



Imperial Townsite Park Project

Initial Study – Mitigated Negative Declaration

prepared by

City of Imperial

Department of Community Services

420 South Imperial Avenue

Imperial, CA 92251

Contact: Tony Lopez, Park Superintendent

prepared with the assistance of

Rincon Consultants, Inc.

8825 Aero Drive, Suite 120

San Diego, California 92123

March 2021



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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Initial Study

1. Project Title

Imperial Townsite Park Project

2. Lead Agency Name and Address

City of Imperial
Department of Community Services
420 South Imperial Avenue
Imperial, CA 92251

3. Contact Person and Phone Number

Tony Lopez, Park Superintendent, (760) 355-3134

4. Project Location

The 3.5 acre project site is located in the City of Imperial in Imperial County, California. The project site lies south of Barioni Boulevard, east of South B Street, west of South D Street, and is approximately 0.25 mile north of Imperial County Airport (see Figure 1 and Figure 2). The project site has been previously disturbed and is currently used as a recreational area consisting of a lap pool, storage building, parking lot, and grass fields. Project site access would be provided via a driveway on Barioni Boulevard.

5. Project Sponsor's Name and Address

City of Imperial
Department of Community Services
420 S Imperial Avenue
Imperial, CA 92251

6. General Plan Designation

Public Use

7. Zoning

R-1 (Single-Family Residential). The project site may require rezoning to Open Space Recreational.

8. Description of Project

The Townsite Park Project (proposed project) is a community driven project that would be funded by Prop 68 funds available in the fourth round of California Department of Parks and Recreation Statewide Park Development and Community Revitalization Program. The City of Imperial, in partnership with Imperial High school District, will submit an application to the state seeking the maximum funds available to develop new recreational features for this proposed project site.

The proposed project would develop approximately 3.5 acres of the 4.16 total acre project site which would include approximately 22,724 square feet (sf) of picnic and playground area, a 9,349 sf park square, 25,070 sf of pool area, 20,953 sf of new skate park features, a 23,000 sf parking lot with approximately 80 to 100 vehicle spaces and 4 bicycle parking spaces, 25,070 sf of multi-use basketball, volleyball and tennis courts, a 1,920 sf restroom and shower structure, a 1,500 sf atrium, and 12,526 sf of ADA compliant walking trails surrounding the perimeter and connecting the project's amenities. The existing lap pool would be demolished and replaced with a competition size pool (50 meters long by 25 meters wide). The pool area would be expanded to include grandstand seating, canopy shading, and an outside shower station. The existing storage structure would be repurposed into ADA compliant restrooms. Landscaping will be placed throughout the project including drought tolerant trees and shrubs on drip irrigation. Existing lawn areas and irrigation system would be augmented or reduced to fit the needs of this project. Other park amenities include benches, gazebos, and LED lighting for the park features and parking lot. All construction would occur within the current conceptual limits of the project (see Figure 3). The project will serve as a recreational use area for the surrounding community.

The project will require the mobilization of grading, excavating, and trenching equipment as well as import and export of building materials. Electrical, plumbing and other on-site improvements would also be required. Construction is expected to begin in July 2022 and be open to the public by November 2022. This schedule is contingent on the award date and availability of funds. Due to the nature of funding for this project, construction could occur in phases depending on the amount of funds awarded through the Statewide Park Development and Community Revitalization Program.

9. Surrounding Land Uses and Setting

The surrounding urban land uses are predominately built out and consist of institutional and residential uses. The project site is surrounded by Imperial High School to the north, Ben Hulse Elementary School to the south, and residential uses to the east and west.

10. Other Public Agencies Whose Approval is Required

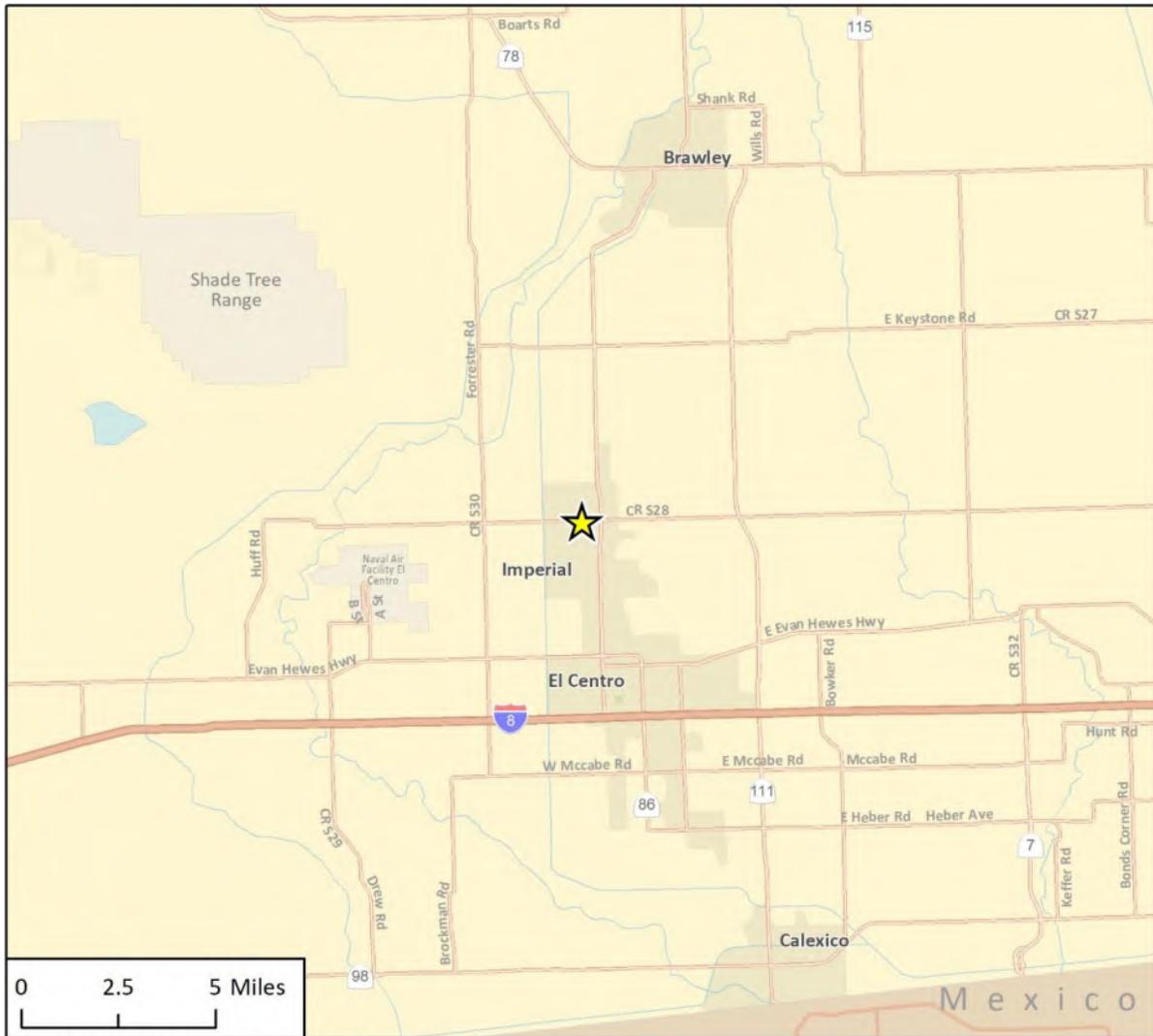
The City of Imperial is the lead agency for the proposed project. No approval from other public agencies is required.

11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area

Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

On March 10, the City of Imperial mailed consultation letters to seventeen Native American tribes requesting consultation under the provisions of Assembly Bill 52. The City has received responses from the Viejas Tribal Government and the Quechan Indian Tribe.. A list of contacted tribes is detailed in Section 18, *Tribal Cultural Resources*, and Appendix D.

Figure 1 Regional Location



★ Project Location

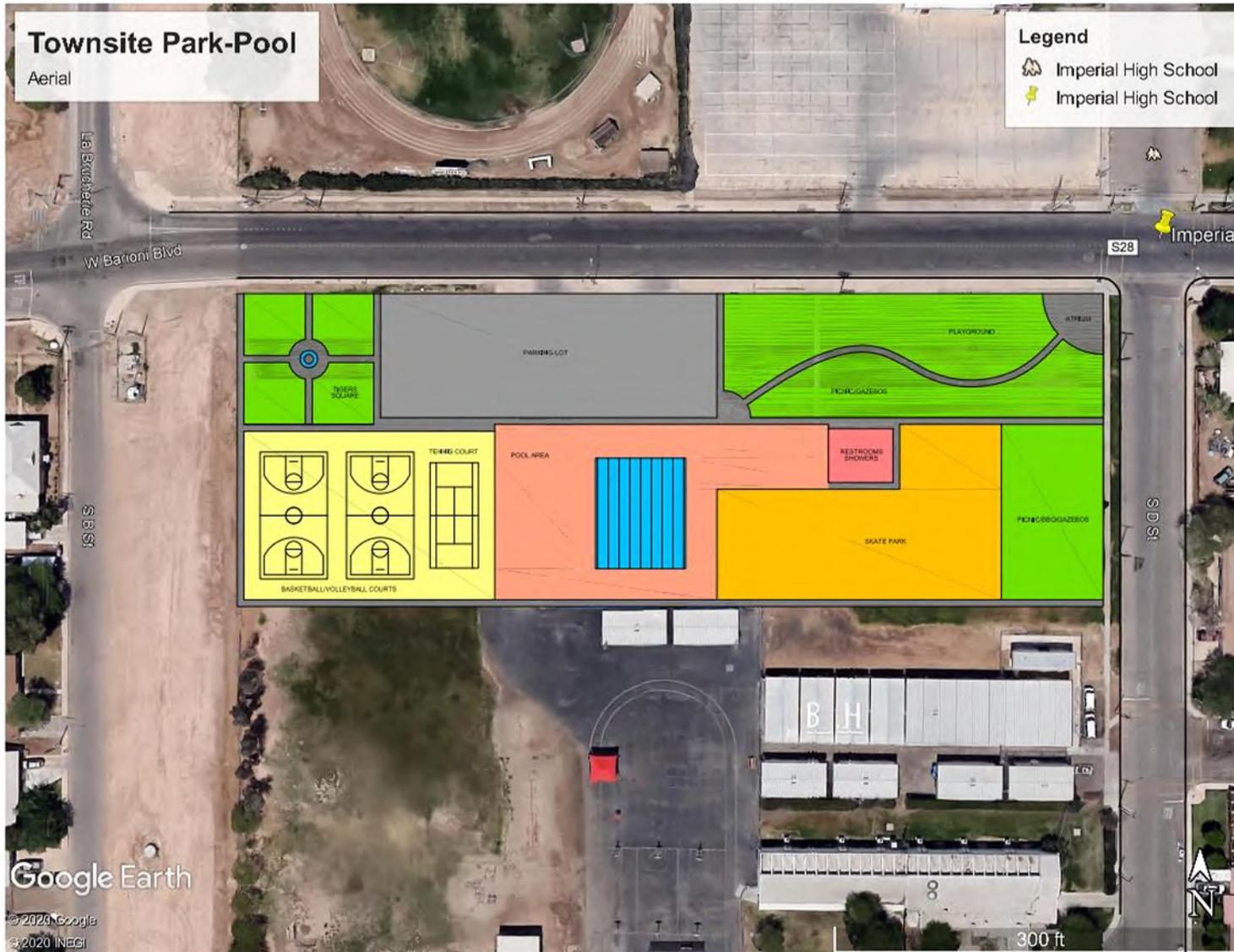


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Figure 2 Project Location



Figure 3 Conceptual Design



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Environmental Factors Potentially Affected

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

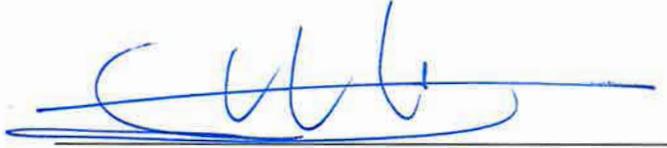
- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/>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

Determination

Based on this initial evaluation:

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

- I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

7/14/21

Date

Othon Mora

Printed Name

Community Development Director

Title

Environmental Checklist

1 Aesthetics

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

Except as provided in Public Resources Code Section 21099, would the project:

a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Scenic vistas can be impacted by development through the construction of a structure which blocks the view of a vista or by impacting the vista itself, for example, through development of a scenic hillside. The project site has been previously disturbed and is currently used as a recreational area. The project site currently consists of a lap pool, storage building, parking lot, and grass fields. Furthermore, the project site is surrounded by urban land uses that are predominately built out and consist of institutional and residential uses as shown in Figure 4 and Figure 5 View looking Northeast from Project Site

. The project site is surrounded by Imperial High School to the north, Ben Hulse Elementary School to the south, and residential uses to the east and west. The City of Imperial General Plan states that “the Zoning Ordinance allows buildings or structures up to 35 feet high in commercial and industrial zones. The development of low-rise buildings will not restrict the view of distant mountain ranges” (City of Imperial 1992). The project site is not within scenic vista areas, but these areas exist as

distant mountain ranges that can be seen along roadway corridors and in breaks between development in the area.

Figure 4 View looking West from S D Street and Barioni Boulevard Intersection



Figure 5 View looking Northeast from Project Site



The project site is zoned R-1 (Single-Family Residential), with a General Plan use of Low Density Residential. The project site may require rezoning to Open Space Recreational. The project would develop approximately 22,724 sf of picnic and playground area, a 9,349 sf park square, 25,070 sf of pool area, 20,953 sf of new skate park features, a 23,000 sf parking lot with approximately 80 to 100 vehicle spaces and 4 bicycle parking spaces, 25,070 sf of multi-use basketball, volleyball and tennis courts, a 1,920 sf restroom and shower structure, a 1,500 sf atrium, and 12,526 sf of ADA compliant walking trails surrounding the perimeter and connecting the project's amenities. The project would not incorporate any tall buildings that would obstruct views of distant mountains. While the surrounding hillsides can be seen from certain locations in the project vicinity, the proposed structures are consistent with City development standards. Furthermore, landscaped areas and recreational areas would enhance the existing visual quality of the area. The proposed structures would not significantly impact views of the surrounding hillsides and, therefore, would have a less than significant impact on scenic vistas.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The project site is not within or adjacent to a designated State scenic highway, as identified by the California Department of Transportation (Caltrans). The nearest designated State scenic highway is a portion of Route 78, approximately 53 miles to the northwest of the project site (Caltrans 2011). Therefore, the project site is not visible from a scenic highway. Furthermore, the project would not result in damage to scenic resources including rock outcroppings, trees, or historic buildings. Therefore, there would be no impacts related to scenic resources near a designated State scenic highway.

NO IMPACT

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

The project site has been previously disturbed and is currently used as a recreational area consisting of a lap pool, storage building, parking lot, and grass fields. The project vision, as presented in the *Project Description*, includes facility improvement and expansion. The project would increase recreation opportunities in a visually pleasing environment with increased and improved landscaping. The current setting has a high visual quality, with single-family residential development bordered by open, non-developed fields.

Project implementation would improve the appearance of facilities within the park that have become degraded through age. The proposed project would implement improved or enhanced facilities and landscaping designed to fit into the existing landscape and integrate in form and volume with the visual character of the area. Visual quality would be improved, and impacts would be beneficial.

The proposed project is in an urbanized or semi-urbanized area zoned for public uses. Project design would not conflict with scenic quality stipulations described in the analysis above. The recreational improvements would improve park facilities in a way that would generate beneficial aesthetic and visual quality impacts to the recreational area. Thus, there would be no impact.

NO IMPACT

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

For purposes of this analysis, light refers to light emissions (brightness) from both stationary sources of light, such as exterior parking lot and building security lighting and light that spills from windows of multi-story buildings; and moving sources of light from the headlights of vehicles driving on roadways near the project site.

Currently the parking lot near the entrance from Barioni Boulevard, has a single pole-mounted light fixture. Furthermore, the adjacent Imperial High School sports field also has various pole-mounted light fixtures. During the day, light associated with parking lots, buildings, and structures in the park would not be visible to adjacent uses. In the evening, security lighting and in the parking lot would be limited to the number of fixtures necessary to illuminate the area for safety. They would not be

positioned in a way that would impact adjacent uses by spilling onto or shining into nearby residential or open space uses.

Glare is defined as focused, intense light emanated directly from a source or indirectly when light reflects off a surface. Daytime glare is caused in large part by sunlight shining on highly reflective surfaces such as buildings that have expanses of polished or glass surfaces, light-colored pavement, and the windshields of parked cars. Glare could also occur when headlights from cars circulating on the project site shine directly into buildings or at passers-by (e.g., other drivers, pedestrians).

The new structures would be designed using natural-appearing exterior finishes. Furthermore, trees planted throughout the park create shade and filter sunlight in a way that also would limit glare effects from light-colored and glass surfaces. None of the non-glass finishes, including pavement and planters, would be reflective and would not generate glare upon project completion. The project facilities would therefore not create glare that would adversely affect views during the day or night.

While cars exiting the sites in the evening hours may shine headlights toward Barioni Boulevard, the glare effect would be limited to early evening hours and would be temporary. These effects already occur with cars that currently exit the project site at this location. Furthermore, both existing and proposed landscaping would help to reduce glare produced by automobile traffic. Light and glare impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

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

Would the project:

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

-
- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- 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?*

The project site is not zoned for agricultural use, timberland, or forestry, and no Williamson Land Contracts or other federal farmland program agreements are in place for the site. Agricultural lands would not be converted on the project site. The project site is in an urbanized area, has been previously disturbed, and is not adjacent to any farmlands. The only open space lands near the site are non-agricultural. Implementation of the project would not have indirect impacts on farmland that could lead to their conversion to non-agricultural uses. There would be no impact.

The project site is not zoned as forest land or for timberland production. The trees on the site are not part of forest land or timberland. The project would retain and improve the site's existing use, and would not 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. Therefore, the proposed project would no impact on agriculture or forestry resources.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section provides an analysis of the proposed project’s impacts on air quality and is based on Rincon’s Air Quality and Greenhouse Gas Report attached as Appendix A.

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),¹ nitrogen oxides (NO_x), particulate matter with diameters of ten microns or less (PM₁₀) and 2.5 microns or less (PM_{2.5}), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO_x. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.

¹ CARB defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this IS-MND.

- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Air Quality Standards and Attainment

The project site is located in the Salton Sea Air Basin (SSAB), which covers Imperial County and the middle portion of Riverside County. The Imperial County Air Pollution Control District (ICAPCD) and the South Coast Air Quality Management District (SCAQMD) monitor and regulate local air quality in the SSAB. However, the project is located within the southern portion of the SSAB and is only within the ICAPCD jurisdictions. As the local air quality management agency, the ICAPCD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether the standards are met or exceeded, the SSAB is classified as being in “attainment” or “nonattainment.” In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 1, are already occurring in that area as part of the environmental baseline condition. Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. Since the project is located in Imperial County, the attainment status of the county was described instead of the Air Basin’s attainment status.

Imperial County is as marginal nonattainment for the federal 8-hour ozone standard and series nonattainment for the federal PM₁₀ standard. A portion of the county that includes the project site is classified as moderate nonattainment for the federal 24-hour PM_{2.5} standard and the federal annual PM_{2.5} standard. Imperial County is also classified as nonattainment for the state ozone standards and PM₁₀ standards. The county is classified as attainment for the state PM_{2.5} standard with the exception of a portion of the county in Calexico at the border of Mexicali in Mexico (CARB 2020a).

Table 1 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction;

Pollutant	Adverse Effects
	(4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ¹
Suspended particulate matter (PM _{2.5})	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.

Source: U.S. EPA 2018

Air Quality Management

Because Imperial County currently exceeds the federal PM₁₀ standard, federal PM_{2.5} standards, state ozone standards, and the state PM₁₀ standards, the ICAPCD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS and CAAQS. The ICAPCD adopted the following State Implementation Plans (SIP) to address how the air district will reduce air pollution for ozone, PM₁₀, and PM_{2.5}: *Imperial County 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard (2017a)*, *Imperial County 2018 Redesignation Request and Maintenance Plan for Particulate Matter Less than 10 Microns in Diameter (2018a)*, *Imperial County 2018 Annual Particulate Matter Less than 2.5 Microns in Diameter State Implementation Plan (2018b)*, and *Imperial County 2013 State Implementation Plan for the 2006 24-Hour PM_{2.5} Moderate Nonattainment Area (2014)*. In addition, ICAPCD adopted the *2009 Reasonably Available Control Technology (RACT) State Implementation Plan* in 2010 to require emission controls to further reduce air pollutants for which the area is designated nonattainment.

The 2017 SIP for the NAAQS 2008 8-Hour ozone standard determines that, with implementation of the proposed control strategy, Imperial County can expect to reach attainment by July 20, 2018 (ICAPCD 2017a). For the PM₁₀ NAAQS and CAAQS, the 2018 SIP did not require an attainment demonstration since exceedances of PM₁₀ were caused by international transport of the pollutant from Mexico or natural high wind events. (ICAPCD 2018a) The SIPs for the PM_{2.5} NAAQS demonstrate that Imperial County would have attained the PM_{2.5} standards but due to international transport of pollutants from Mexico the County exceeded the NAAQS. Therefore, an attainment demonstration would not be required either.

Air Pollutant Emission Thresholds

The ICAPCD has adopted guidelines for quantifying and determining the significance of air quality emissions in its 2017 *CEQA Air Quality Handbook* (ICAPCD 2017b).

The ICAPCD developed screening criteria in the December 2017 *CEQA Air Quality Handbook* to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant air quality impacts (see Table 2 in the handbook). If a project meets the screening criteria, then the lead agency or applicant would not need to perform a comprehensive air quality analysis report of their project’s air pollutant emissions. For projects that do not meet the screening conditions, the ICAPCD significance thresholds for criteria air pollutants, shown in Table 2, are used to evaluate a project’s potential air quality impacts. For construction PM impacts, ICAPD suggest that a qualitative approach be taken over a quantitative approach.

Table 2 ICAPCD Air Quality Significance Thresholds

Pollutant	Construction (Pounds Per Day)	Operation (Pounds Per Day)	
		Tier I	Tier II
Oxides of Nitrogen (NO _x)	100	<137	>=137
Reactive Organic Gases (ROG)	75	<137	>=137
Respirable Particulate Matter (PM ₁₀)	75	<150	>=150
Oxides of Sulfur (SO _x)	N/A	<150	>=150
Fine Particulate Matter (PM _{2.5})	N/A	<550	>=550
Carbon Monoxide (CO)	550	<550	>=550

N/A = Not Available
 Source: ICAPCD 2017b

Construction Significance Thresholds

Projects that have emissions below the significance thresholds would be considered less-than-significant and would have to adhere to the most current rules adopted to control fugitive dust in addition to the standard mitigation measures for construction equipment. Projects that exceed the significance thresholds would be considered potentially significant and would need to conduct a construction analysis that includes a health risk assessment in consultation with the ICAPCD.

Operational Significance Thresholds

Any proposed residential, commercial, or industrial development with a potential to emit emissions within Tier I emission levels may potentially have an adverse impact on local air quality. These projects are required to implement the feasible standard mitigation measures listed in the ICAPCD CEQA handbook. In addition, commercial projects in Tier I are required to abide by off-site mitigation requirements listed under *Off-site Mitigation for Commercial Projects*.

Any proposed residential, commercial, or industrial development with a potential to meet or exceed Tier II emission levels is considered to have a significant impact on regional and local air quality. Therefore, projects exceeding Tier I emission levels are required to implement feasible standard mitigation measures as well as feasible discretionary mitigation measures. Standard and discretionary mitigation measures are listed in the following sections. In addition, all commercial projects in Tier II are required to abide by off-site mitigation requirements listed under *Off-site Mitigation for Commercial Projects*.

Odor Screening Distances

The ICAPCD provides minimum distances for siting of proposed projects near potential odor sources as shown in Table 3. A significant impact would occur if the project would result in other emissions (such as odors) affecting substantial numbers of people or would site a new odor source as shown in Table 3 within the specified distances of existing receptors.

Table 3 ICAPCD Project Screening Distances for Potential Odor Sources

Odor Source	Project Screening Distance
Wastewater treatment plant	1 mile
Sanitary Landfill	1 mile
Composting Station	1 mile
Feedlot	1 mile
Asphalt Plant	1 mile
Painting/Coating Operations (auto body shop)	1 mile
Rendering Plant	1 mile

Local Air Quality Regulations

To minimize potential impacts from project emissions, the ICAPCD implements rules and regulations for emissions that may be generated by various uses and activities. The rules and regulations detail pollution-reduction measures that must be implemented during construction and operation of projects. Rules and regulations relevant to the project include the following:

- **Regulation VIII (Fugitive Dust Rules).** This regulation contains Rules 800 to 806 which are all measures to reduce PM₁₀ fugitive dust during active operation. This regulation applies to an activity capable of generating fugitive dust, including but not limited to, earthmoving activities, construction activities, unpaved roads, track-out/carry-out, bulk material storage and transport, and unpaved haul/access roads. Each rule lists specific best control measures that all new projects must adhere to within the ICAPCD region (ICAPCD 2021).
- **Rule 424 (Architectural Coatings).** This rule limits the content of VOCs in architectural coatings that are supplied, sold, offered for sale, and manufactured within the Air District. Effective as of January 1, 2011 all nonflat coatings were limited to a VOC content of 100 grams per liter (ICAPCD 2010).

In addition, the ICAPCD has established standard mitigation measures that projects would need to implement during construction and operation (ICAPCD 2017b). The following measures are standard requirements; ICAPCD also has additional discretionary mitigation measures for fugitive PM₁₀ control and enhanced mitigation measures for construction equipment in their CEQA handbook. Standard mitigation measures for project operation are provided for residential, commercial, and industrial projects. However, the standard mitigation measures for project operation would not be applicable to the project since it is a recreational park not a commercial, industrial, or residential development.

Standard Mitigation Measures for Project Construction

REGULATION VIII – FUGITIVE DUST CONTROL MEASURES

All construction sites, regardless of size, must comply with the requirements contained within Regulation VIII. Although compliance with Regulation VIII does not constitute mitigation under the reductions attributed to environmental impacts, its main purpose is to reduce the amount of PM₁₀ entrained into the atmosphere as a result of anthropogenic (man-made) fugitive dust sources. Therefore, under all preliminary modeling a presumption is made that all projects comply with Regulation VIII.

STANDARD MITIGATION MEASURES FOR FUGITIVE PM₁₀ CONTROL

- a. All disturbed areas, including bulk material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material such as vegetative ground cover.
- b. All on-site and off-site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
- c. All unpaved traffic areas one (1) acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emission shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
- d. The transport of bulk materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.
- e. All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
- f. Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line.
- g. The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.

DISCRETIONARY MITIGATION MEASURES FOR FUGITIVE PM₁₀ CONTROL

- a. Water exposed soil with adequate frequency for continued moist soil
- b. Replace ground cover in disturbed areas as quickly as possible
- c. Automatic sprinkler system installed on all soil piles
- d. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
- e. Develop a trip reduction plan to achieve a 1.5 AVR for construction employees
- f. Implement a shuttle service to and from retail services and food establishments during lunch hours

STANDARD MITIGATION MEASURES FOR CONSTRUCTION COMBUSTION EQUIPMENT

- a. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
- b. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.

- c. Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use
- d. Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set)

ENHANCED MITIGATION MEASURES FOR CONSTRUCTION EQUIPMENT

- a. Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways
- b. Implement activity management (e.g. rescheduling activities to reduce short-term impacts)

Methodology

Air pollutant emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., city park, recreational swimming pool, asphalt surfaces, and parking lot), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described above in the project description.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the proposed project was analyzed based on the project applicant information and CalEEMod defaults for the construction schedule and construction equipment list. Per the project applicant, construction would begin in July 2022 and be completed in October 2022. The construction schedule and equipment list were generated by CalEEMod using default values. However, the default building construction, paving, and architectural coating phase were revised to end in October 2022 to align with the proposed schedule. The building construction schedule was shortened, while the paving and architectural coating start dates were changed so the end date was October 31, 2022. The default number of workdays for the paving and architectural coating phases were kept the same. Construction would be approximately four months under this schedule. It was assumed that all construction equipment used would be diesel-powered. This analysis assumes that the project would comply with all applicable regulatory standards. In particular, the project would comply with the ICAPCD Regulation VIII and Rule 424.

The first year of operation was assumed to be 2022. Operational emissions modeled include mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions. Mobile source emissions are generated by vehicle trips to and from the project site. Trip generation rates were sourced from the *Townsite Community Park Project, VMT and Traffic Volume Analysis Technical Memorandum* (STC Traffic, Inc. 2021). Emissions attributed to energy use include emissions from lighting the parking lot. Area source emissions are generated by landscape maintenance equipment, consumer products, and architectural coatings. No standard mitigation measures were assumed during project operation since the project is not a residential, commercial, or industrial development.

For construction and operation, the CalEEMod default paved road dust percentage was changed from 50 percent to 95 percent. The default of 50 percent assumes that trucks traveling during

construction and visitors to the site are driving on unpaved roads for half the time. The project is in a centralized portion of Imperial where all the connecting roadways are paved. It is expected that construction workers and visitors to the park would be traveling on paved roads for the majority of their travel time. A model run was conducted assuming that the paved road percentage would be 95 percent.

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

A significant air quality impact could occur if a project is not consistent with the applicable AQMP or if the project would represent a substantial hindrance to implementing the policies or obtaining the goals of that plan. The project is located within jurisdiction of the SSAB, which is designated nonattainment for ozone, PM₁₀, and PM_{2.5} within the project location. The ICACPD has created three SIPs to address how the region will reduce emissions of these pollutants. The relevant SIPs include: Imperial County 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard (2017a), Imperial County 2018 Redesignation Request and Maintenance Plan for Particulate Matter less than 10 Microns in Diameter (2018a), Imperial County 2018 Annual Particulate Matter Less than 2.5 Microns in Diameter State Implementation Plan (2018b), and Imperial County 2013 State Implementation Plan for the 2006 24-Hour PM_{2.5} Moderate Nonattainment Area (2014). A project may be considered inconsistent with these air quality plans if it would cause the existing population to exceed forecasts contained in the most recently adopted AQMP. All the applicable SIPs rely on the Southern California Association of Governments' (SCAG's) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) forecasts of regional population growth in its AQMP population projections.²

The project is a recreational park that would not include new residences nor would it generate new employment. Therefore, it would not result in an increase in regional population growth and would not exceed the growth originally identified by SCAG in the 2016 Regional Transportation Plan/Sustainable Communities Strategy. Furthermore, the project's emissions would be below the applicable ICACPD thresholds as discussed under Threshold 2, which were developed to identify if a project would have a significant air quality impact. Therefore, the project would not conflict with the applicable air quality plans. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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?

Imperial County is designated nonattainment for the NAAQS for ozone, PM_{2.5}, and PM₁₀ and the CAAQS for ozone and PM₁₀. The following subsections discuss emissions associated with construction and operation of the proposed project.

Construction Emissions

Project construction would involve site preparation, grading, amenity construction, paving, and architectural coating activities that have the potential to generate air pollutant emissions. Table 4 summarizes the estimated maximum daily emissions of ROG, NO_x, PM₁₀, PM_{2.5}, SO_x, and carbon

² On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). However, the SIPs were adopted prior to this date and relies on the demographic and growth forecasts of the 2016-2040 RTP/SCS; therefore, these forecasts are utilized in the analysis of the project's consistency with the AQMP.

monoxide during project construction. As shown in Table 4, project construction emissions for all criteria pollutants would be below the ICAPCD daily thresholds of significance. Furthermore, the project would implement all standard mitigation measures to control fugitive PM₁₀ dust. Therefore, impacts would be less than significant.

Table 4 Project Construction Emissions

	Maximum Daily Emissions (lbs./day)					
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}	SO _x
Maximum Daily Emissions	6	33	34	72	12	<1
ICAPCD Thresholds (Daily Emissions)	75	100	550	150	NA	N/A
Threshold Exceeded?	No	No	No	No	N/A	N/A

N/A = not applicable; no ICAPCD threshold for PM_{2.5} or SO_x

Source: Table 2.1 "Overall Construction-mitigated" emissions. Winter emissions results are shown for all emissions. See CalEEMod worksheets in Appendix B.

Operational Emissions

The project would generate criteria pollutants during operation. To determine whether a project would result in emissions that would violate an air quality standard or contribute substantially to an existing or projected air quality violation, a project's emissions are evaluated based on the quantitative emission thresholds established by the ICAPCD.

Table 5 summarizes the project's operational emissions by emission source (area, energy, and mobile). As shown below, the emissions generated by operation of the proposed project would not exceed the ICAPCD's threshold for any criteria pollutant. Therefore, the project would be a Tier I project, which would require implementation of applicable Standard Mitigation Measures. However, the ICAPCD CEQA handbook does not have standard mitigation measures for recreational park land uses. Nevertheless, the project design features would implement measures that would reduce operational emissions from energy, water, and mobile sources. These features include drought tolerant trees and shrubs on drip irrigation, LED lighting fixtures, and four bicycle parking spaces. These project design features are similar to measures required or recommend by the ICAPCD in their CEQA handbook. Therefore, project operational emissions would be less than significant.

Table 5 Project Operational Emissions

Emission Source	Maximum Daily Emissions (lbs./day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	<1	<1	<1	0	<1	<1
Energy	0	0	0	0	0	0
Mobile	1	3	5	<1	28	3
Project Emissions	1	3	5	<1	28	3
ICAPCD Thresholds	137	137	550	150	150	550
Threshold Exceeded?	No	No	No	No	No	No

Emissions may not sum correctly due to rounding

Source: Table 2.2 "Overall Operation-Unmitigated" emissions. Summer emissions results are shown for all emissions. See CalEEMod worksheets in Appendix B.

LESS THAN SIGNIFICANT IMPACT

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

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Therefore, the majority of sensitive receptor locations are schools, hospitals, and residences. Sensitive receptors in the project vicinity include students at the Ben Hulse Elementary, which is adjacent to the project’s southern boundary. Imperial High School is also approximately 70 feet north of the project site across West Barioni Boulevard/Worthington Road. Single-family residences are also located to the 130 feet to west and 50 feet east of the project site. Localized air quality impacts to sensitive receptors typically result from carbon monoxide hotspots and TACs, which are discussed in the following subsections.

Carbon Monoxide Hotspots

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above a carbon monoxide ambient air quality standard. Localized carbon monoxide hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local carbon monoxide concentration exceeds the federal one-hour standard of 35.0 parts per million (ppm) or the federal and state eight-hour standard of 9.0 ppm (CARB 2016).

The ICAPCD recommends that projects with the potential to generate volumes traffic that can lead to high levels of carbon monoxide at intersections should perform a hot spot model. The project would include a 3.5-acre recreational park. Trip generation rates provided by STC Traffic Inc. (2021) indicate the project would generate approximately 158 daily trips. Per the traffic technical memorandum, the operation of the project would result in a minimal increase on the nearby roadways. For example, on Worthington Road (roadway adjacent to project’s northern boundary), the project would add 24 daily trips, increasing the predicted traffic volume from 7,469 to 7,493 daily vehicles. The slight increase is not expected to change current operations on this roadway. Furthermore, the project would add fewer daily trips on other nearby roadway segments compared to Worthington Road. Therefore, the project is not expected to generate high volumes of traffic on

congested intersection that would then lead to a carbon monoxide hotspot. The impact of localized carbon monoxide emissions would be less than significant.

Toxic Air Contaminants

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The following subsections discuss the project's potential to result in impacts related to TAC emissions during construction and operation.

Construction

Construction-related activities would result in temporary project-generated emissions of DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998 (CARB 2017).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately four months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., four months) is less than one percent of the total exposure period used for health risk calculation. Therefore, DPM generated by project construction would not create conditions where the probability is greater than 10 in one million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. This impact would be less than significant.

Operational

The proposed project is a recreational park that would not site permanent sensitive receptors. However, a park is defined by CARB as a sensitive land use since these developments can include playgrounds and play area (CARB 2005). Based on a review of the project area, the only potential source of air toxics would be West Barioni Boulevard/Worthington Road (The Perfect Solution 2015). CARB recommends avoid siting new sensitive lands within 500 feet of urban roads with 100,000 vehicles per day. The daily traffic on West Barioni Boulevard/Worthington Road is well below the 100,000 daily vehicles threshold with a daily volume of 7,469 vehicles. With the project, the daily volume would increase to 7,493 vehicles, which is still below the 100,000 daily vehicles thresholds. Thus, the proposed project would not expose sensitive populations to substantial pollutant concentrations from freeway or roadway sources. Therefore, cumulative impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The project would generate oil and diesel fuel odors during construction from equipment use as well as odors related to asphalt paving. The odors would be limited to the construction period and would be temporary and would disperse greatly with distance. With respect to operation, the ICAPCD *CEQA Handbook* (2017b) identifies land uses associated with odor complaints to include, but not limited to, wastewater treatment plants, landfills, feedlots, composting stations, asphalt plants, painting/coating operations and rendering plants. Recreational park uses are not identified on this list. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

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

This section provides an analysis of the proposed project’s impacts on biological resources and is based on Rincon’s Biological Resources Assessment attached as Appendix C.

The project site is in a developed residential and agricultural area of the Imperial Valley Floodplain located approximately -20 meters (-61 feet) below mean sea level. The site contains two soil types: Imperial silty clay, wet and Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes; both are typical for the agricultural land in this region (USDA 2021). The entire project site consists of developed/disturbed land cover which has an existing recreational area, lap pool, storage building, parking lot, and grass fields. There are no waterways, irrigation channels, open spaces, or natural habitats within the vicinity of the project site.

In February 2021, Rincon Consultants, Inc. conducted a Biological Resources Assessment (BRA), including a literature review and field reconnaissance survey to document existing site conditions and the potential presence of special-status biological resources, including plant and wildlife species, plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The BRA identifies the 'study area' as the project site plus a 100-foot buffer which is also developed and disturbed by paved roads and sidewalks. The study area is surrounded by Imperial High School to the north, Ben Hulse Elementary School to the south, and residential neighborhoods to the east and west with limited ornamental vegetation.

The following analysis is derived from the findings of the BRA which can be found in Appendix C of this document.

- 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?*

Special-status species are those plants and animals that are 1) listed, proposed for listing, or candidates for listing as Threatened or Endangered by the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) under the Federal Endangered Species Act (FESA); 2) those listed or proposed for listing as Rare, Threatened, or Endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA); 3) those recognized as Species of Special Concern (SSC) or Fully Protected by CDFW; and 4) plants occurring on lists 1 and 2 of the CDFW California Rare Plant Rank (CRPR) system per the following definitions:

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

- List 2B.2 = Rare, threatened or endangered in California, but more common elsewhere; moderately endangered in California (20-80% of occurrences threatened/high degree and immediacy of threat)
- List 2B.3 = Rare, threatened or endangered in California, but more common elsewhere; not very endangered in California (<20% of occurrences threatened, or no current threats known)

In addition, special-status wildlife and plant species are ranked globally (G) and subnationally (S) 1 through 5 based on NatureServe's (2010) methodologies:

- G1 or S1 - Critically Imperiled Globally or Subnationally (state)
- G2 or S2 - Imperiled Globally or Subnationally (state)
- G3 or S3 - Vulnerable to extirpation or extinction Globally or Subnationally (state)
- G4 or S4 - Apparently secure Globally or Subnationally (state)
- G5 or S5 - Secure Globally or Subnationally (state)
- ? - Inexact Numeric Rank
- T - Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
- Q – Questionable taxonomy that may reduce conservation priority

Although not considered special status, nesting birds are afforded protection under Migratory Bird Treaty Act (MBTA) and/or California Fish and Game Code (CFG) 3505.

A review of records from the California Natural Diversity Database (CNDDDB) (queried in January 2021 for a 5-mile radius of the project site) and California Native Plant Society's Electronic Inventory (CNPSEI) (queried for the Escondido United States Geological Survey (USGS) quadrangle and surrounding eight quadrangles) identified 8 special-status animal species and 15 special-status plant species with occurrence records within the project's vicinity.

Plant species observed onsite during field reconnaissance included: curtain fig (*Ficus microcarpa*), Mexican fan palm (*Washingtonia robusta*), natal plum (*Carissa macrocarpa*), oleander (*Nerium oleander*), olive tree (*Olea europaea*), peacock flower (*Caesalpinia pulcherrima*), silver wattle (*Arcacia dealbata*), smooth-mesquite (*Prosopis laevigata*), tamarisk (*Tamarix ramosissima*), and Texas sage (*Leucophyllum frutescens*).

Wildlife species observed onsite during the field reconnaissance survey included: California gull (*Larus californicus*), Eurasian collared dove (*Streptopelia decaocto*), European starling (*Sturnus vulgaris*), great egret (*Ardea alba*), northern mockingbird (*Mimus polyglottos*), rock pigeon (*Columba livia*), and snowy egret (*Egretta thula*).

Rincon biologists determined that the study area does not contain suitable habitat for any special status plant species based on a variety of factors, including developed nature of the project site, lack of suitable soils, inappropriate hydrologic conditions, and/or absence of appropriate vegetation communities. Additionally, many of the species' CNDDDB occurrences are historical, dating from the early to mid-1900s and no special-status plant species were detected during the survey. Therefore, no impacts to special-status plant species will occur. Appendix C includes a description of the 15 special-status plants with historic records in the project vicinity.

Similarly, the study area does not provide suitable habitat for special-status wildlife species given their known distributions and habitat requirements relative to existing site conditions that include existing development, low quality habitat relative to species needs, and regular maintenance or other disturbance from frequent human activity. Of the 8 special status wildlife species evaluated, none have a moderate or high potential to occur. However, low quality or marginal foraging and/or nesting habitat is present onsite for two special-status wildlife species, burrowing owl (*Athene cunicularia*) and western yellow bat (*Lasiurus xanthinus*). While CDFW considers both species as Species of Special Concern (SSC), burrowing owl is also a covered species under the Imperial Valley Natural Community Conservation Plan (NCCP); whereas the western yellow bat is not. Appendix C includes a description of these 8 special-status wildlife species with historic records in the project vicinity.

As indicated, the project site is entirely developed/disturbed. Although burrowing owl and western yellow bat may occupy disturbed areas, they are unlikely to occur on the project site given the poor habitat quality and high level of disturbance in the study area. Moreover, according to the BRA, no suitable burrows for burrowing owl were observed and no riparian woodland habitat, including palm trees, suitable for supporting western yellow bat roosts are present in the project vicinity. Therefore, construction of the project is not likely to impact these species. Due to the developed and disturbed nature of the site, the project site is not expected to provide viable habitat for these species, and therefore, would not result in loss of suitable habitat. Impacts to these two species are not evaluated further due to their low potential to occur. Furthermore, no direct or indirect impacts to any other special-status species is expected given the lack of suitable habitat elements adjacent to proposed work areas within the study area. As a result, no impacts to special-status species are expected; therefore, no mitigation measures are recommended.

Project activities that occur during the avian nesting season, typically February through August, have the potential impact nesting birds (directly or indirectly) if nests are destroyed, or if project activities may be disruptive to breeding and cause birds to abandon their nests. The project site contains ornamental trees that are suitable habitat for a variety of nesting birds protected under the federal MBTA and state CFGC Section 3505. Construction-related disturbance could result in nest abandonment or premature fledging of the young. Therefore, impacts to nesting birds would be potentially significant unless mitigation is incorporated. Construction occurring within the vicinity of nesting birds may also indirectly impact individuals with construction noise and dust. Implementation of BIO-1 would reduce the project's impacts to nesting birds to a less than significant level.

Mitigation Measures

BIO-1 Nesting Birds

If construction must begin within the breeding season, then a pre-construction nesting bird survey shall be conducted by a qualified biologist no more than three days prior to initiation of ground disturbance and/or vegetation removal activities. The pre-construction survey shall be conducted within the project site, plus a 300-foot no work buffer (500-foot for raptors), on foot, and within inaccessible areas (i.e., private properties) afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (which is dependent upon the species, the proposed work activity, and existing disturbances associated with land uses in and around the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All

construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer may occur only at the discretion of the qualified biologist.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, including for special-status species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities by looking at the state ranking, the ranking involves the knowledge of range and distribution of a given type of vegetation, and the proportion of occurrences that are of good ecological integrity (CDFW 2021). No sensitive vegetation communities or riparian habitat were documented within or adjacent to the study area. Furthermore, project impacts are limited to previously developed areas with high human activity and no impacts to areas outside of those mapped as developed/disturbed are anticipated. Therefore, the proposed project does not have the potential to result in direct or indirect impacts to sensitive vegetation communities. No mitigation measures are recommended.

NO IMPACT

- 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?*

A single-edged berm exists along the northwestern edge of the project site near the elementary school playground and appears to convey overhead irrigation runoff due to poor drainage. This feature has no outlet or connectivity to any stormwater or drainage systems, contains no bed/bank or Ordinary High Water Mark (OHWM), and does not contain any riparian vegetation. Therefore, it is not considered waters of the U.S. or streambed, and thus, is not regulated by the United States Army Corps of Engineers (USACE), CDFW, or the Colorado River Regional Water Quality Control Board. There are no other potentially jurisdictional features on the project site or within the study area. As a result, the proposed project does not have the potential to result in direct or indirect impacts to jurisdictional areas, wetlands, other waters, or riparian habitats. No mitigation measures are required.

NO IMPACT

- d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The CDFW Biogeographic Information and Observation System (BIOS) (2021b) does not include any mapped essential habitat connectivity areas near the project site. The nearest habitat connectivity area is over 16 miles east of the study area in the Little Mule Mountains. In addition, the project site is surrounded by existing development and heavily traveled transportation corridors, including State Route 111, and is therefore not expected to serve as a significant migratory wildlife corridor. Given the developed nature of the surroundings, the site would not function as a wildlife corridor or

linkage, or as a wildlife nursery site. Therefore, no impacts are anticipated and no mitigation is required.

NO IMPACT

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

The city of Imperial Municipal Code does not include specific protections for biological resources. As a result, the proposed project will not conflict with any local policies or ordinances.

NO IMPACT

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

The study area is within the Imperial Valley NCCP and the BLM Desert Renewable Energy Conservation Plan (DRECP) area boundaries. The Imperial Valley NCCP is being prepared by the Imperial Valley Irrigation District (IID) in consultation with CDFW and USFWS. While the study area is in the IID plan area, the entire project site and surrounding areas are entirely developed. Furthermore, the study area does not contain any navigable irrigation or drainage systems and does not involve any alterations to irrigation features specified as 'covered activities' in the Imperial Valley NCCP. The BLM DRECP area covers land use for renewable energy and conservation areas. The study area is not in a designated renewable energy or conservation area covered under the DRECP due to the developed nature of the surrounding space. As a result, the project would not conflict with the conservation goals and objectives of the Imperial Valley NCCP or the BLM DRECP.

LESS THAN SIGNIFICANT IMPACT

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section provides an analysis of the proposed project’s impacts on cultural resources, including historical and archaeological resources, as well as human remains, and is based on Rincon’s Cultural Resources Assessment Memorandum attached as Appendix D.

CEQA requires that a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). State CEQA Guidelines Section 15064.5 also states the term “historical resources” shall include the following:

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

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
- Has yielded, or may be likely to yield, information important in prehistory or history (State CEQA Guidelines Section 15064.5)

Properties listed on the National Register of Historic Places (NRHP) are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

To address historical resources and archaeological resources, a cultural resources study was prepared for the project, including a cultural resources records search at the South Coastal Information Center (SCIC), a search of the Native American Heritage Commission's (NAHC) Sacred Lands File (SLF), pedestrian survey, and historic resources evaluation.

A cultural resources records search conducted via the SCIC identified six cultural resources studies previously conducted within 0.5-mile of the project site. A portion of two of these studies (IM-00264 and IM-01634) overlap with the current project site; however, neither study resulted in the identification of cultural resources within or adjacent to the current project site. The cultural resources records search identified four historic-period built environment resources within a 0.5-mile radius of the project area. None of the resources identified in the records search are located within or adjacent to the project site. Three of the resources are residential properties (P-13-008003, P-13-008637, and P-13-014923) that have not been evaluated for historical significance. As such they are not historical resources pursuant to CEQA. The other resource is the no longer extant water tower (P-13-008426) formerly located at the City of Imperial Water Plant. It was recommended eligible for inclusion in the NRHP in 2001 but has since been removed from the site.

Rincon contacted the NAHC on January 26, 2021, to request an SLF search of the project site and a 0.5-mile radius. The NAHC responded on February 9, 2021, stating the results of the SLF search were negative.

Rincon Archaeologist Mark Strother, MA, Registered Professional Archaeologist, conducted a pedestrian survey of the proposed project site on February 4, 2021. Overall, ground visibility was poor (approximately 10 percent) as much of the project site is developed with the existing facilities and landscaping. Minimal areas of exposed ground surface are present at the southcentral edge and southwestern corner of the project site. Exposed soils throughout the project site consist of medium-brown sandy loam, typically intermixed with gravel. No archaeological resources were identified during the survey. As part of the survey, the historic-period built environment features that comprise the pool facility, portable restroom building, and storage building were documented with field notes and digital photographs.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

As a result of the field survey, one historic-period built environment property of more than 45 years of age was identified on the project site. It consists of a public swimming pool, permanent restroom building, utility building, storage building and shade structures constructed sometime between 1953 and 1968, in addition to a portable restroom building constructed circa 2010. The built environment elements located in the project site were determined to constitute a single resource, which was evaluated for eligibility for inclusion in the NRHP and CRHR. Because it lacks historical and architectural significance, the built environment resource was recommended ineligible for listing in the NRHP and CRHR, and therefore, is not considered a historical resource pursuant to CEQA.

The cultural resource assessment identified no historical resources within or adjacent to the project site. Therefore, no impact to historical resources would occur as a result of the proposed project.

NO IMPACT

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

Based on the results of the cultural resources records search, SLF search, and pedestrian field survey, no archaeological resources were identified within the project site. Given the prior development of the property and limited potential to encounter intact native soils during ground disturbing activities, there is a relatively low potential for intact archaeological deposits to be encountered during construction. However, the unanticipated discovery of archaeological resources, that may also be considered historical resources, during construction of the project remains a possibility and impacts to unanticipated resources are potentially significant. The following mitigation would reduce archaeological impacts to less than significant levels by requiring halting construction in the vicinity of any cultural resources found during construction and requiring evaluation and treatment of any resources evaluated as significant.

Mitigation Measure

CUL-1 Inadvertent Discoveries

If cultural resources are encountered during ground-disturbing activities associated with construction of the project, work within 50 feet of the find shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) be contacted immediately to evaluate the find. If no additional work to evaluate the find is necessary, the archaeologist shall evaluate the find for listing in the NRHP and CRHR. If the find requires excavation, the archaeologist shall prepare a work plan and implement a Phase II excavation to evaluate the find. If the discovery proves to be eligible for listing in the NRHP and/or CRHR, the archaeologist shall make recommendations for further treatment such as data or heritage recovery or capping. If the find is of Native American origin, appropriate treatment shall be determined in consultation with local Native Americans. Implementation of Mitigation Measure CUL-1 would reduce potential impacts to unanticipated archeological resources to less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

No human remains have been identified within the project site; however, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the

property secure from subsequent disturbance. Therefore, impacts related to the discovery of human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

The proposed project would include the development of approximately 22,724 sf of picnic and playground area, a 9,349 sf park square, 25,070 sf of pool area, 20,953 sf of new skate park features, a 23,000 sf parking lot with approximately 80 to 100 vehicle spaces and 4 bicycle parking spaces, 25,070 sf of multi-use basketball, volleyball and tennis courts, a 1,920 sf restroom and shower structure, a 1,500 sf atrium, and 12,526 sf of ADA compliant walking trails surrounding the perimeter and connecting the project's amenities. The existing lap pool would be demolished and replaced with a competition size pool. The CalEEMod modeling (Appendix B) indicates that the proposed project would use 8,050 kWh/year of electricity. The proposed project would be built in conformance with California Energy Commission and CALGreen building codes and the proposed project's energy resources would not be used in a wasteful or inefficient manner.

The project would be developed with energy efficient measures such as LED lights in all facilities. Furthermore, as the project would be developed according to State green building codes, the electricity consumption would be net zero. The project would have a less than significant impact on consumption of energy resources during construction and operation.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The project would be required to comply with all Federal, State, regional, and local regulations such as SB 100 and Title 24. Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's RPS Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045. Because the project would be powered by the existing electricity grid, the project would eventually be powered by renewable energy mandated by

City of Imperial
Imperial Townsite Park Project

SB 100 as existing service providers adjust their renewable energy supplies, and the project would not conflict with this statewide plan. The buildings would also be subject to energy efficiency standards pursuant to CCR Title 24 requirements. As such, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and the project would have no impact.

NO IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a.1. 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?*
- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

The project site is subject to strong ground shaking associated with active and/or potentially active faults in the region. The Imperial fault is located a few miles east of the existing City limits and is the nearest fault to the City. The San Andreas Fault zone is located near the western boundary of the Algodones Dunes Sand Hills, approximately 30 miles east of the City (City of Imperial 1992). Seismically induced ground shaking has affected the city in the past and is expected to do so in the future. Despite these potentially active nearby faults, the California Geological Survey (CGS) identifies the project site to not be located within an Alquist-Priolo Zone, and no active faults have been mapped across the project site (CGS 2019). Furthermore, the project would be built to current State and local seismic safety standards.

The entire southern California region is susceptible to strong ground shaking from severe earthquakes. Consequently, development of the project could expose people and structures to strong seismic ground shaking. However, the project would be designed and constructed in accordance with state and local building codes to reduce the potential for exposure of people or structures to seismic risks to the maximum extent possible. The project would be required to comply with the seismic safety requirements in the California Building Code, including a soils investigation and a geotechnical study to verify that the proposed project complies with the seismic safety requirements and all other applicable earth safety requirements of applicable building codes. These studies will serve as the basis upon which seismic safety design decisions are made in the final implementation of the project, in particular design and construction of the community center. Compliance with these requirements would reduce seismic ground shaking impacts to the maximum extent practicable with current engineering practices. Furthermore, the project would not increase ground shaking hazards at adjacent properties. Therefore, impacts related to strong seismic ground shaking would be reduced to a less than significant level through compliance with existing regulations requiring a geotechnical study and with applicable seismic safety requirements and all other applicable earth safety requirements of applicable building codes.

LESS THAN SIGNIFICANT IMPACT

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

A significant impact would occur if the project would be situated in a hillside area with unstable geological conditions or soil types that would be susceptible to failure when saturated.

The project site is currently developed with a community pool. According to CGS, the project site is not directly located in a liquefaction or landslide zone (CGS 2019). The project site has not historically experienced subsidence and no activities currently occur or are proposed for the site that would induce subsidence. The project would be built according to California Building Code

geotechnical standards that would safeguard against the effects of subsidence and landslides. Impacts would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

A significant impact would occur if construction activities or proposed uses would result in substantial soil erosion or loss of topsoil. Construction of the project would result in ground surface disturbance associated with limited grading, which could create the potential for soil erosion. The project site is currently developed with a community pool, including paved parking areas and landscaped areas. Development would remain or be improved throughout most of the park in a way that would reduce the potential for significant erosion. It is assumed that fill soil will be drawn from soil excavated on site, wherever possible.

The project would be required to send conceptual grading and drainage plans to the Director of Community Development to ensure minimal soil disturbance during construction of the project. The project construction plan would be required to comply with any conditions and requirements established by the National Pollution Discharge Elimination System (NPDES) permit or other permits reasonably related to the reduction or elimination of pollutants in stormwater from the construction site, including soils from grading, and any condition and/or requirements in place to protect specific watersheds. Impacts related to erosion would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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?

As stated above, the project site is not in a liquefaction zone and would not be subject directly to instability that results from liquefaction, subsidence, spreading, or collapse. The CSG does not identify any landslide or liquefaction areas in the immediate vicinity of the project site. The project would be designed and built according to the most recent California Building Code geotechnical standards that would safeguard against the effects of landslide. Impacts would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

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?

Expansive soils are highly compressible, clay-based soils that tend to expand as they absorb water and shrink as water is drawn away. Expansive soils are of concern since building foundations may rise during the rainy season and fall during dry periods in response to the clay's action. The project site is previously disturbed and has not been subject historically to soil expansion due to heavy rainfall. Nonetheless, as weather patterns change with the effects of climate change, historical conditions could fail to represent future conditions. According to the San Diego County General Plan (GP) EIR, the City of Imperial is not located in an area with expansive soils (San Diego County GP EIR 2011). The project would be designed and built according to California Building Code geotechnical standards that would safeguard against the effects of expansive soils, and impacts would be less than significant.

NO IMPACT

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

The proposed project would not include the installation of new septic tanks or alternative wastewater disposal systems since the project would connect to the existing sanitary sewer system, as discussed in Section 19, *Utilities and Service Systems*. No on-site wastewater treatment systems would be required, and no impact would occur.

NO IMPACT

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

The project site is underlain by late Pleistocene to Holocene age, alluvial terrace deposits (DOC 2018). Recent review of online databases found that the City of Imperial is located in the Salton Trough. Much of the ground surface of the western portion of the Salton Trough in Imperial County is covered by a veneer of recent sediments varying in thickness from 0 to 20 feet. These sediments include eolian sand, as found in active sand dunes, and alluvial sand and gravel. These sediments are thought to be entirely of Holocene age and, while not considered sensitive for fossils (Demere and Ekdale 2011), may contain cultural resources. However, based on Section 5, *Cultural Resources*, no prehistoric or historic-period archaeological sites were documented on the project site and no prehistoric archaeological resources have been identified within the vicinity of the project. Given the prior development of the property and limited potential to encounter intact native soils during ground disturbing activities, there is a relatively low potential for intact archaeological deposits to be encountered during construction.

Ground-disturbing activities during project construction may impact previously unknown paleontological resources that may be present below the project site surface. Therefore, construction of the project could result in direct or indirect impacts to paleontological resources that could potentially be significant and mitigation measures would be required.

Mitigation Measure

The following mitigation measure would reduce impacts to a less than significant level.

GEO-1 Paleontological Resources Management Program

The following mitigation measures shall only be implemented during ground construction activities (i.e., grading, trenching, foundation work, excavations) where ground disturbance exceeds eight feet below ground surface within project areas underlain by Pleistocene alluvial fan deposits.

- g. **Mitigation and Monitoring Program.** The Paleontological Mitigation and Monitoring Program shall be supervised by a qualified paleontologist. A qualified paleontologist is an individual who meets the education and professional experience standards as set forth by the SVP (2010), which recommends the paleontologist shall have at least a Master's Degree or equivalent work experience in paleontology, shall have knowledge of California geology and local paleontology, shall be familiar with paleontological procedures and techniques, and who has worked as a paleontological mitigation project supervisor for a least one year. Monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources.

- h. **Paleontological Worker Environmental Awareness Program (WEAP).** Prior to the start of construction, the qualified paleontologist or his or her designee, shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP shall be fulfilled at the time of a preconstruction meeting. In the event a fossil is discovered by construction personnel anywhere in the project area, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find before re-starting work in the area. If it is determined that the fossil(s) is (are) scientifically significant, the qualified paleontologist shall complete the mitigation outlined below to mitigate impacts to significant fossil resources.
- i. **Resource Recovery and Management Plan.** Ground-disturbing activity that does not exceed eight feet in depth in areas of low paleontological sensitivity shall not require paleontological monitoring. Any excavations within undisturbed bedrock in areas of high paleontological sensitivity (i.e., Pleistocene-aged deposits), and excavations that exceed eight feet in depth in those areas potentially underlain by Pleistocene-aged deposits (i.e., Holocene-aged alluvial sediments) shall be monitored on a full-time basis by a qualified paleontological monitor. If no fossils are observed during the first 50 percent of excavations in Holocene-aged sediments exceeding eight feet in depth, or if the qualified paleontologists can determine that excavations below nine feet are not disturbing Pleistocene-aged (or other potentially fossil-containing) sediments, then paleontological monitoring can be discontinued or reduced to spot-checking under the discretion of the qualified paleontologist, subject to approval from Imperial County. If fossils are discovered, the qualified paleontologist (or paleontological monitor) shall recover them. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. Should larger fossils be discovered, the qualified paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner.

Once salvaged, fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology or other institution determined by the City of La Verne or Los Angeles County), along with all pertinent field notes, photos, data, and maps.

Upon completion of ground-disturbing activities (and curation of fossils if necessary), the qualified paleontologist shall prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated.

Implementation of Mitigation Measure GEO-1 would reduce project impacts to unanticipated paleontological resource discoveries to less than significant levels.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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8 Greenhouse Gas Emissions

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

This section provides an analysis of the proposed project’s impacts on greenhouse gas emissions and is based on Rincon’s Air Quality and Greenhouse Gas Report attached as Appendix A.

Overview of Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHG emissions contributing to the “greenhouse effect,” a natural occurrence which takes place in Earth’s atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth’s surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as “carbon dioxide equivalent” (CO₂e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 28, meaning its global warming effect is 28 times greater than CO₂ on a molecule per molecule basis (IPCC 2014).³

³ The IPCC’s (2014) *Fifth Assessment Report* determined that methane has a GWP of 28. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the IPCC’s (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

Anthropogenic activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the concentration of GHGs in the atmosphere that trap heat. Since the late 1700s, estimated concentrations of CO₂, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (U.S. EPA 2020). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

Regulatory Framework

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (discussed further below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of carbon dioxide equivalents (CO₂e) by 2030 and two MT of CO₂e by 2050 (CARB 2017).

Other relevant state laws and regulations include:

- **SB 375:** The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. Metropolitan Planning Organizations are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the Metropolitan Planning Organization's Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG) was assigned targets of an 8 percent reduction in per capita GHG emissions from passenger vehicles by 2020 and a 19 percent reduction in per capita GHG emissions from passenger vehicles by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.
- **SB 100:** Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Methodology

GHG emissions associated with project construction and operation were estimated using CalEEMod, version 2016.3.2, with the assumptions described under Section 3, *Air Quality*, in addition to the following:

- **Amortization of Construction Emissions.** In accordance with South Coast Air Quality Management District’s (SCAQMD) recommendation, GHG emissions from construction of the proposed project were amortized over a 30-year period and added to annual operational emissions to determine the project’s total annual GHG emissions (SCAQMD 2008).
- **Nitrous Oxide Emissions from Mobile Sources.** Because CalEEMod does not calculate nitrous oxide emissions from mobile sources, nitrous oxide emissions were quantified using guidance from the CARB and the EMFAC2017 Emissions Inventory for the ICAQMD region for the year 2030 (the next State milestone target year for GHG emission reductions) using the EMFAC2011 categories (CARB 2018 and 2021; see Appendix B for calculations).
- **Utility Energy Intensity Factors.** The project would be served by Imperial Irrigation District (IID). Therefore, IID’s specific energy intensity factors (i.e., the amount of CO₂e per megawatt-hour) are used in the calculations of GHG emissions. However, per SB 100, the statewide RPS Program requires electricity providers to increase procurement from eligible renewable energy sources to 44 percent by 2024. To account for the continuing effects of the RPS, the energy intensity factors included in CalEEMod were reduced for year 2022 based on the percentage of renewables reported by IID. The percent procurement for 2022 was linearly interpolated using the RPS target for 2024. IID energy intensity factors that include this reduction are shown in Table 6.

Table 6 IID Energy Intensity Factors

	2015 (lbs./MWh)	2022 (lbs./MWh) ²
Percent procurement	22% ¹	39%
CO ₂	1,038	811
CH ₄	0.029	0.023
N ₂ O	0.00617	0.005

¹ Source: IID 2015, The Climate Registry 2021

² RPS goal established by SB 100

lbs. = pounds; MWh = megawatt-hour; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; RPS = Renewable Portfolio Standards; SB = Senate Bill

Significance Thresholds

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

According to *CEQA Guidelines* Section 15183.5, projects can tier off of a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP) in their white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions (AEP 2016). However, the City of Imperial has not published a qualified climate action plan nor has the County.

The next best approach would be to use a quantitative threshold from the local air district. However, the ICAPCD has not adopted a numeric threshold nor guidance to address project level GHG emissions in regard to the 2030 target established by SB 32.

CEQA Guidelines section 15064.4 expressly provides that a "lead agency shall have discretion to determine, in the context of a particular project," whether to "[u]se a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use." A lead agency also has discretion under the CEQA Guidelines to "[r]ely on a qualitative analysis or [quantitative] performance-based standards." Therefore, in light of the specific GHG guidance from the ICAPCD, it is appropriate to refer to guidance from other agencies when discussing GHG emissions. Thus, for the purposes of this analysis, thresholds developed by the SCAQMD are considered to determine the significance of GHG emissions

In guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD considered a tiered approach to determine the significance of residential and commercial projects. The draft tiered approach is outlined in meeting minutes dated September 29, 2010 (SCAQMD 2008, 2010):

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines Section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 10,000 MT CO₂e per year for industrial projects and 3,000 MT CO₂e per year for all non-industrial projects
- **Tier 4.** Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT CO₂e per year for land use projects.

The project would not be statutory or categorically exempt, and therefore Tier 1 does not apply. As previously stated, the City does not have a local, qualified GHG reduction plan for the project to tier off, thus Tier 2 would not apply. The SCAQMD Tier 3 bright-line quantitative threshold of 3,000 MT CO₂e per year threshold to analyze project GHG emissions would be a possible approach. The project would not have a service population since it would not have residents nor new employees, thus the Tier 4 approach would not apply. Therefore, the applicable threshold for the project would be a bright line-threshold of 3,000 MT CO₂e per year for non-industrial projects in accordance with Tier 3.

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

Construction and operation of the proposed project would generate GHG emissions. This analysis considers the combined impact of GHG emissions from both construction and operation. Calculations of CO₂, methane, and nitrous oxide emissions are provided to identify the magnitude of potential project effects.

Construction GHG Emissions

Construction of the proposed project would generate temporary GHG emissions primarily as a result of operation of construction equipment on-site as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport building materials and soil export. As shown in Table 7, construction of the proposed project would generate an estimated total of 164 MT CO₂e. Amortized over a 30-year period per SCAQMD guidance, construction of the proposed project would generate an estimated 5 MT CO₂e per year.

Table 7 Estimated Construction GHG Emissions

Construction	Project Emissions MT CO₂e
2022	164
Amortized over 30 Years	5

Source: Appendix B CalEEMod worksheets

Combined Annual GHG Emissions

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. As shown in Table 8, annual operational emissions generated by the proposed project combined with amortized construction emissions would total approximately 298 MT CO₂e per year, which would not exceed the SCAMQD threshold of 3,000 MT CO₂e per year. Therefore, impacts would be less than significant.

Table 8 Combined Annual Emissions

Emission Source	Annual Emissions (MT CO₂e)
Construction ¹	7
Operational	
Area	<1
Energy	3
Solid Waste	72
Water	27
Mobile	
CO ₂ and CH ₄	178
N ₂ O	11
Total	298
SCAQMD Threshold²	3,000
Exceed Threshold?	No

¹ Amortized construction related GHG emissions over 30 years

² The SCAQMD threshold of 3,000 MT CO₂e per year is the Tier 3 approach threshold for non-industrial projects.

Source: Appendix B CalEEMod worksheets

LESS THAN SIGNIFICANT IMPACT

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

Several plans and policies have been adopted to reduce GHG emissions in the southern California region, including the State’s 2017 Scoping Plan and SCAG’s 2020-2045 RTP/SCS. The proposed project’s consistency with these plans is discussed in the following subsections. As discussed therein, the proposed project would not conflict with plans and policies aimed at reducing GHG emissions. Therefore, impacts would be less than significant.

2017 Scoping Plan

The principal state plans and policies are AB 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions. The 2017 Scoping Plan’s strategies that are applicable to the proposed project include reducing fossil fuel use, energy demand, and vehicle miles traveled (VMT); maximizing recycling and diversion from landfills; and increasing water conservation. The project would be consistent with these goals through project design, which includes complying with the latest installing energy-efficient LED lighting, planting drought-tolerant plants, and using drip irrigation. The project would be served by IID, which is required to increase its renewable energy procurement in accordance with SB 100 targets. The project would also be located in centralized part of Imperial and would be a local-serving development. The project would be within walking and biking distance of schools and residential neighborhoods, which would reduce

future visitors' VMT and associated fossil fuel usage. Therefore, the project would be not conflict with the 2017 Scoping Plan.

Connect SoCal: 2020-2045 SCAG RTP/SCS

The SCAG *Connect SoCal RTP/SCS* is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by eight percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. The 2020-2045 RTP/SCS includes ten goals with corresponding implementation strategies for focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The project would construct a recreational park with playground area, a skate park, multi-use courts, a competition sized pool, and walking trails that would serve the local community. As a result, Imperial residents would not have to travel further distances for these recreational amenities. Therefore, the project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

LESS THAN SIGNIFICANT IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

The proposed project is intended for recreational use and would not involve the routine transport, use, or disposal of hazardous materials. Occasional use of small amounts of hazardous materials would occur for cleaning and maintaining park facilities, such as household cleaners, paint, and landscaping products, similar to what is used in the park currently. No routine disposal of hazardous materials is proposed.

According to the Preliminary Hazardous Materials Study prepared for this project (Appendix E), hazardous material impacts during construction are not expected. Construction activities would potentially use a limited amount of hazardous, flammable substances/oils during heavy equipment operation for site preparation and building construction. However, any transport, use, and storage of hazardous materials during construction of the project would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Therefore, the project would not create a significant hazard to the public or the environment through a foreseeable accident, or the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The proposed project lies approximately 60 feet north Ben Hulse Elementary School and approximately 215 feet southwest of Imperial High School. The proposed project is intended for recreational use and its operation would not emit or involve the handling of hazardous materials, substances, or waste. According to the Preliminary Hazardous Materials Study prepared for this project, based on the varying age of the onsite structures, building materials containing lead, asbestos, mercury, other hazardous materials may currently be present onsite. If lead, asbestos, or other hazardous material containing building materials are present, current local, state, and federal regulations would be followed. New facilities proposed on this site would not contain hazardous building materials.

Additionally, the maintenance and upkeep of facilities on-site, specifically the pool area, would occasionally require the use of various solvents, cleaners, and water treatment chemicals. Accidents may occur during the transport, storage, use, or disposal of hazardous materials, including spills or leaks. Adherence to applicable local, state, and federal plans and regulations for transport, storage, use, and disposal would reduce the potential for contamination from hazardous materials through proper cleanup, disposal, and remediation. Impacts to the surrounding schools would be less than significant. **LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The following online resources were reviewed to determine if hazardous materials may be present at the Project Site, including:

- Cortese List database⁴ (DTSC Envirostor 2021a),
- California State Water Resource Control Board's (SWRCB) online GeoTracker database (SWRCB GeoTracker, 2021a),
- California Department of Toxic Substances Control's (DTSC) online EnviroStor database (DTSC EnviroStor, 2021b),
- Environmental Data Resources (EDR), Aerial Photographs on February 8, 2021 (EDR, 2021),
- Online historic topographic maps dating back to 1955⁵ (Topos 2021),
- State of California Geologic Energy Management Division (CalGEM) Online Mapping System⁶ (CalGEM 2021),
- CalRecycle Solid Waste Information System (SWIS) Facility/Site Search⁷ (CalRecycle 2021)
- National Pipeline Mapping System (NPMS) online Public Map Viewer⁸ (NMPS 2021), and
- SWRCB polyfluoroalkyl substances (PFAS) database⁹ (SWRCB 2021b).

The project site is not currently listed as a Cortese site compiled pursuant to Government Code Section 65962.5⁴. According to the SWRCB's online GeoTracker database, no unauthorized release sites were identified within 1,500 feet of the project site and according to the DTSC's online EnviroStor database, no unauthorized release sites were identified within one-half mile of the project site. The nearest listed site is located at the intersection of 15th Street and Highway 86, located approximately 1,800 feet to the northeast of the project site.

A review of the CalGEM Online Mapping System indicates that no oil wells are located on the Project Site, adjacent properties, or within a quarter mile of the Project Site.

A review of the CalRecycle Solid Waste Information System (SWIS) Facility/Site Search indicates that no municipal landfills are located on the Project Site, adjacent properties, or within 2,000 feet of the Project Site.

A review of the National Pipeline Mapping System (NPMS) online Public Map Viewer indicates that no natural gas transmission pipelines or hazardous liquid pipelines are located on the Project Site or adjacent properties.

In 2019, the California SWRCB sent assessment requirements to property owners of sites that may be potential sources of PFAS. These sites currently include select landfills, airports, and chrome plating facilities. According to the SWRCB, "PFAS are a large group of human-made substances that do not occur naturally in the environment and are resistant to heat, water, and oil" (SWRCB 2019). Review of the California 2019 Statewide PFAS Investigation online Public Map Viewer indicates that there are no current chrome plating, airport, or landfill PFAS orders at any facilities located within one-half mile of the Project Site. Additionally, review of the California 2019 Statewide Drinking Water System Quarterly Testing Results online Public Map Viewer indicates that no drinking water

⁴ https://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG.COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST

⁵ <https://www.historicaerials.com/viewer>

⁶ <https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx>

⁷ <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>

⁸ <https://www.npms.phmsa.dot.gov/PublicViewer/>

⁹ <https://www.waterboards.ca.gov/pfas/>

wells have been tested for PFAS within two miles of the Project Site. Because there are no hazardous materials sites on or within 1,000 feet of the site, there would be no impact.

NO IMPACT

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

The Imperial County Airport is approximately 0.25 mile to the south of the project site. According to Section 13, *Noise*, no substantial noise exposure would occur to construction workers or users of the project site from aircraft noise. The project site is not located in an airport land use plan area or a public or private airport. The project site is not subject to hazards from these airports and there would be no impact.

NO IMPACT

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

The proposed project would renovate existing facilities in the park and demolish and rebuild the pool in the existing park. Development in the park would not restrict access to roadways during construction, as construction workers would park in existing parking lots on the project site. The project would retain existing parking and add a limited number of new parking spaces to the parking lot. When operational, the project would not increase the daily number of cars entering and exiting the park or the neighborhood in which it is situated, compared to existing conditions, to such an extent that traffic congestion that could impede emergency response or evacuation would occur.¹⁰ The project would therefore have a less than significant impact concerning interference with adopted emergency response or evacuation plans.

LESS THAN SIGNIFICANT IMPACT

- g. *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

As discussed in detail in Section 20, *Wildfire*, the project site is not located in or near a State Responsibility Area or lands classified as a VHFHSZ. The nearest such zone is a state responsibility area designated with moderate fire severity located approximately 22 miles west of the project site. Given the project site's urbanized location and distance from fire hazard severity zones, the proposed project would exposure people or structures to risk of loss, injury, or death involving wildland fires. Therefore, no impact would occur.

NO IMPACT

¹⁰ For further discussion of project trip generation, see Section 17, *Transportation*

10 Hydrology and Water Quality

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

Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction

On-site construction activities would be required to comply with the California State Construction General Permit (Order No. 2009-2009-DWQ, as amended) because project construction would disturb more than one acre of land. Compliance with the California State Construction General Permit would require the creation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP identifies all potential sources of pollution that may be expected to affect the quality of storm water discharge from a project site and provide Best Management Practices (BMPs) to help reduce potential impacts (e.g., pollutant source control, site design to reduce run off, monitoring for spills and leaks, implementing straw wattles, silt fencing, infiltration techniques). The BMPs would include measures that would be implemented to prevent discharge of eroded soils from the construction site and sedimentation of surface waters offsite. The BMPs would also include measures to quickly contain and clean up any minor spills or leaks of fluids from construction equipment. Compliance with the Construction General Permit during construction would reduce water quality and waste discharge impacts from runoff during temporary construction activities and a less than significant impact would occur during construction.

Operation

The proposed project would be designed to meet the requirements of the Imperial County Municipal Stormwater Permit and those stated in Imperial County's Stormwater Management Plan. The project would be subject to the requirements in the Imperial County municipal separate storm sewer system (MS4) permit. Site-specific BMPs that mitigate stormwater would be designed and built following design requirements in the Imperial County MS4 Permit, which establishes limits for the concentration of contaminants entering the storm drain system for the life of the project. Retention, infiltration, bioretention, and biofiltration mitigation BMPs would be used consistent with requirements outlined in the Imperial County MS4 Permit. The proposed project would be required to implement the stormwater quality mitigation controls specified in the approved design plans required to implement the project. With adherence to these requirements, project operation would result in less than significant impacts to surface or ground water quality.

LESS THAN SIGNIFICANT IMPACT

- 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?*

- e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project would occur on a site currently used for recreation and would retain most of its existing pervious and impervious surfaces, with minor modifications. At completion of the proposed project, historical drainage patterns would be retained, and a similar amount of groundwater recharge would occur compared to existing conditions. The proposed project would be in compliance with the County of Imperial Integrated Regional Water Management Plan and include drought tolerant landscape design features. The proposed project would have a less than significant impact to groundwater supply and recharge.

Project features would be built to CalGreen specifications, including those that address water conservation in buildings and specify water conserving plumbing fixtures and fittings, food waste disposers, and faucets and wash fountains. Project design would comply with these specifications and would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would 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?*
- c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

The proposed project would not alter the course of any stream or river and would not change existing drainage flows on the project site. Project implementation would not alter the course of the creek or add impervious surfaces near it and flood flows would remain the same as under existing conditions.

Stormwater runoff can be contaminated with sediment, pesticides, pathogens, trash, debris, petroleum hydrocarbons, and heavy metals, especially when the source of urban runoff is paved roadways and the runoff is generated by the first storm of the winter season. The project would not increase the volume of pollutants draining into the stormwater system because pervious and impervious surfaces would remain roughly equal to existing conditions. Furthermore, the project would be required to comply with Imperial County's National Pollutant Discharge Elimination System (NPDES) MS4 permit and recommended BMPs from the Stormwater Management Plan. The NPDES program requires stormwater permits for point source discharges and the County's MS4 Permit establishes limits for the concentrations of contaminants entering the storm drain system. Under the MS4 Permit, any project applicant who discharges stormwater runoff from a site is required to pre-treat runoff on site through BMPs such as landscaping and infiltration.

With incorporation of standard MS4 permit requirements during construction and operation, the project site would not discharge polluted stormwater more than County requirements. Impacts to water quality and the project site's drainage pattern would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Seiches are seismically induced waves that occur in large bodies of water, such as lakes and reservoirs. The closest lake is the Salton Sea, which is approximately 20 miles north of the project site. Therefore, seiches are a not a risk to the project site. A tsunami is a tidal wave produced by offshore seismic activity. The project site is approximately 100 miles from the Pacific Ocean, and therefore is not in an area susceptible to tsunamis. There would be no impact.

NO IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project physically divide an established community?

A significant impact could occur if the proposed project were large enough or otherwise configured in such a way as to create a physical barrier within an established community. The project site is in an existing park in an area zoned as R-1 (Single-Family Residential). The project may require rezoning to Open Space Recreational. Rezoning the project site would not impose a substantial change in land use than what is currently existing. Rather, it would allow for greater recreational density and uses than what is currently permitted under R-1. The project site currently has a community pool that would be redeveloped as part of the project. The project would solely expand recreational facilities on the project site that would provide greater recreational opportunities to the surrounding residential development. The surrounding urban land uses are predominately built out and consist of institutional and residential uses. The project site is surrounded by Imperial High School to the north, Ben Hulse Elementary School to the south, and residential uses to the east and west. Implementation of the project would not disturb or alter access to any existing adjacent uses. Therefore, the project would have no impact on the physical make-up of an established community.

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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?

The project site is owned and operated by the City Department of Community Services. The project site is not in a specific plan area, coastal zone, or sphere of influence; the main documents regulating land use in the city and immediate vicinity are the City’s General Plan and Zoning Code.

City of Imperial General Plan

The City’s General Plan is the principal land use document guiding development within the city, which it does by establishing goals and policies that guide growth, land use patterns, and other aspects of city life. The General Plan also includes a Land Use Element as well as a Parks and Recreation Element that sets forth guiding principles for land use development and recreational

facilities within the City. The following consistency analysis compares applicable goals and policies in the General Plan with the intent of the proposed project.

Table 9 Project Consistency Analysis with General Plan Goals and Policies

General Plan Goal or Policy	Consistency Analysis
LU Goal 2: To achieve land use compatibility throughout the City and promote character areas, where appropriate.	Consistent. The proposed project would further expand recreational facilities than what is currently existing to better provide diverse opportunities and facilities for the surrounding neighborhood.
LU Goal 3: Availability of adequate public services and facilities for all existing and proposed development and create an aesthetically please full-service community with an excellent quality of life.	Consistent. The proposed project would develop approximately 142,112 total square feet of park and recreation space to serve the surrounding neighborhood and City as a whole.
LU Policy 3.1: Strive to create multi-generational, family-friendly public spaces throughout the developed community that are widely used by everyone and to maximize existing infrastructure.	Consistent: The proposed project would improve park facilities and expand some amenities within the park that all age groups can utilize.
Parks and Recreation Goal 1: Provide the current and future residents of the City of Imperial with ample recreational open space land, and with a variety of recreational programs to encourage maximum beneficial use of leisure time.	Consistent: The proposed project would develop approximately 142,112 total square feet of park and recreational space to maximize the amount of recreational space feasible on the project site.
Parks and Recreation Policy 1: Cooperate with the Imperial Unified School District to Develop joint use recreation plans for all recreational open space in the City, including property under the control of the School District.	Consistent: The project would be developed in partnership with the Imperial High School District.
Parks and Recreation Policy 2: All parks within the City should have as a minimum, the following facilities: picnic areas with tables and cabanas, restrooms, child play area with playground equipment, and either outdoor basketball courts or horseshoe pits.	Consistent: The project would the development of a picnic and playground area, pool area, skate park, multi-use basketball, volleyball and tennis courts, restrooms and shower facilities, and ADA compliant walking trails.
Parks and Recreation Goal 2: Enhance the services currently provided in the existing park facilities while seeking expansion of described services through a variety of methods.	Consistent: The proposed project would redevelop the existing lap pool on the project size as well as expand the park facilities to include several additional amenities such as picnic and playground areas, skate park features, updated restrooms and showers, volleyball and tennis courts, and walking trails.
Parks and Recreation Policy 4: The City shall consider the feasibility of an agreement between the City and the Imperial Unified School District on the joint ownership, financing, usage, and maintenance of recreational facilities on or adjacent to the school property.	Consistent: The project would be developed in partnership with the Imperial High School District.

Source: City of Imperial 1992

City of Imperial Municipal Code and Zoning

The City identifies the site as having a land use designation of Public Use, and a zoning designation of R-1 (Single-family Residential). According to Section 24.03 of the City's municipal code, R-1 (Single-family Residential) zones permit parks and related facilities with a conditional use permit. A zone change may be required in which the zone would be changed to Open Space Recreational. If a zone change is required upon approval of the project, a rezone would not conflict with any applicable policies or plans.

As demonstrated in Table 9 above, the project would be consistent with applicable goals and policies of the City's General Plan, and would not conflict with any other land use plan, regulations of agencies with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental impact. If a zone change were to occur, it would not substantially change or alter the existing land use than what is currently there. The project would result in a less than significant impact.

LESS THAN SIGNIFICANT IMPACT

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12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

A significant impact would occur if a project site were in an area used or available for extraction of a regionally important mineral resource, or if the project would convert an existing or future regionally important mineral extraction use to another use. An impact could also occur if the project would affect access to a site used or available for regionally important mineral resource extraction.

The proposed project includes redevelopment of an existing community pool and construction of a picnic and playground area, skate park facilities, multi-use basketball courts, volleyball and tennis courts, new restrooms and showers, an atrium, and ADA compliant trails. According to the DOC, no significant mineral resources exist on the project (DOC 2015). The project site is not designated as a locally important mineral resource recovery site in the local general plan, or other land use documents. Implementation of the project would not result in loss of availability of known mineral resources or a locally important mineral resource recovery site. No impact would occur.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section provides an analysis of the proposed project’s impacts on noise and is based on Rincon’s Noise and Vibration Study attached as Appendix F.

Overview of Noise and Vibration

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA’s guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. The L_{eq} is defined as the single steady A-weighted sound level equivalent to the same amount of sound energy as that contained in the actual fluctuating sound levels over time. Typically, the L_{eq} is summed over a one-hour period. The L_{max} is the highest root mean squared (RMS) sound pressure level within the sampling period, and the L_{min} is the lowest RMS sound pressure level within the measuring period (Crocker 2007). Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{DN}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by L_{DN} and CNEL usually differ by about 1 dBA. The relationship between the peak-hour L_{eq} value and the L_{DN} /CNEL depends on the distribution of traffic during the day, evening, and night. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

Vibration

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas sound is simply carried through the air. Thus, vibration is generally felt rather

than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 10.

Table 10 Vibration Annoyance Potential Criteria

Human Response	Vibration Level (in/sec PPV)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity
 Source: Caltrans 2020

Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The City of Imperial’s Noise Element of the General Plan defines residential uses as the most sensitive, and agricultural uses as the most tolerant (City of Imperial 1992). Noise sensitive receivers also typically include hospitals, convalescent homes, schools, and churches. Noise sensitive receivers near the site include single family residences 70 feet to the east, Ben Hulse Elementary School 60 feet to the south, and Imperial High School 215 feet to the northeast.

Vibration sensitive receivers are similar to noise sensitive receivers, such as residences, and institutional uses, such as schools, churches, and hospitals. However, vibration sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment, affected by levels that may be well below those associated with human annoyance.

Project Noise Setting

The most common source of noise in the project site vicinity is vehicular traffic from Worthington Road Boulevard and aircraft operations associated with Imperial County Airport. According to Figure 3.11-1 of City of Imperial Land Use and Circulation Element Update Draft Environmental Impact Report, the project site is situated within the 60 dBA CNEL airport noise contour (City of Imperial 2017). Noise associated with school activities (i.e., student drop off/pick up, school bell, students playing and talking, and sporting events) also make up the noise environment of project site area.

Regulatory Setting

City of Imperial General Plan

The Imperial General Plan was adopted in 1992. The goal and policies of the noise element are intended to maintain the quiet rural residential nature of the community through the use of sensitive land use planning practices and appropriate noise mitigation measures Chapter 3 of the City of Imperial's General Plan sets forth policies and standards for evaluating community noise in the City. At the time of developing the 1992 General Plan, stationary source noise was not a concern, however, the City shall require appropriate noise buffers and screening to ensure that noise levels of greater than 55 dBA CNEL are not transmitted offsite to noise sensitive land uses. The following are applicable to the proposed project:

Acceptable Noise Levels

Policy 1.

- A. 60 dBA CNEL is established as the acceptable outdoor noise exposure level for rural and single-family residential areas.
- B. 65 dBA CNEL is established as the acceptable outdoor noise exposure level for multiple-family residential areas.
- C. In the event that acceptable outdoor noise exposure levels cannot be attained by various noise attenuation measures, indoor noise levels shall not exceed 45 dBA CNEL.
- D. 70 dBA CNEL is established as the maximum outdoor noise exposure level for schools (public and private), libraries, churches, hospitals, nursing homes, parks and recreation areas.

Land Use Compatibility

Policy 2.

- E. The location and distribution of land uses throughout the City shall take into account the compatibility of different uses with the various levels of noise.
- F. Any new development within the Airport Land Use Planning Area shall be limited to those uses defined as sensitive, moderately sensitive and insensitive.
- G. The City shall encourage the Airport Management to maximize the use of the east/west runway and minimize the use of the north/south runway.
- H. The review of development applications shall consider the impact of the use on the noise environment of existing or planned contiguous uses.
- I. Where necessary because of incompatibilities, noise attenuation measures shall be required by the City to achieve the acceptable noise exposure levels.

Noise Ordinance

Policy 4.

- A. The City shall maintain a community noise ordinance to resolve noise complaints; the ordinance should address the following as a minimum:
 - 1. Prohibition of construction activities between the hours of 8:00 p.m. and 7:00 a.m.; however, the following zones will the opportunity to obtain an exemption:

- General Industrial
- Rail-Served Industrial
- Public
- Agriculture

Methodology

Construction Noise

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FHWA 2018). Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels.

Construction activity would result in temporary noise in the project area, exposing residential sensitive receivers to increased noise levels. The project would involve demolition, site preparation, grading, excavation, and trenching. Construction noise would typically be higher during the heavier periods of initial construction (i.e., grading) and would be lower during the later construction phases. Typical heavy construction equipment during project grading could include dozers, backhoes, and graders. It is assumed that diesel engines would power all construction equipment. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

A potential construction scenario includes a dozer, excavator, and a grader working to grade the site. Therefore, a dozer, excavator, and a grader were analyzed together for construction noise impacts due to their likelihood of being used in conjunction at the same time and therefore a reasonable scenario for the greatest noise generation during construction. At a distance of 100 feet, a dozer, excavator, and a grader would generate a noise level of 78 dBA L_{eq} (RCNM calculations are included in Appendix G).

Groundborne Vibration

Operation of the proposed project would not include any substantial vibration sources. Thus, construction activities have the greatest potential to generate ground-borne vibration affecting nearby receivers, especially during grading and excavation of the project site. The greatest vibratory source during construction would be equipment similar to a dozer, such as an excavator. Neither blasting nor pile driving would be required for construction of the proposed project. Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020a, FTA 2018).

The highest levels of vibration generated by construction equipment would be produced by a large bulldozer. A large bulldozer would create approximately 0.089 in./sec. PPV at a distance of 25 feet, which would attenuate to 0.031 in./sec. PPV at 50 feet (Caltrans 2020a).

Operational Noise Sources

Traffic Noise

Noise levels affecting the proposed project site would be primarily influenced by traffic noise from West Barioni Boulevard, Worthington Road, Nance Road, Brewer Road, and Austin Road. West Barioni Boulevard, Nance Road, and Brewer Road are two-lane roadways with a posted speed limit of 25 miles per hour (mph) near the project site; Worthington Road is a two-lane roadway with a posted speed limit of 25 mph from P street to B street and 35 mph from B street to Nance Street; and Austin Road is a two-lane roadway with a posted speed limit of 55 mph. The FHWA Highway Traffic Noise Prediction Model (FHWA RD 77-108) was used to calculate traffic noise levels along project area roadways. Traffic noise-model inputs includes roadways, distance to noise sensitive receivers, vehicle volumes and speeds, type of vehicle, and existing shielding factors. Traffic noise modeling was conducted based on traffic volumes from the traffic analysis prepared for this project (STC Traffic, Inc. 2020).

The project's contribution to the existing traffic noise levels along area roadways was determined by comparing the predicted noise levels at a reference distance of 50 feet from the roadway centerline for Opening Year (2020) conditions with and without project-generated traffic. Trip generation is based on the project's traffic analysis, which determined the project would result in a total of 207 daily trips distributed throughout the roadway network. Exterior transportation noise levels were modeled at the future park use areas, with the receivers placed at 5 feet above ground level. Model results are included in Appendix F.

The CNEL is calculated based on the daily traffic volumes with additional project trips. To determine the CNEL, the daytime traffic volume was assumed to represent 80 percent of the average daily traffic (ADT) volume, evening volumes represent 15 percent of the ADT, and nighttime volumes represent 5 percent of the ADT. Using ADT volumes with this day/evening/nighttime ADT split results in a predicted daily traffic noise level that is expressed in dBA CNEL. To determine the vehicle classification mix for modeling, Caltrans vehicle classification for the nearest segment of Highway 86 were used (Caltrans 2018), with a mix of 88 percent automobiles, 6 percent medium trucks, and 6 percent heavy trucks.

Park Noise

Analysis of proposed park noise is based on measured noise levels for other similar park projects. (County of Sacramento 2011; American Journal of Audiology 1998; Illingworth & Rodkin 2015; Mach Group 2020). Children playing, people gathering, and skate park activities would be the dominant noise sources anticipated at the project site.

Parking Lot Noise

Parking lot noise typically includes vehicular circulation, screeching tires, engines, door slams, car alarms, and human voices. Based on the FTA General Transit Noise Assessment methodology, parking lot noise levels were calculated with the CREATE noise model (HMMH 2006). The CREATE noise model calculates parking lot noise based on reference single event noise levels (SEL), the number of peak hour vehicle trips, and distance to receivers. The project proposes to provide 80 to

100 parking stalls. Assuming 100 parking stalls are filled in the peak hour, noise levels would be 45 dBA L_{eq} at 100 feet.

Skate Park Noise

Skate park noise typically consists of rolling noise and impact noise. Rolling noise is the noise resulting from the interaction of skate wheels with concrete surfaces; rougher surfaces would produce higher rolling noise. Impact noise is an impulsive noise source resulting from the impact of the user’s skateboard, roller blades, or scooter with park features, from user falls or from shouting and cheering. Skate park noise data applied to analysis for this project are summarized in

Table 11.

Table 11 Skate Park Noise Levels

Description	Distance Measured (feet)	Noise Level (dBA, L_{eq})	Noise Level at 100 feet (dBA, L_{eq})
Sunnyvale Skate Park ¹ with ramps, bowls, banks, quarter pipes, and grind rails and 5 to 12 skaters at any given time	75	57	55
	60	56	52
	75	55	53
	13	64	46
Jose Avenue Skate Park ¹ with ramps, bowls, quarter pipes, grind rails and 4 to 5 skaters at any given time	30	56	46
Ettington Community Skate Park ²	15	69	53

sqft= square feet; dBA=A-weighted decibels; L_{eq} =equivalent continuous noise level over a stated period of time

¹ Illingworth & Rodkin. 2015. Monterey Avenue Skatepark Project Noise and Vibration Assessment Capitola, California. September 2.

² Mach Group, 2020. RP 200206 – Ettington Community Skate Park – Noise Impact Assessment.

Park User Noise

Average noise levels from social conversations and children playing are approximately 60 dBA at 50 feet for approximately 20 children playing and approximately 63 dBA L_{eq} at three feet for 20 people talking simultaneously (County of Sacramento 2011; American Journal of Audiology 1998). For the purposes of this analysis, it is assumed that peak operations of the playground area on the eastern portion of the project site would consist of approximately 20 children utilizing the playground and approximately 40 people utilizing the picnic and seating areas. This analysis also assumes that 180 people could be attending swim meets at the pool area.

Significance Thresholds

The following thresholds are based on City noise standards and Appendix G of the CEQA guidelines. Noise impacts would be considered significant if:

- **Issue a – Noise in Excess of Established Standards:** The project would result in the 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.
 - **Temporary:** Construction noise would be significant if:
 - Noise levels exceed the FTA criteria of 80 dBA L_{eq} , 85 dBA L_{eq} , and 90 dBA L_{eq} for an 8-hour period for residential, commercial, and industrial land uses, respectively; or

- Construction noise is generated outside of allowable construction hours as stated in the City of Imperial General Plan Noise Element (construction activities are prohibited between the hours of 8:00 p.m. and 7:00 a.m.).
 - **Permanent:** Operational noise would be significant if:
 - Per the City of Imperial General Plan Noise Element, the City shall require stationary noise sources of more than 55 dBA CNEL are not transmitted offsite to noise sensitive land uses.
 - For traffic-related noise, impacts would be considered significant if project-generated traffic would result in exposure of sensitive receivers to an unacceptable increase in noise levels by 3 dBA.
 - **Issue a – Land Use Compatibility:** The project’s on-site uses would be subject to noise exceeding City Noise Element land use compatibility standards.
 - This would occur if exterior use areas of the project are subject to noise levels in excess of 70 dBA CNEL
 - **Issue b - Vibration:** The project would result in the generation of excessive ground-borne vibration or ground-borne noise levels.
 - This would occur if the project would subject vibration-sensitive land uses to construction-related ground-borne vibration that exceeds the distinctly perceptible vibration annoyance potential criteria for human receivers of 0.24 in./sec. PPV, or the residential structural damage criteria of 0.4 in./sec. PPV.
 - **Issue c – Airport Noise:** For a project located in 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, if the project exposes people residing or working in the project area to excessive noise levels.
- 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?*

Construction Noise

Over the course of a typical construction or demolition day, construction equipment would be located as close as 75 feet to the nearest noise sensitive school use to the south (Ben Hulse Elementary School). Construction related equipment would typically be located at an average distance further away over an 8-hour period due to the nature of construction where equipment is mobile throughout the day. Therefore, it is conservatively assumed that over the course of a typical construction day the construction equipment would operate at an average of 85 feet from the nearby properties.

At a distance of 85 feet, a dozer, excavator and grader would generate a noise level of 79 dBA L_{eq} (8-hour) at the nearest noise sensitive use to the project site. Therefore, construction noise levels with this equipment would not exceed the FTA construction noise threshold of 80 dBA L_{eq} (8-hour) at residential and school land uses. Other construction activities, such as trenching construction, would be anticipated to use equipment of intensity similar to or less than the simultaneous use of a dozer, excavator, and grader. In addition, construction would occur within the allowed hours of the City’s Noise Element. Given the aforementioned, impacts would be less than significant.

Operation

The project would introduce new sources of operational noise to the site due to skate park activity, children playing, parking lot activities, and people gathering and talking while utilizing the new park. The site currently has a swimming pool with grandstands for spectators and is considered as part of the existing noise environment. Assumptions for park noise are discussed in Section 3.3. For a conservative analysis, combined noise levels from all park uses at the nearest properties from the project are shown in

Table 12. The project site layout indicates a wall is proposed along the southern project boundary as part of the project. For this analysis it is assumed to be a 6-foot-tall masonry wall. A conservative 3 dBA reduction has been applied to modeled noise levels for receivers that would benefit from shielded park users, specifically, Ben Hulse Elementary School.

Table 12 Operational Noise Levels at Off-site Receivers

Receiver	Park Use	Distance (feet)	Noise Levels (dBA L _{eq})	Combined Noise Levels (dBA L _{eq})	Exceed Threshold? ²
D Street Residence	Basketball/Tiger Square	170	28	41	No
	Parking Lot	250	31		
	Skate Park	500	40		
	Playground	540	25		
	Pool Area	400	31		
B Street Residences	Picnic Area	100	33	47 ¹	No
	Parking Lot	375	34		
	Skate Park	175	50		
	Playground	100	33		
	Pool Area	425	30		
Imperial High School	Playground	200	27	46	No
	Parking Lot	200	39		
	Skate Park	300	45		
	Picnic Area	300	23		
	Pool Area	450	29		
Ben Hulse Elementary School	Skate Park	100	55	52 ¹	No
	Picnic Area	100	33		
	Playground	160	28		
	Parking Lot	170	40		
	Pool Area	150	39		

dBA=A-weighted decibels; L_{eq}=equivalent continuous noise level over a stated period of time

¹A conservative -3 dBA applied to combined noise level to account for proposed western and southern wall.

² In accordance with the City's General Plan Noise Element, the applicable threshold is that operational noise shall not exceed 55 dBA CNEL at any point on the property line of the premises upon which the noise or sound is generated or produced

As shown in the table, operational noise levels from the project are below the City's General Plan Noise Element standard of 55 dBA CNEL. Therefore, operational noise from the project would be less than significant.

Off-Site Traffic Noise

Based on the project's traffic volume analysis, the project would result in 207 vehicle trips per day (STC 2020). With an additional 207 vehicle trips added to daily roadway volumes and distributed throughout the roadway network, the largest increase of ADT volumes would be experienced on Worthington Road that has an existing ADT of 7,358. Daily traffic volumes on Worthington Road

would increase by 207 per day, all other studied roadways resulted in daily increase of 119 or less. The project would result in traffic noise level increase of less than 0.5 dBA on Worthington Road and on all other studied roadway segments. Therefore, the project's traffic noise increases would not exceed 3 dBA, the threshold for a noticeable noise increase, and impacts would be less than significant.

Land Use Compatibility

Following the methodology discussed above, noise levels at the project's future park use areas were modeled. On-site park noise levels were modeled at ground-level. Daily on-site traffic noise levels that future park users would be exposed to would be 64 dBA CNEL at 50 feet. Therefore, noise levels at park use areas of the project would not exceed the City's 70 dBA CNEL normally acceptable exterior noise standard for park uses and would not conflict with the City General Plan.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Construction activities known to generate excessive ground-borne vibration, such as pile driving, would not be conducted by the project. The greatest anticipated source of vibration during general project construction activities would be from a dozer, which may be used within 75 feet of the nearest off-site structures to the south. A dozer would create approximately 0.089 in/sec PPV at a distance of 25 feet and 0.017 in/sec PPV at a distance of 75 feet (Caltrans 2020). This would be lower than what is considered a distinctly perceptible impact for humans of 0.24 in/sec PPV, and the structural damage impact of 0.4 in/sec PPV. Therefore, although a dozer may be perceptible to nearby human receptors, temporary impacts associated with the dozer (and other potential equipment) would be less than significant.

Operation of the project would not include any substantial vibration sources. Therefore, operational vibration impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The Imperial County Airport is approximately 0.25 mile to the south of the project site. The City's land use compatibility threshold for a recreational use is 70 dBA CNEL. Based on Figure 3.11-1 of City of Imperial Land Use and Circulation Element Update Draft Environmental Impact Report, the project site is situated within the 60 dBA CNEL airport noise contour and outside the 65 dBA CNEL airport noise contour (City of Imperial 2017). Therefore, no substantial noise exposure would occur to construction workers or users of the project site from aircraft noise, and no impacts would occur.

NO IMPACT

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14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial 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)?*

A significant impact may occur if a project were to induce substantial, unplanned population growth in an area, either directly or indirectly. According to the Census Bureau, in July 2019 the population of Imperial was 18,120 (California Department of Finance 2020). SCAG estimates a population increase to 27,800 by 2045 (SCAG 2020a).

The proposed project would redevelop an existing community pool, improve existing facilities (e.g., playground and picnic areas, basketball courts, volleyball and tennis courts, and trails), and add new benches, gazebos, trees, and parking. The proposed project does not include construction of any new residences or businesses and is intended for use by the existing population. Project implementation would not introduce population growth nor would it increase the number of businesses in Imperial, resulting in indirect growth. The project would not, therefore, cause substantial, unplanned population growth in an area, either directly or indirectly and there would be no impact.

NO IMPACT

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

A significant impact would occur if a project were to result in the displacement of existing housing units or people, necessitating construction of replacement housing elsewhere. The existing park facilities contain no residences, nor do they house people. Implementation of the project would not, therefore, displace persons or remove residential units that would necessitate the construction of additional housing elsewhere. There would be no impact.

NO IMPACT

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15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

A project would normally have a significant impact on fire protection if its implementation made necessary the construction of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service, the construction of which would cause significant environmental impacts. The Imperial County Fire Department (ICFD) provides fire prevention, suppression, and medical services to Imperial (City of Imperial 2020).

ICFD operates nine fire stations with six contracting agencies including the City of Imperial. The fire station in Imperial is located at 2514 La Brucherie Rd, approximately 1.25 miles south of the proposed project. Stations in El Centro can also be called upon to provide additional support if necessary. All available ICFD equipment and manpower can be called upon in the event of a larger incident.

The proposed project would replace an existing community pool, expand recreational facilities (e.g., basketball, volleyball, and tennis courts, fields, trails, and picnic areas), and add new trees and parking. Expansion of park facilities would allow for larger recreational events, which would increase

the need for medical emergency services. However, the increase of emergency services would be minimal and would not require the expansion of ICFD facilities. Additionally, the proposed project would not increase the population or number of people employed in Imperial. Implementation of the project would have a less than significant impact to fire protection facilities.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The project would have a significant impact if it were to require new or expanded police station facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for police protection.

The City of Imperial is serviced by the Imperial Police Department. The City's police station is located at 424 S Imperial Avenue, approximately 0.5 miles southeast of the project site. The police station operates 24 hours a day, seven days a week and are dispatch in response to emergency calls from wherever they are situated, rather than from the police station. The distance between the facility and the location of the emergency therefore does not usually determine response times. Instead, response times correlate more closely with the number of police officers on the street. The project would replace an existing community pool building with new park facilities such as picnic areas, a new pool, a playground, new park trails and enhanced lawns. As the project is not expected to introduce new residents to the surrounding neighborhoods, it would not result in a substantial increase in police services required to serve the park over existing conditions. No new or physically altered police facilities would be needed to maintain performance objectives and there would be no impact during operation.

NO IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

A significant impact could occur if a project were to include substantial employment or population growth that could generate a demand for school facilities. The project would occur in an existing recreational space, replacing and enhancing existing facilities. The project is not expected to introduce new residential population and associated school-aged children. More so, the project aims to expand recreational facilities for the surrounding neighborhoods and enrolled students in the Imperial Unified School District. As the project would not generate additional students, it would not generate a demand for school capacity beyond what currently exists within the Imperial Unified School District. Project implementation would not result in a need for new or improved facilities that would create a physical impact on the environment. There would be impact

NO IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the

construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

A significant impact could occur if the recreation and park services available could not accommodate a project-related population increase and the proposed project would result in the need to construct new facilities that would create significant environmental impacts. The project is a park project in which the environmental impacts are discussed throughout this document, and addressed through mitigation, where appropriate. Impacts would be less than significant with mitigation incorporated.

POTENTIALLY SIGNIFICANT IMPACT

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Project implementation would not increase population, directly or indirectly, and demand on existing public facilities and services (such as libraries) would not be added. There would be no impact to these public facilities or to service ratios, response times, or other performance objectives associated with them

NO IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

A substantial impact could occur if a project includes substantial employment or population growth, which would increase the use of the existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated.

The City currently has approximately 48.52 acres of parks and open space areas. The current estimated population in Imperial is 18,120, resulting in approximately 2.6 acres per 1,000 resident. The proposed project involves the redevelopment of the existing community pool with upgraded park facilities totaling approximately 3.5 acres. The new community center would be built within the existing site boundaries. The project would expand or enhance amenities including pedestrian trails, picnic areas, basketball courts, tennis courts, volleyball courts, skate facilities, and picnic areas. The project would also implement additional or enhanced parking facilities that would facilitate ADA access. The purpose of the project is to reinvigorate community resources in the surrounding neighborhood in partnership with the Imperial High School District and to enhance the park's character through attractive architectural and landscape features that make the park functional for adjacent neighborhoods and others seeking recreation opportunities in the City. Although the park would expand in square footage, increased visitors are not anticipated as it is anticipated to serve existing residents from the surrounding neighborhoods. Furthermore, renovated and enhanced features throughout the rest of the park will improve its existing condition. As discussed in Section 14, *Population and Housing*, the proposed project would not add residential or commercial uses that would increase population or employment opportunities that could result in increased use of existing recreational facilities on or near the project site. Therefore, the project would create no impacts related to the increased use and subsequent deterioration of recreational facilities.

NO IMPACT

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

Environmental effects evaluated in this IS-MND indicate that potential project-related impacts are either less than significant or less than significant with mitigation incorporated. With the integration of these mitigation measures into project design, all potentially significant impacts would be reduced to a less than significant level. Expansion of the current community facilities would occur within the existing site boundaries and would be consistent with the City's land use goals and policies. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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17 Transportation

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

This section provides an analysis of the proposed project’s impacts on transportation and is based on STC’s VMT and Traffic Volume Analysis attached as Appendix H.

California Senate Bill 743 was adopted in 2013, replacing automobile level of service metrics with VMT as the standard for determining impacts under CEQA. VMT is a measure of the amount and distance of travel over a given time, based on type of land use. In 2018, The State Office of Planning and Research issued guidance stating that the appropriate metric to evaluate projects like the one proposed herein is net change in VMT, and the threshold of significance is increase in total VMT.

The City of Imperial and Imperial County has not yet published guidelines on evaluating VMT impacts for CEQA following the implementation of Senate Bill 743. This analysis is therefore consistent with the Governor’s Office of Planning and Research (OPR) Technical Advisory (December 2018).

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

The project involves the development of a 1.0-acre picnic and playground area, 0.6-acre pool area, 0.5-acre of new skate park features, a 0.5-acre parking lot with approximately 80 to 100 vehicle spaces and 4 bicycle parking spaces, 0.5-acre of multi-use basketball, volleyball and tennis courts, a 0.05-acre restroom structure, and ADA compliant walking trails surrounding the perimeter and connecting the project’s amenities.

Trip generation rates were derived from a comparison between the Institute of Transportation Engineers (ITE) Trip Generation 10th Edition and SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region. The SANDAG rate was found to have a higher rate,

therefore, this rate was used to derive project trip generation and is considered a conservative analysis.

The Traffic Technical Memorandum (Appendix H) analyzed the Russell Court Subdivision project traffic study that is expected to produce similar VMT finding as the proposed project. The Russell Court Subdivision project traffic study used 2015 traffic counts and added a compounded 1.5% per year growth factor to account for cumulative project traffic to derive an opening year (2017) volumes. To ensure that this analysis included traffic volumes from the Russell Court Subdivision project, the cumulative plus project (2017) volumes, from the Russel Court traffic study were used as a baseline. This was considered a conservative methodology which negates any short-term reduction in traffic volumes due to the COVID-19 pandemic. The Traffic Technical Memorandum for the project indicates that the daily trip generation VMT would increase from 19,303 on all traffic segments under current conditions to 19,359 under the proposed project.

Thus, the technical memorandum determined that the project will predominately be for the use and benefit of the local community. It can therefore be considered local-serving and “screened out” from further VMT analysis. Therefore, the project would have no impact in terms of conflicting with existing programs, plans, ordinances, or polices that address circulation of all types.

NO IMPACT

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

As discussed above, the technical memorandum determined that the project will predominately be for the use and benefit of the local community. It can therefore be considered local-serving and “screened out” from further VMT analysis. Thus, the proposed project would have no impact related to any potential inconsistency with CEQA Guidelines Section 1506.3(b).

NO IMPACT

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

d. Would the project result in inadequate emergency access?

The project does not have any hazardous design features such as sharp curves or dangerous intersections. The project is compatible with surrounding uses. The existing site access points will remain in place under the proposed project and no limitations to emergency access will occur. Furthermore, the project will create a 23,000 sf parking lot with approximately 80 to 100 vehicle spaces and 4 bicycle parking spaces, in addition to expanded areas at the entrance and in the lower parking lot to accommodate the turning radius of fire emergency vehicles, having a beneficial impact. Overall, the project will have no impact related to these issue areas.

NO IMPACT

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, “tribal cultural resources.” AB 52 states, “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

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

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those having requested notice of projects proposed in the jurisdiction of the lead agency.

On March 10, 2021, the City of Imperial distributed AB 52 consultation letters for the proposed project, including project information, map, and contact information to 14 Native American tribes. The tribal governments provided with an AB 52 consultation letter include the following list of recipients:

- Barona Group of the Capitan Grande
- Campo Band of Diegueño Mission Indians
- Ewiiapaayp Band of Kumeyaay Indians
- Iipay Nation of Santa Ysabel
- Inaja-Cosmit Band of Indians
- Jamul Indian Village
- Kwaaymii Laguna Band of Mission Indians
- La Posta Band of Diegueño Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Diegueño Mission Indians
- Quechan Tribe of the Fort Yuma Reservation
- San Pasqual Band of Diegueño Mission Indians
- Sycuan Band of the Kumeyaay Nation
- Viejas Band of Kumeyaay Indians

Under AB 52, Native American tribes have 30 days to respond and request further project information and request formal consultation. Two tribes responded within 30 days of mailing of the letters, the Quechan Indian Tribe the Viejas Tribal Government. The Quechan Indian Tribe had no further comments on the proposed project, while the Viejas Tribal Government requested that any identified sacred sites be avoided with adequate buffer zones. Additionally, the Viejas Tribal Government requested that laws governing the protection of tribal cultural resources be followed and that they be contacted should there be any inadvertent discoveries on-site. Accordingly, AB 52 consultation is complete for the project.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 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 as defined in Public Resources Code 21074 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?

No tribal cultural resources have been identified on or near the project site. However, the project area may contain sites sacred to the Kumeyaay people. The proposed project would follow all laws regulating the protection and avoidance of sacred sites. Therefore, the project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

-
- 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?*

A significant impact may occur if the project would:

- Discharge wastewater, whose content exceeds the regulatory limits established by the governing agency
- Increase water consumption or wastewater generation to such a degree that the capacity of facilities currently serving the project site would be exceeded
- Increase wastewater flows such that a sewer or treatment plant is constrained or would become constrained

Water

Governor Brown signed into law SB 606 and AB 1668, ushering in a new era of state oversight of water use. These bills were necessitated by the severity of the recent drought and the growing evidence that California is becoming hotter, precipitation is becoming more erratic, and California will need to be prepared for multi-year or even decade-long droughts.

Based on the 2018 Annual Water Quality Report, the project site is served by the City of Imperial Irrigation District (IID) (City of Imperial 2018). IID was formed in 1911 to acquire properties of the bankrupt California Development Company. The District provides water for the County of Imperial, including the project site. IID receives its water supply from the Colorado River throughout the All-American Canal.

According to the City of Imperial's 2018 Annual Water Quality Report, the City provided an approximately 2.6 million gallons per day in the 2018 water year, and approximately 961 million gallons of water annually to citizens that receive water from IID. The City of Imperial meets all applicable State Water Resources Control Board Division of Drinking Water and U.S. Environmental Protection Agency (U.S. EPA) domestic water quality standards (City of Imperial 2018). According to the 2020 IID Service Plan, the City anticipates non-agricultural water demand to increase to approximately 163.2 AFY by 2040 (IID 2020). The project is expected to require 0.02 AFY for indoor use and outdoor use. This represents a projected increase of 0.02 AFY over existing conditions (see Appendix B for the CalEEMod modeling results). The project facilities will install water conserving features according to CalGreen building requirements. Furthermore, the project would follow the City's Conservation Element guidelines for landscaping, and water use.

Because the project would not require or result in the relocation or construction of new or expanded water facilities and sufficient water supplies would be available to serve the project, impacts would be less than significant.

Wastewater

The City of Imperial serves and would continue to serve the project site for wastewater disposal and treatment. The City treats wastewater at the City of Imperial Treatment Plant and Pumping Facility, which has the capacity to treat 2.4 million gallons per day (mgd) of wastewater and currently treats a daily average of 1.2 mgd from domestic, commercial, and industrial customers (City of Imperial 2012). Employees at the project site would remain the same under project operation as under existing conditions, and park users would not substantially increase because improved facilities would still serve roughly the same number of expected users. Therefore, wastewater production is expected to remain roughly the same as under existing conditions, and project implementation would not result in a substantial increase in wastewater or exceed the treatment capacity of the City of Imperial Treatment Plan and Pumping Facility. Furthermore, this treatment plant is subject to an

NPDES permit. It therefore meets the requirements of the Regional Water Quality Control Board (RWQCB). Finally, because the project would not discharge wastewater whose content exceed the regulatory limits established by the RWQCB, impacts would be less than significant.

Stormwater Drainage

A significant impact may occur if the volume of stormwater runoff would increase to a level exceeding the capacity of the storm drain system serving the project site, resulting in the construction of new stormwater drainage facilities. As discussed in Section 10, *Hydrology and Water Quality*, under the proposed project stormwater drainage patterns would remain the same or be improved compared to existing conditions. Stormwater drainage during construction would be treated according to requirements of the NPDES permit, during which maintenance/repair of BMPs would ensure they remained effective to prevent runoff and siltation. Furthermore, the project would not introduce increased impervious surfaces that would result in increased stormwater runoff. Therefore, the project would not exceed the applicable wastewater treatment requirements, and impacts would be less than significant.

Electric Power & Natural Gas

Electric service for the project site is provided by Imperial Irrigation District (IID) through existing lines in the surrounding streets. IID services up to 6,471 square miles, including all of Imperial County and the project site. Natural gas service for the project site is provided by SoCal Gas (SCG) through the existing lines on-site and within the right-of-way of Barioni Boulevard. SCG provides natural gas service to approximately six million residential and business customers across 20,000 square miles of southern California, including the City of Imperial and the project site (SCG 2019).

The project site is currently served by existing electricity and natural gas infrastructure. As discussed in Section 6, *Energy*, the project would increase electricity and natural gas demand; however, an increase in residential electricity and natural gas demand would not be considered a wasteful use of energy and is not anticipated to require additional electricity substations or natural gas storage/transmission facilities. Therefore, impacts with respect to new or expanded electric power or natural gas facilities would be less than significant. No further analysis of this issue is necessary.

Telecommunications

Cable, telephone, and internet services within the City of Imperial are currently provided by AT&T, Frontier, and/or Charter Spectrum. The project would not involve any components requiring telecommunications infrastructure and would not involve the relocation of existing telecommunications facilities. Existing telecommunications infrastructure would serve the needs of project employees. Therefore, no impact related to telecommunications facilities would occur, and no further analysis of this issue is necessary.

LESS THAN SIGNIFICANT IMPACT

- 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?*

A significant impact may occur if the project would increase solid waste generation to a degree such that the existing and projected landfill capacity would be insufficient to accommodate the additional solid waste or if a project would generate solid waste that was not disposed of in accordance with applicable regulations. Assembly Bill 969 requires all jurisdictions in California to increase their landfill diversion to 50 percent by year 2000. In addition, AB 341 sets a new statewide goal of achieving 75 percent landfill diversion by 2020.

The handling of all debris and waste generated during construction of the project would be subject to 2016 CALGreen requirements and the California Integrated Waste Management Act of 1989 (AB 939) requirements for salvaging, recycling, and reuse of materials from construction activity on the project site. In accordance with 2016 CALGreen requirements, the project would be required to achieve a minimum of 65 percent diversion rate for construction waste.

For operational waste, AB 939 requires all cities and counties to divert a minimum of 50 percent of all solid waste from landfills. According to the CalEEMod outputs for the project (Appendix B), the project would generate approximately 143.2 tons per year of solid waste, or approximately 0.39 tons per day. The project's anticipated daily solid waste generation would account for less than one percent of the daily permitted throughputs at the Republic Services Allied Imperial Landfill. Given the small proportion project-generated solid waste and the existing surplus capacity at area landfills, the solid waste generated by operation of the project would be adequately accommodated by existing landfills. Furthermore, the project would be required to comply with federal, State, and local statutes and regulations related to solid waste. Therefore, the project would have a less than significant impact, and no further discussion of this issue is necessary.

LESS THAN SIGNIFICANT IMPACT

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20 Wildfire

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

The entire southern California region is prone to large wildfires due to its hot, dry climate and expansive coverage of ignitable vegetation. During the autumn and winter months, strong offshore Santa Ana wind events carry dry, desert air and can fan fast-moving fires that spread rapidly from heavily-vegetated wilderness and mountainous areas into developed communities. The City of Imperial is in an urbanized area of Imperial County, which limits the spread of large, uncontrolled wildfires. However, the area is prone to regular brush fires, particularly during summer heat waves, which can pose a safety risk.

While a natural ecological process in coastal chaparral and forest systems, wildfire return intervals have decreased throughout southern California, resulting in more frequent ecological disturbance, loss of biodiversity, and colonization by non-native grass species (U.S. Forest Service 2018). Furthermore, post-fire conditions leave exposed mountain slopes and hillsides vulnerable to surface erosion and runoff. In southern California, as little as 0.3 inch of rain in 30 minutes can produce debris flows on post-fire landscapes (U.S. Geological Survey 2018).

The project site is not located in a designated Very High Fire Hazard Severity Zone (VHFHSZ) or a State Responsibility Area. The nearest VHFHSZ is a local responsibility area north of Borrego Salton Seaway (S22), approximately 52 miles northwest of the project site (CAL FIRE 2020). The nearest State Responsibility Area is a Moderate Fire Hazard Severity Zone located approximately 22 miles west of the project site (CalOES 2015).

- 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 downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is not located in or near a State Responsibility Area or lands classified as a VHFHSZ. The nearest such zone is a state responsibility area designated with moderate fire severity located approximately 22 miles west of the project site. The VHFHSZ is separated from the site by residential development with minimal vegetation and open desert. The project would develop approximately 22,724 sf of picnic and playground area, a 9,349 sf park square, 25,070 sf of pool area, 20,953 sf of new skate park features, a 23,000 sf parking lot, 25,070 sf of multi-use basketball, volleyball and tennis courts, a 1,920 sf restroom and shower structure, a 1,500 sf atrium, and 12,526 sf of ADA compliant walking trails surrounding the perimeter and connecting the project's amenities. The project site is surrounded by residential development and is occupied by an existing recreational area consisting of a lap pool, storage building, parking lot, and grass fields. The project would be served by existing water utilities, including fire hydrants along Barioni Boulevard, with the nearest hydrant located on the north frontage of the project site. As described in Section 17, *Transportation*, the project would not result in significant traffic impacts with the potential to impede emergency response or evacuation. The project site is within a relatively flat portion of Imperial and not located near a landslide hazard area or floodplain, minimizing the potential for impacts related to post-fire flooding, landslides, or slope instability. Given the project site's urbanized location and distance from fire hazard severity zones, project impacts related to wildfire would be less than significant. No further analysis of this issue is necessary.

LESS THAN SIGNIFICANT IMPACT

21 Mandatory Findings of Significance

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

Does the project:

a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The project would improve an existing recreational use in Imperial, California. Section 4, *Biological Resources*, discusses the potential for SSC to occur on the project site, although the analysis finds their occurrence unlikely as there have been no recently documented occurrences and no individuals were observed during surveys. However, the project site contains ornamental trees that are suitable habitat for a variety of nesting birds protected under the federal MBTA and state CFGC Section 3505. Construction-related disturbance could result in nest abandonment or premature fledging of the young. Therefore, impacts to nesting birds would be potentially significant unless

mitigation is incorporated. Construction occurring within the vicinity of nesting birds may also indirectly impact individuals with construction noise and dust. Implementation of BIO-1 would reduce the project's impacts to nesting birds to a less than significant level.

As described in Section 5, *Cultural resources*, implementation would not eliminate important examples of major periods in architectural history. Cultural resources are not expected to be discovered on the site but if they are, Mitigation Measure CUL-1 is provided to reduce impacts to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As concluded in Sections 1 through 20, the project would have no impact, less than significant impact, or less than significant impact with mitigation incorporated, with respect to all environmental issues considered in this document. Cumulative impacts related to several resource areas have been addressed in the individual resource sections of this IS-MND, including air quality, GHG emissions, noise, and transportation (see CEQA Guidelines Section 15064(h)(3)). As discussed in Section 3, *Air Quality*, and in Section 8, *Greenhouse Gas Emissions*, the proposed project would result in less than significant impacts associated with air quality and GHG emissions during project construction and operation. Therefore, air quality and GHG emissions associated with operation and construction would be less than significant and would not be cumulatively considerable.

As discussed in Section 13, *Noise*, the proposed project would not generate significant construction noise impacts. The noise and traffic analyses in this IS-MND both considered increases in traffic and traffic noise under Existing plus Project conditions and contribution to VMT and concluded that impacts would be less than significant and would not add to cumulatively significant impacts.

This IS-MND determined that, for some of the other resource areas (e.g., agriculture, mineral), the proposed project would have no impact compared to existing conditions. Therefore, the project would not contribute to cumulative impacts related to these issues. Other issues (e.g., biological resources, cultural resources, geology, hazards and hazardous materials, and tribal cultural resources) are by their nature project-specific and impacts at one location do not add to impacts at other locations or create additive impacts. As such, cumulative impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project would develop a neighborhood park for recreational use by residents and visitors in the surrounding area. After mitigation, there would be no substantial projects resulting from project implementation. Therefore, the project would have a less than significant impact from adverse effects on human beings.

LESS THAN SIGNIFICANT IMPACT

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Appendix A

Air Quality and Greenhouse Gas Report



Imperial Town Site Park Project

Air Quality and Greenhouse Gas Study

prepared for

City of Imperial

Department of Community Services

420 South Imperial Avenue

Imperial, California 92251

Contact Tony Lopez, Park Superintendent

prepared by

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March 2021



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Imperial Town Site Park Project

Air Quality and Greenhouse Gas Study

prepared for

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March 2021



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1 Project Description

1.1 Introduction

This study analyzes the potential air quality and greenhouse gas (GHG) impacts of the proposed Townsite Park Project (project) located in the city of Imperial, California. Rincon Consultants, Inc. (Rincon) prepared this study for the City of Imperial (applicant) for use in support of environmental documentation pursuant to the California Environmental Quality Act (CEQA). The purpose of this study is to analyze the project's air quality and GHG impacts related to both temporary construction activity and long-term operation of the project. The conclusions of this study are summarized in Table 1.

Table 1 Summary of Impacts

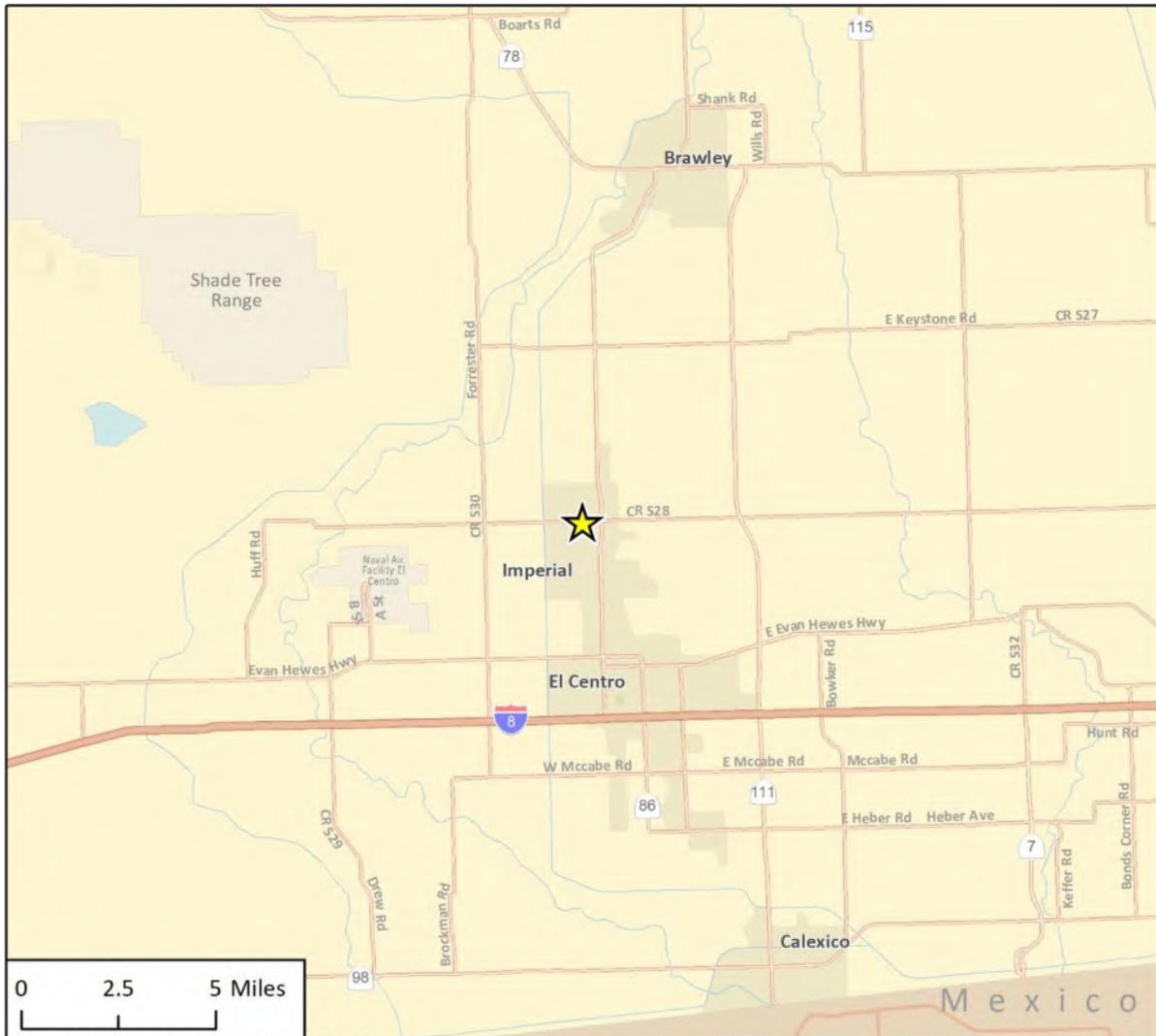
Impact Statement	Proposed Project's Level of Significance	Applicable Recommendations
Air Quality		
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than significant impact	None
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	Less than significant impact	None
Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than significant impact	None
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than significant impact	None
Greenhouse Gas Emissions		
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than significant impact	None
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	None

1.2 Project Summary

Project Location

The 3.15-acre project site is located in the City of Imperial in Imperial County, California. The project site lies south of Barioni Boulevard, east of South B Street, west of South D Street, and is approximately 0.25 mile north of Imperial County Airport. The project site has been previously disturbed and is currently used as a recreational area consisting of a lap pool, storage building, parking lot, and grass fields. Project site access would be provided via a driveway on Barioni Boulevard. Figure 1 shows the project site's regional location and Figure 2 shows an aerial view of the project site and surrounding area. Figure 3 shows the project plan layout.

Figure 1 Regional Location



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★ Project Location

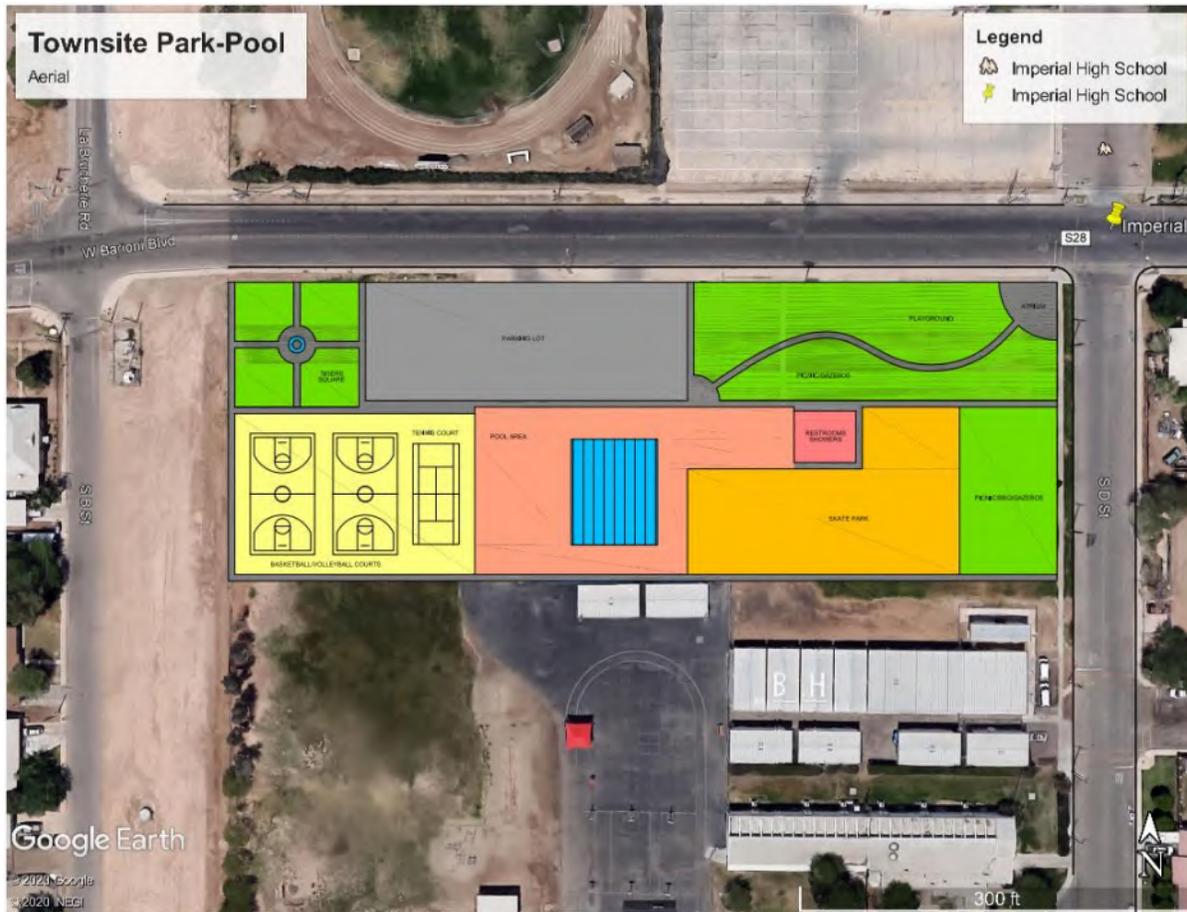


102_3_Regional Location

Figure 2 Project Site



Figure 3 Project Site Plans



Project Description

The project would include the development of approximately 22,724-square foot picnic and playground area, 9,349-square foot park square, 25,070-square foot pool area, 20,953-square foot skate park, 23,000-square foot parking lot with approximately 80 to 100 vehicle spaces and 4 bicycle parking spaces, 25,070 square feet of multi-use basketball, volleyball and tennis courts, 1,920-square foot restroom and shower structure, 1,500-square foot atrium, and 12,526 square feet of ADA compliant walking trails surrounding the perimeter and connecting the project's amenities. The existing lap pool would be demolished and replaced with a competition size pool (50 meters long by 25 meters wide). The pool area would be expanded to include grandstand seating, canopy shading, and an outside shower station. The existing storage structure would be repurposed to include ADA compliant restrooms. Landscaping will be placed throughout the project including drought tolerant trees and shrubs on drip irrigation. The project will serve as a recreational area for the surrounding community.

Sustainability Features

The project would include drought tolerant trees and shrubs on drip irrigation. Existing lawn areas and irrigation system would be augmented or reduced to fit the needs of this project. Other park amenities include light-emitting diode (LED) lighting for the park features and parking lot.

Construction

All construction would occur within the current conceptual limits of the project. The project will require the mobilization of grading, excavating, and trenching equipment as well as import and export of building materials. Electrical, plumbing, and other on-site improvements would also be required. Construction is expected to begin in July 2022 and be open to the public by November 2022. This schedule is contingent on the award date and availability of funds. For this analysis, it was assumed all construction would end in October 2022 and the park would be operational in November 2022.

2 Background

2.1 Local Climate and Meteorology

The project site is in the Salton Sea Air Basin (SSAB), which covers Imperial County and the middle portion of Riverside County. The Imperial County Air Pollution Control District (ICAPCD) and the South Coast Air Quality Management District (SCAQMD) monitor and regulate local air quality in the SSAB. However, the project is located within the southern portion of the SSAB and is only within the ICAPCD jurisdictions. As the local air quality management agency, the ICAPCD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Air pollutant emissions in the SSAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

The predominant wind direction in the vicinity of project site is from the west and the average wind speed is approximately 7.3 miles per hour (Iowa Environmental Mesonet 2021). The maximum average daily temperature in the project area is approximately 88 degrees Fahrenheit (°F), and the minimum average daily temperature is approximately 57°F. Total precipitation in the project area averages approximately 2 inches annually (Western Regional Climate Center 2021).

2.2 Air Pollutants of Primary Concern

Primary criteria pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere. Primary criteria pollutants include carbon monoxide (CO), nitrogen dioxide (NO₂), fine particulate matter (PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂), and lead (Pb). Ozone (O₃) is considered a secondary criteria pollutant because it is created by atmospheric chemical and photochemical reactions between reactive organic gases (ROG) and nitrogen oxides (NO_x). The project would generate CO, PM₁₀, PM_{2.5}, SO₂, and Pb as well as ozone precursors ROG and NO_x (including NO₂) during construction and operation. These pollutants can have adverse impacts on human health at certain levels of exposure. The following subsections describe the characteristics, sources, and health and atmospheric effects of air pollutants.

Ozone

Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic gases (ROG¹). NO_x is formed during the combustion of fuels, while ROG are formed during combustion and evaporation of organic solvents. Because O_3 requires sunlight to form, it usually occurs in substantial concentrations between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions (U.S. EPA 2020a). Groups most sensitive to O_3 include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

Carbon monoxide is a local pollutant that is found in high concentrations near fuel combustion equipment and other sources of CO. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic. Therefore, elevated concentrations are usually only found near areas of high traffic volumes. The health effects of CO are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulty in people with chronic diseases, nausea, reduced lung capacity, and impaired mental abilities (U.S. 2020).

Nitrogen Dioxide

Nitrogen dioxide is a byproduct of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2 , creating the mixture of NO and NO_2 commonly called NO_x . NO_2 is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Elevated levels of NO_2 can also cause respiratory irritation, impaired pulmonary function, and bronchitis (U.S. EPA 2020a). Nitrogen dioxide absorbs blue light, gives a reddish-brown cast to the atmosphere, and reduces visibility. It can also contribute to the formation of ozone/smog and acid rain.

Sulfur Dioxide

SO_2 is a colorless, pungent, irritating gas formed primarily by the combustion of sulfur-containing fossil fuels. When SO_2 oxidizes in the atmosphere, it forms sulfur trioxide (SO_3). Collectively, these pollutants are referred to as sulfur oxides (SO_x). In humid atmospheres, SO_2 can also form sulfuric acid mist, which can eventually react to produce sulfate particulates that can inhibit visibility. Combustion of high sulfur-content fuels is the major source, while chemical plants, sulfur recovery plants, and metal processing are minor contributors. At sufficiently high concentrations, SO_2 irritates the upper respiratory tract. At lower concentrations, when in conjunction with particulates, SO_2 appears to do still greater harm by injuring lung tissues. This compound also constricts the breathing passages, especially in people with asthma and people involved in moderate to heavy exercise.

¹ Organic compound precursors of ozone are routinely described by a number of variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in a rather confusing array of acronyms: HC, THC (total hydrocarbons), RHC (reactive hydrocarbons), TOG (total organic gases), ROG (reactive organic gases), TOC (total organic compounds), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, two groups are important from an air quality perspective: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (HC, RHC, ROG, ROC, and VOC). ICAPCD uses the term ROG to denote organic precursors.

Sulfur dioxide causes respiratory irritation, including wheezing, shortness of breath, and coughing (U.S. EPA 2020a). Long-term SO₂ exposure has been associated with increased risk of mortality from respiratory or cardiovascular disease. Sulfur oxides, in combination with moisture and oxygen, can yellow leaves on plants, dissolve marble, and eat away iron and steel.

Particulate Matter

Atmospheric particulate matter is comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. The particulates that are of particular concern are PM₁₀ (small particulate matter that measures no more than 10 microns in diameter) and PM_{2.5} (fine particulate that measures no more than 2.5 microns in diameter). The characteristics, sources, and potential health effects associated with the PM₁₀ and PM_{2.5} can be different. Major man-made sources of PM₁₀ are agricultural operations, industrial processes, combustion of fossil fuels, construction, demolition operations, and entrainment of road dust into the atmosphere. Natural sources include windblown dust, wildfire smoke, and sea spray salt. The finer PM_{2.5} particulates are generally associated with combustion processes as well as formation in the atmosphere as a secondary pollutant through chemical reactions. Elevated levels of PM₁₀ can cause respiratory irritation, reduced lung function, aggravation of cardiovascular disease, and cancer (U.S. EPA 2020a). PM_{2.5} is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. Elevated levels of PM_{2.5} can cause respiratory stress and decreased lung function and increase the risk of long-term disease (U.S. EPA 2020a). More than half of the small and fine particulate matter that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Lead

Lead (Pb) is a metal found naturally in the environment, as well as in manufacturing products. Lead occurs in the atmosphere as particulate matter. The major sources of Pb emissions historically have been mobile and industrial sources. In the early 1970s, the United States Environmental Protection Agency (U.S. EPA) set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The U.S. EPA completed the ban prohibiting the use of leaded gasoline in highway vehicles in December 1995. As a result of the U.S. EPA's regulatory efforts to remove lead from gasoline, atmospheric lead concentrations have declined substantially over the past several decades. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries in part due to national emissions standards for hazardous air pollutants (U.S. EPA 2013). As a result of phasing out leaded gasoline, metal processing is currently the primary source of Pb emissions. The highest level of Pb in the air is generally found near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. Lead may cause a range of health effects, including anemia, kidney disease, and neuromuscular and neurological dysfunction (in severe cases). Demolition of buildings containing lead-based paint is regulated by existing laws and regulations, including California Code of Regulations Title 17, Division 1, Chapter 8, and Senate Bill 460, to reduce or eliminate the risk to nearby receptors. Furthermore, the proposed project does not include any stationary sources of lead emissions. Therefore, implementation of the project would not result in substantial emissions of lead, and this pollutant is not discussed further in this analysis.

Toxic Air Contaminants

A toxic air contaminant (TAC) is an air pollutant that may cause or contribute to an increase in mortality or serious illness or which may pose a present or potential hazard to human health. TACs may result in long-term health effects such as cancer, birth defects, neurological damage, asthma, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation, runny nose, throat pain, and headaches. TACs are considered either carcinogenic or non-carcinogenic based on the nature of the health effects associated with exposure. For carcinogenic TACs, potential health impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

TACs include both organic and inorganic chemical substances. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as diesel particulate matter (DPM; California Air Resources Board [CARB] 2011); however, TACs may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities.

2.3 Air Quality Regulation

The federal and state governments have authority under the federal and state Clean Air Acts to regulate emissions of airborne pollutants and have established ambient air quality standards (AAQS) for the protection of public health. An air quality standard is defined as “the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harming public health” (CARB 2019a). The U.S. EPA is the federal agency designated to administer air quality regulation, while CARB is the state equivalent in California. Federal and state AAQS have been established for six criteria pollutants: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, PM₁₀, PM_{2.5}, and lead. AAQS are designed to protect those segments of the public most susceptible to respiratory distress, such as children under the age of 14, the elderly (over the age of 65), persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases (U.S. EPA 2016). In addition, the State of California has established health-based ambient air quality standards for these and other pollutants, some of which are more stringent than the federal standards (CARB 2019b and 2019c). The federal and state Clean Air Acts are described in more detail below.

Federal Air Quality Regulations

The Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (USC) 7401] for the purposes of protecting and enhancing the quality of the nation’s air resources to benefit public health, welfare, and productivity. In 1971, to achieve the purposes of Section 109 of the CAA [42 USC 7409], the U.S. EPA developed primary and secondary National Ambient Air Quality Standards (NAAQS). NAAQS have been designated for the following criteria pollutants of primary concern: O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and Pb.

The primary NAAQS “in the judgment of the Administrator², based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health,” and the secondary standards are to “protect the public welfare from any known or anticipated adverse effects associated with

² The term “Administrator” means the Administrator of the U.S. EPA.

the presence of such air pollutant in the ambient air” [42 USC 7409(b)(2)]. The U.S. EPA classifies specific geographic areas as either “attainment” or “nonattainment” areas for each pollutant based on the comparison of measured data with the NAAQS. States are required to adopt enforceable plans, known as a State Implementation Plan (SIP), to achieve and maintain air quality meeting the NAAQS. State plans also must control emissions that drift across state lines and harm air quality in downwind states. Table 2 lists the current federal standards for regulated pollutants.

Table 2 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	NAAQS	CAAQS
Ozone	1-Hour	–	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	–	–
	24-Hour	–	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM ₁₀	Annual	–	20 µg/m ³
	24-Hour	150 µg/m ³	50 µg/m ³
PM _{2.5}	Annual	12 µg/m ³	12 µg/m ³
	24-Hour	35 µg/m ³	–
Lead	30-Day Average	–	1.5 µg/m ³
	3-Month Average	0.15 µg/m ³	–

NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million; µg/m³ = micrograms per cubic meter
 Source: CARB 2016; U.S. EPA 2016

To derive the NAAQS, the U.S. EPA reviews data from integrated science assessments and risk/exposure assessments to determine the ambient pollutant concentrations at which human health impacts occur, then reduces these concentrations to establish a margin of safety (U.S. EPA 2018). As a result, human health impacts caused by the air pollutants discussed above may affect people when ambient air pollutant concentrations are at or above the concentrations established by the NAAQS. The closer a region is to attaining a particular NAAQS, the lower the human health impact is from that pollutant (Brief for San Joaquin Valley Unified Air Pollution Control District 2018). Accordingly, ambient air pollutant concentrations below the NAAQS are considered to be protective of human health (CARB 2019a and 2019b). The NAAQS and the underlying science that forms the basis of the NAAQS are reviewed every five years to determine whether updates are necessary to continue protecting public health with an adequate margin of safety (U.S. EPA 2015).

State Air Quality Regulations

California Clean Air Act

The California Clean Air Act (CCAA) was enacted in 1988 (California Health & Safety Code (H&SC) §39000 et seq.). Under the CCAA, the State has developed the California Ambient Air Quality Standards (CAAQS), which are generally more stringent than the NAAQS. Table 2 lists the current state standards for regulated pollutants. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Similar to the federal CAA, the CCAA classifies specific geographic areas as either “attainment” or “nonattainment” areas for each pollutant, based on the comparison of measured data within the CAAQS.

Toxic Air Contaminants

In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: H&SC Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, Senate Bill 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air quality monitoring network, and develop any additional air toxic control measures needed to protect children's health.

State Implementation Plan

The SIP is a collection of documents that set forth the state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, and permitting), district rules, state regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

As the regional air quality management district, the ICAPCD is responsible for preparing and implementing the portion of the SIP applicable to the portion of the SSAB within its jurisdiction. The air pollution control district for each county adopts rules, regulations, and programs to attain federal and state air quality standards and appropriates money (including permit fees) to achieve these objectives.

Local Air Quality Regulations

As the local air quality management agency, the ICAPCD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the SSAB is classified as being in “attainment” or “nonattainment.” In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts described in Section 2.2, *Air Pollutants of Primary Concern*, are already occurring in that area as part of the environmental baseline condition.

Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The ICAPCD adopted the following State Implementation Plans to address how the air district will reduce air pollution for ozone, PM₁₀, and PM_{2.5}: *Imperial County 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard (2017a)*, *Imperial County 2018 Redesignation Request and Maintenance Plan for Particulate Matter Less than 10 Microns in Diameter (2018a)*, *Imperial County 2018 Annual Particulate Matter Less than 2.5 Microns in Diameter State Implementation Plan (2018b)*, and *Imperial County 2013 State Implementation Plan for the 2006 24-Hour PM_{2.5} Moderate Nonattainment Area (2014)*. In addition, ICAPCD adopted the *2009 Reasonably Available Control Technology (RACT) State Implementation Plan in 2010 (2010a)* to require emission controls to further reduce air pollutants for which the area is designated nonattainment.

Project-level significance thresholds established by local air districts set the level at which a project would cause or have a cumulatively considerable contribution to an exceedance of a federal or state ambient air quality standard. Therefore, if a project’s air pollutant emissions exceed the significance thresholds, the project could cause or contribute to the human health impacts described under Section 2.2, *Air Pollutants of Primary Concern*.

To minimize potential impacts from project emissions, the ICAPCD implements rules and regulations for emissions that may be generated by various uses and activities. The rules and regulations detail pollution-reduction measures that must be implemented during construction and operation of projects. Rules and regulations relevant to the project include the following:

- **Regulation VIII (Fugitive Dust Rules).** This regulation contains Rules 800 to 806 which are all measures to reduce PM₁₀ fugitive dust during active operation. This regulation applies to an activity capable of generating fugitive dust, including but not limited to, earthmoving activities, construction activities, unpaved roads, track-out/carry-out, bulk material storage and transport, and unpaved haul/access roads. Each rule lists specific best control measures that all new projects must adhere to within the ICAPCD region (ICAPCD 2021).
- **Rule 424 (Architectural Coatings).** This rule limits the content of VOCs in architectural coatings that are supplied, sold, offered for sale, and manufactured within the Air District. Effective as of January 1, 2011 all nonflat coatings were limited to a VOC content of 100 grams per liter (ICAPCD 2010b).

In addition, the ICAPCD has established standard mitigation measures that projects would need to implement during construction and operation (ICAPCD 2017b). The following measures are standard requirements; ICAPCD also has additional discretionary mitigation measures for fugitive PM₁₀ control and enhanced mitigation measures for construction equipment in their CEQA handbook. Standard mitigation measures for project operation are provided for residential, commercial, and industrial projects. However, the standard mitigation measures for project operation would not be

applicable to the project since it is a recreational park not a commercial, industrial, or residential development.

Standard Mitigation Measures for Project Construction

REGULATION VIII – FUGITIVE DUST CONTROL MEASURES

All construction sites, regardless of size, must comply with the requirements contained within Regulation VIII. Although compliance with Regulation VIII does not constitute mitigation under the reductions attributed to environmental impacts, its main purpose is to reduce the amount of PM₁₀ entrained into the atmosphere as a result of anthropogenic (man-made) fugitive dust sources. Therefore, under all preliminary modeling a presumption is made that all projects comply with Regulation VIII.

STANDARD MITIGATION MEASURES FOR FUGITIVE PM₁₀ CONTROL

- a. All disturbed areas, including bulk material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material such as vegetative ground cover.
- b. All on-site and off-site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
- c. All unpaved traffic areas one (1) acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emission shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
- d. The transport of bulk materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.
- e. All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
- f. Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line.
- g. The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.

DISCRETIONARY MITIGATION MEASURES FOR FUGITIVE PM₁₀ CONTROL

- a. Water exposed soil with adequate frequency for continued moist soil
- b. Replace ground cover in disturbed areas as quickly as possible
- c. Automatic sprinkler system installed on all soil piles

- d. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
- e. Develop a trip reduction plan to achieve a 1.5 AVR for construction employees
- f. Implement a shuttle service to and from retail services and food establishments during lunch hours

STANDARD MITIGATION MEASURES FOR CONSTRUCTION COMBUSTION EQUIPMENT

- a. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
- b. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
- c. Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use
- d. Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set)

ENHANCED MITIGATION MEASURES FOR CONSTRUCTION EQUIPMENT

- a. Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways
- b. Implement activity management (e.g. rescheduling activities to reduce short-term impacts)

City of Imperial

The City's General Plan, adopted in December 1992, does not have specific air quality policies. No other objectives or policies within the General Plan would be applicable to the project for air quality.

2.4 Current Air Quality

The ICAPCD operates a network of air quality monitoring stations throughout the southern portion of SSAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. The monitoring station located closest to the project site is the El Centro-9th Street station, located at 150 9th Street, approximately five miles south of the project site. Table 3 indicates the number of days that each of the standards has been exceeded at the El Centro-9th Street station. As shown therein, the federal and state eight-hour ozone standards were exceeded in 2017, 2018, and 2019. The state worst hour ozone standard was exceeded in 2017 and 2018. The state 24-hour PM₁₀ standard was exceeded all three years and the federal 24-hour standard was exceeded in 2017 and 2018. No other state or federal standards were exceeded at this monitoring stations.

Table 3 Ambient Air Quality at the El Centro-9th Street Monitoring Station

Pollutant	2017	2018	2019
8 Hour Ozone (ppm), 8-Hr Average	0.092	0.090	0.071
Number of Days of state exceedances (>0.070 ppm)	17	15	1
Number of days of federal exceedances (>0.070 ppm)	17	14	1
Ozone (ppm), Worst Hour	0.110	0.102	0.080
Number of days of state exceedances (>0.09 ppm)	4	2	0
Number of days of federal exceedances (>0.112 ppm)	0	0	0
Nitrogen Dioxide (ppm) - Worst Hour	0.049	0.034	0.041
Number of days of state exceedances (>0.18 ppm)	0	0	0
Number of days of federal exceedances (>0.10 ppm)	0	0	0
Particulate Matter 10 microns, $\mu\text{g}/\text{m}^3$, Worst 24 Hours ¹	268.5	256.3	123.9
Number of days of state exceedances (>50 $\mu\text{g}/\text{m}^3$)	60	111	53
Number of days above federal standard (>150 $\mu\text{g}/\text{m}^3$)	5	5	0
Particulate Matter <2.5 microns, $\mu\text{g}/\text{m}^3$, Worst 24 Hours ²	23.2	22.4	21.4
Number of days above federal standard (>35 $\mu\text{g}/\text{m}^3$)	0	0	0

Source: CARB 2019d

NAAQS and CAAQS Attainment Status

California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. If an air basin is not in either federal or state attainment for a particular pollutant, the basin is classified as a nonattainment area for that pollutant. Under the federal and state Clean Air Acts, once a nonattainment area has achieved the air quality standards for a particular pollutant, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. Areas that have been redesignated to attainment are called maintenance areas. Since the project is in Imperial County, the attainment status of the county was described instead of the Air Basin's attainment status.

Imperial County is as marginal nonattainment for the federal 8-hour ozone standard and series nonattainment for the federal PM_{10} standard. A portion of the county that includes the project site is classified as moderate nonattainment for the federal 24-hour $\text{PM}_{2.5}$ standard and the federal annual $\text{PM}_{2.5}$ standard. Imperial County is also classified as nonattainment for the state ozone standards and PM_{10} standards. The county is classified as attainment for the state $\text{PM}_{2.5}$ except for a portion of the county in Calexico at the border of Mexicali in Mexico (CARB 2020a).

Sensitive Receptors

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB

2005; OEHHA 2015). Some land uses considered more sensitive to air pollution than others due to the types of population groups or activities involved are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, religious facilities, and daycare centers.

The sensitive receptors nearest to the project site are students at the Ben Hulse Elementary, which is adjacent to the project's southern boundary. Imperial High School is also approximately 70 feet north of the project site across West Barioni Boulevard/Worthington Road. Single-family residences are also located to the 130 feet to west and 50 feet east of the project site.

3 Air Quality Impact Analysis

3.1 Methodology

The project's construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses, and location, to estimate a project's construction and operational emissions.

Construction emissions modeled include emissions generated by construction equipment used on the site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. Per the project applicant, construction would begin in July 2022 and be completed in October 2022. The construction schedule and equipment list were generated by CalEEMod using default values. However, the default building construction, paving, and architectural coating phase were revised to end in October 2022 to align with the proposed schedule. The building construction schedule was shortened, while the paving and architectural coating start dates were changed so the end date was October 31, 2022. The default number of workdays for the paving and architectural coating phases were kept the same. Construction would be approximately four months under this schedule. This analysis assumes that the project would comply with all applicable regulatory standards. In particular, the project would comply with ICAPCD Regulation VIII and Rule 424, which are discussed under Section 2.3, *Air Quality Regulation*.

The first year of operation was assumed to be 2022. Operational emissions modeled include mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions. Mobile source emissions are generated by vehicle trips to and from the project site. Trip generation rates were sourced from the *Townsite Community Park Project, VMT and Traffic Volume Analysis Technical Memorandum* (STC Traffic, Inc. 2021). Emissions attributed to energy use include emissions from lighting the parking lot. Area source emissions are generated by landscape maintenance equipment, consumer products, and architectural coatings. No standard mitigation measures were assumed during project operation since the project is not a residential, commercial, or industrial development.

For construction and operation, the CalEEMod default paved road dust percentage was changed from 50 percent to 95 percent. The default of 50 percent assumes that trucks traveling during construction and visitors to the site are driving on unpaved roads for half the time. The project is in a centralized portion of Imperial where all the connecting roadways are paved. It is expected that construction workers and visitors to the park would be traveling on paved roads for the majority of their travel time. A model run was conducted assuming that the paved road percentage would be 95 percent.

3.2 Significance Thresholds

To determine whether a project would result in a significant impact to air quality, Appendix G of the *CEQA Guidelines* requires consideration of whether a project would:

- Conflict with or obstruct implementation of the applicable air quality plan;

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The ICAPCD has adopted guidelines for quantifying and determining the significance of air quality emissions in its December 2017 *CEQA Air Quality Handbook* (2017b).

ICAPCD Significance Thresholds

The ICAPCD developed screening criteria in the December 2017 *CEQA Air Quality Handbook* to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant air quality impacts (see Table 2 in the handbook). If a project meets the screening criteria, then the lead agency or applicant would not need to perform a comprehensive air quality analysis report of their project’s air pollutant emissions. For projects that do not meet the screening conditions, the ICAPCD significance thresholds for criteria air pollutants, shown in Table 4, are used to evaluate a project’s potential air quality impacts. For construction PM impacts, ICAPD suggest that a qualitative approach be taken over a quantitative approach.

Table 4 ICAPCD Air Quality Significance Thresholds

Pollutant	Construction (Pounds Per Day)	Operation (Pounds Per Day)	
		Tier I	Tier II
Oxides of Nitrogen (NO _x)	100	<137	>=137
Reactive Organic Gases (ROG)	75	<137	>=137
Respirable Particulate Matter (PM ₁₀)	75	<150	>=150
Oxides of Sulfur (SO _x)	N/A	<150	>=150
Fine Particulate Matter (PM _{2.5})	N/A	<550	>=550
Carbon Monoxide (CO)	550	<550	>=550

N/A = Not Available
 Source: ICAPCD 2017b

Construction Significance Thresholds

Projects that have emissions below the significance thresholds would be considered less-than-significant and would have to adhere to the most current rules adopted to control fugitive dust in addition to the standard mitigation measures for construction equipment. Projects that exceed the significance thresholds would be considered potentially significant and would need to conduct a construction analysis that includes a health risk assessment in consultation with the ICAPCD.

Operational Significance Thresholds

Any proposed residential, commercial, or industrial development with a potential to emit emissions within Tier I emission levels may potentially have an adverse impact on local air quality. These projects are required to implement the feasible standard mitigation measures listed in the ICAPCD CEQA handbook. In addition, commercial projects in Tier I are required to abide by off-site mitigation requirements listed under *Off-site Mitigation for Commercial Projects*.

Any proposed residential, commercial, or industrial development with a potential to meet or exceed Tier II emission levels is considered to have a significant impact on regional and local air quality. Therefore, projects exceeding Tier I emission levels are required to implement feasible standard mitigation measures as well as feasible discretionary mitigation measures. Standard and discretionary mitigation measures are listed in the following sections. In addition, all commercial projects in Tier II are required to abide by off-site mitigation requirements listed under *Off-site Mitigation for Commercial Projects*.

Odor Screening Distances

The ICAPCD provides minimum distances for siting of proposed projects near potential odor sources as shown in Table 5. A significant impact would occur if the project would result in other emissions (such as odors) affecting substantial numbers of people or would site a new odor source as shown in Table 5 within the specified distances of existing receptors.

Table 5 ICAPCD Project Screening Distances for Potential Odor Sources

Odor Source	Project Screening Distance
Wastewater treatment plant	1 mile
Sanitary Landfill	1 mile
Composting Station	1 mile
Feedlot	1 mile
Asphalt Plant	1 mile
Painting/Coating Operations (auto body shop)	1 mile
Rendering Plant	1 mile

3.3 Project-level Impact Analysis

Threshold 1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Impact AQ-1 THE PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT THE IMPLEMENTATION OF THE IMPERIAL COUNTY 2017 STATE IMPLEMENTAL PLAN FOR THE 2008 8-HOUR OZONE STANDARD, THE IMPERIAL COUNTY 2018 REDESIGNATION REQUEST AND MAINTENANCE PLAN FOR PARTICULATE MATTER LESS THAN 10 MICRONS IN DIAMETER, THE IMPERIAL COUNTY 2018 ANNUAL PARTICULATE MATTER LESS THAN 2.5 MICRONS IN DIAMETER STATE IMPLEMENTATION PLAN, NOR THE IMPERIAL COUNTY 2013 SIP FOR THE 2006 24-HOUR PM_{2.5} MODERATE NONATTAINMENT AREA. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

A significant air quality impact could occur if a project is not consistent with the applicable AQMP or if the project would represent a substantial hindrance to implementing the policies or obtaining the goals of that plan. The project is located within jurisdiction of the SSAB, which is designated nonattainment for ozone, PM₁₀, and PM_{2.5} within the project location. The ICACPD has created the SIPs to address how the region will reduce emissions of these pollutants. The relevant SIPs include: *Imperial County 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard (2017a)*, *Imperial County 2018 Redesignation Request and Maintenance Plan for Particulate Matter less than 10 Microns in Diameter (2018a)*, *Imperial County 2018 Annual Particulate Matter Less than 2.5 Microns in Diameter State Implementation Plan (2018b)*, and *Imperial County 2013 State Implementation Plan for the 2006 24-Hour PM_{2.5} Moderate Nonattainment Area (2014)*. A project

may be considered inconsistent with these air quality plans if it would cause the existing population to exceed forecasts contained in the most recently adopted AQMP. All the applicable SIPs rely on the Southern California Association of Governments' (SCAG's) *2016 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) forecasts of regional population growth in its AQMP population projections.³

The project is a recreational park that would not include new residences nor would it generate new employment. Therefore, it would not result in an increase in regional population growth and would not exceed the growth originally identified by SCAG in the *2016 Regional Transportation Plan/Sustainable Communities Strategy*. Furthermore, the project's emissions would be below the applicable ICAPCD thresholds as discussed under Threshold 2, which were developed to identify if a project would have a significant air quality impact. Therefore, the project would not conflict with the applicable air quality plans. Impacts would be less than significant.

Threshold 2 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

Impact AQ-2 PROJECT CONSTRUCTION AND OPERATION WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF A CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS IN NON-ATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD. IMPACTS WOULD BE LESS THAN SIGNIFICANT

Construction Emissions

Project construction would involve site preparation, grading, amenity construction, paving, and architectural coating activities that have the potential to generate air pollutant emissions. Table 6 summarizes the estimated maximum daily emissions of carbon monoxide, ROG, NO_x, PM₁₀, PM_{2.5}, and SO_x during project construction. As shown in Table 6, project construction emissions for all criteria pollutants would be below the ICAPCD daily thresholds of significance. Furthermore, the project would implement all standard mitigation measures to control fugitive PM₁₀ dust. Therefore, impacts would be less than significant.

Table 6 Project Construction Emissions

	Maximum Daily Emissions (lbs./day)					
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}	SO _x
Maximum Daily Emissions	6	33	34	72	12	<1
ICAPCD Thresholds (Daily Emissions)	75	100	550	150	NA	N/A
Threshold Exceeded?	No	No	No	No	N/A	N/A

N/A = not applicable; no ICAPCD threshold for PM_{2.5} or SO_x

Source: Table 2.1 "Overall Construction-mitigated" emissions. Winter emissions results are shown for all emissions. See CalEEMod worksheets in Appendix A.

³ On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). However, the SIPs were adopted prior to this date and relies on the demographic and growth forecasts of the 2016-2040 RTP/SCS; therefore, these forecasts are utilized in the analysis of the project's consistency with the AQMP.

Operational Emissions

The project would generate criteria pollutants during operation. To determine whether a project would result in emissions that would violate an air quality standard or contribute substantially to an existing or projected air quality violation, a project’s emissions are evaluated based on the quantitative emission thresholds established by the ICAPCD.

Table 7 summarizes the project’s operational emissions by emission source (area, energy, and mobile). As shown below, the emissions generated by operation of the proposed project would not exceed the ICAPCD’s threshold for any criteria pollutant. Therefore, the project would be a Tier I project, which would require implementation of applicable Standard Mitigation Measures. However, as explained in *Section 2.3 Air Quality Regulation*, the ICAPCD CEQA handbook does not have standard mitigation measures for recreational park land uses. Nevertheless, the project design features would implement measures that would reduce operational emissions from energy, water, and mobile sources. These features include drought tolerant trees and shrubs on drip irrigation, LED lighting fixtures, and four bicycle parking spaces. These project design features are similar to measures required or recommend by the ICAPCD in their CEQA handbook. Therefore, project operational emissions would be less than significant.

Table 7 Project Operational Emissions

Emission Source	Maximum Daily Emissions (lbs./day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	<1	<1	<1	0	<1	<1
Energy	0	0	0	0	0	0
Mobile	1	3	5	<1	28	3
Project Emissions	1	3	5	<1	28	3
ICAPCD Thresholds	137	137	550	150	150	550
Threshold Exceeded?	No	No	No	No	No	No

Emissions may not sum correctly due to rounding

Source: Table 2.2 “Overall Operation-Unmitigated” emissions. Summer emissions results are shown for all emissions. See CalEEMod worksheets in Appendix A.

Threshold 3 Would the project expose sensitive receptors to substantial pollutant concentrations?
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Impact AQ-3 THE PROJECT WOULD NOT INCREASE CARBON MONOXIDE CONCENTRATIONS SUCH THAT IT WOULD CREATE CARBON MONOXIDE HOTSPOTS. CONSTRUCTION AND OPERATION OF THE PROJECT WOULD NOT RESULT IN EMISSIONS OF TACs SUFFICIENT TO EXCEED APPLICABLE HEALTH RISK CRITERIA. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed above, the sensitive receptors nearest to the project site are students attending Ben Hulse Elementary School, which is adjacent to the project’s southern boundary. Imperial High School is north of the project across West Barioni Boulevard/Worthington Road. Residences are located east and west of the project boundaries.

Carbon Monoxide Hotspots

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above a carbon monoxide ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal one-hour standard of 35.0 parts per million (ppm) or the federal and state eight-hour standard of 9.0 ppm (CARB 2016).

The ICAPCD recommends that projects with the potential to generate volumes traffic that can lead to high levels of carbon monoxide at intersections should perform a hot spot model. The project would include a 3.15-acre recreational park. Trip generation rates provided by STC Traffic Inc. (2021) indicate the project would generate approximately 158 daily trips. Per the traffic technical memorandum, the operation of the project would result in a minimal increase on the nearby roadways. For example, on Worthington Road (roadway adjacent to project's northern boundary), the project would add 24 daily trips, increasing the predicted traffic volume from 7,469 to 7,493 daily vehicles. The slight increase is not expected to change current operations on this roadway. Furthermore, the project would add fewer daily trips on other nearby roadway segments compared to Worthington Road. Therefore, the project is not expected to generate high volumes of traffic on congested intersection that would then lead to a carbon monoxide hotspot. The impact of localized CO emissions would be less than significant.

Toxic Air Contaminants

Construction Impacts

Construction-related activities would result in temporary project-generated emissions of DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998 (CARB 2017).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately four months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., four months) is less than one percent of the total exposure period used for health risk calculation. Therefore, DPM generated by project construction would not create conditions where the probability is greater than 10 in one million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. This impact would be less than significant.

Operational Impacts

The proposed project is a recreational park that would not site permanent sensitive receptors. However, a park is defined by CARB as a sensitive land use since these developments can include playgrounds and play area (CARB 2005). Based on a review of the project area, the only potential source of air toxics would be West Barioni Boulevard/Worthington Road (The Perfect Solution 2015). CARB recommends avoid siting new sensitive lands within 500 feet of urban roads with 100,000 vehicles per day. The daily traffic on West Barioni Boulevard/Worthington Road is well below the 100,000 daily vehicles threshold with a daily volume of 7,469 vehicles. With the project, the daily volume would increase to 7,493 vehicles, which is still below the 100,000 daily vehicles thresholds. Thus, the proposed project would not expose sensitive populations to substantial pollutant concentrations from freeway or roadway sources. Therefore, cumulative impacts would be less than significant.

Threshold 4 Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact AQ-4 THE PROJECT WOULD NOT GENERATE ODORS ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE DURING CONSTRUCTION OR OPERATION. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project would generate oil and diesel fuel odors during construction from equipment use as well as odors related to asphalt paving. The odors would be limited to the construction period and would be temporary and would disperse greatly with distance. With respect to operation, the ICAPCD *CEQA Handbook (2017)* identifies land uses associated with odor complaints to include, but not limited to, wastewater treatment plants, landfills, feedlots, composting stations, asphalt plants, painting/coating operations and rendering plants. Recreational park uses are not identified on this list. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people, and impacts would be less than significant.

4 Greenhouse Gas Emissions

4.1 Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed a high degree of confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century (IPCC 2014a).

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

GHGs are emitted by natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are usually by-products of fossil fuel combustion, and CH₄ results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆ (United States Environmental Protection Agency [U.S. EPA] 2020).

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO₂e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 28, meaning its global warming effect is 28 times greater than CO₂ on a molecule per molecule basis (IPCC 2014b).⁴

⁴ The IPCC's (2014b) *Fifth Assessment Report* determined that methane has a GWP of 28. However, modeling of GHG emissions was completed using the California Emissions Estimator Model version 2016.3.2, which uses a GWP of 25 for methane, consistent with the IPCC's (2007) *Fourth Assessment Report*.

4.2 Greenhouse Gas Emissions Inventory

Global Emissions Inventory

Worldwide anthropogenic emissions of GHGs were approximately 49,000 million metric tons (MMT) CO₂e in 2010 (IPCC 2014a). Carbon dioxide emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, CO₂ was the most abundant, accounting for over 75 percent of total 2010 emissions. Methane emissions accounted for 16 percent of the 2010 total, while N₂O and fluorinated gases accounted for 6 percent and 2 percent respectively (IPCC 2014a).

United States Emissions Inventory

Total United States (U.S.) GHG emissions were 6,676.6 MMT CO₂e in 2018. Emissions increased by 2.9 percent from 2017 to 2018, and since 1990, total U.S. emissions have increased by an average annual rate of 0.13 percent for a total increase of 3.7 percent between 1990 and 2018. The increase from 2017 to 2018 was primarily driven by increased fossil fuel combustion because of multiple factors, including increased energy usage from greater heating and cooling needs due to a colder winter and hotter summer in 2018 as compared to 2017. In 2018, the transportation and industrial end-use sectors accounted for 36 percent and 26 percent, respectively, of nationwide GHG emissions while the residential and commercial end-use sectors accounted for 20 percent and 17 percent of nationwide GHG emissions, respectively, with electricity emissions distributed among the various sectors (U.S. EPA 2020b).

California Emissions Inventory

Based on the California Air Resource Board's (CARB) California Greenhouse Gas Inventory for 2000-2018, California produced 425.3 MMT CO₂e in 2018. The major source of GHG emissions in California is the transportation sector, which comprises 41 percent of the state's total GHG emissions. The industrial sector is the second largest source, comprising 24 percent of the state's GHG emissions while electric power accounts for approximately 15 percent (CARB 2020b). The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT CO₂e (CARB 2020b). The annual 2030 statewide target emissions level is 260 MMT CO₂e (CARB 2017).

4.3 Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature (GMST) from 2015 to 2017 was approximately 1.0°C higher than the average GMST over the period from 1880 to 1900 (National Oceanic and Atmospheric Administration 2020). Furthermore, several independently analyzed data records of global and regional Land-Surface Air

Temperature (LSAT) obtained from station observations jointly indicate that LSAT and sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014a and 2018).

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state and regionally specific climate change case studies (State of California 2018). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. A summary follows of some of the potential effects that could be experienced in California because of climate change.

Air Quality

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century (State of California 2018). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains could tend to temporarily clear the air of particulate pollution, which would effectively reduce the number of large wildfires and thereby ameliorate the pollution associated with them (California Natural Resources Agency 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western U.S., including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the central and southern California

coasts (State of California 2018). The Sierra snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack (State of California 2018). Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding (State of California 2018). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from flooding. The rate of increase of global mean sea levels between 1993 to 2020, observed by satellites, is approximately 3.3 millimeters per year, double the twentieth century trend of 1.6 millimeters per year (World Meteorological Organization 2013; National Aeronautics and Space Administration 2020). Global mean sea levels in 2013 were about 0.23 meter higher than those of 1880 (National Aeronautics and Space Administration 2020). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea level rise of 0.25 to 0.94 meter by 2100 (IPCC 2018). A rise in sea levels could erode 31 to 67 percent of southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California's water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). Furthermore, increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has an over \$50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2020). Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems and Wildlife

Climate change and the potential resultant changes in weather patterns could have ecological effects on the global and local scales. Soil moisture is likely to decline in many regions as a result of higher temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

4.4 Regulatory and Legal Setting

Federal Regulations

Federal Clean Air Act

The U.S. Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) that the U.S. EPA has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the U.S. EPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

Safer Affordable Fuel-Efficient Vehicles Rule

On September 27, 2019, the U.S. E.PA and the National Highway Traffic Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The SAFE Rule Part One revokes California's authority to set its own GHG emissions standards and to adopt its own zero-emission vehicle mandates. On April 30, 2020, the U.S. E.PA and the National Highway Traffic Safety Administration published Part Two of the SAFE Vehicles Rule, which revised corporate average fuel economy and CO₂ emissions standards for passenger cars and trucks of model years 2021-2026 such that the standards increase by approximately 1.5 percent each year through model year 2026 as compared to the approximately five percent annual increase required under the 2012 standards (National Highway Traffic Safety Administration 2020). To account for the effects of the SAFE Vehicles Rule, CARB released off-model adjustment factors on June 26, 2020 to adjust GHG emissions outputs from the EMFAC model (CARB 2020c).

State Regulations

CARB is responsible for the coordination and oversight of state and local air pollution control programs in California. There are numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below. For more information on the Senate and Assembly Bills, executive orders, building codes, and reports discussed below, and to view reports and research referenced below, please refer to the following websites:

<https://www.energy.ca.gov/data-reports/reports/californias-fourth-climate-change-assessment>, www.arb.ca.gov/cc/cc.htm, and <https://www.dgs.ca.gov/BSC/Codes>.

California Advanced Clean Cars Program

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, the U.S. EPA granted the waiver of Clean Air Act preemption to California for its GHG emission standards for motor vehicles, beginning with the 2009 model year, which allows California to implement more stringent vehicle emission standards than those promulgated by the U.S. EPA. Pavley I regulates model years from 2009 to 2016 and Pavley II, now referred to as "LEV (Low Emission Vehicle) III GHG," regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, the rules will be fully implemented, and new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Senate Bill 32)

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT CO₂e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

The CARB approved the 2013 Scoping Plan update in May 2014. The update defined the CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the state's longer term GHG reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (discussed later). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six MT CO₂e by 2030 and two MT CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-

regional, or regional level), but not for specific individual projects because they include all emissions sectors in the state (CARB 2017).

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state’s ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO’s Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as “transit priority projects”) can receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG) was assigned targets of an 8 percent reduction in per capita GHG emissions from passenger vehicles by 2020 and a 19 percent reduction in per capita GHG emissions from passenger vehicles by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.”

Senate Bill 1383

Adopted in September 2016, SB 1383 (Lara, Chapter 395, Statutes of 2016) requires the CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state’s Renewables Portfolio Standard (RPS) Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18

On September 10, 2018, the former Governor Brown issued Executive Order (EO) B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

California Building Standards Code

The California Code of Regulations (CCR) Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2019 Title 24 standards. The California Building Standards Code's energy-efficiency and green building standards are outlined below.

PART 6 – BUILDING ENERGY EFFICIENCY STANDARDS/ENERGY CODE

CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC). The 2019 Title 24 standards are the applicable building energy efficiency standards for the project because they became effective on January 1, 2020.

PART 11 – CALIFORNIA GREEN BUILDING STANDARDS

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The 2019 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers (Tiers I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- 20 percent reduction in indoor water use relative to specified baseline levels;⁵
- 65 percent construction/demolition waste diverted from landfills;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards;
- Dedicated circuitry to facilitate installation of electric vehicle charging stations in newly constructed attached garages for single-family and duplex dwellings; and
- Installation of electric vehicle charging stations at least three percent of the parking spaces for all new multi-family developments with 17 or more units.

The voluntary standards require:

- **Tier I:** stricter energy efficiency requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste with third-party verification, 10

⁵ Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water-reduction requirements must be demonstrated through completion of water use reporting forms. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

percent recycled content for building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof; and

- **Tier II:** stricter energy efficiency requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste with third-party verification, 15 percent recycled content for building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar reflective roof.

California Integrated Waste Management Act (Assembly Bill 341)

The California Integrated Waste Management Act of 1989, as modified by AB 341 in 2011, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995 through source reduction, recycling, and composting activities and (2) diversion of 50 percent of all solid waste on and after January 1, 2000.

Local Regulations

2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes ten goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020).

Relevant Case Law

Center for Biological Diversity v. California Department of Fish and Wildlife (Case No. 217763)

The California Supreme Court's (Court) decision in the *Center for Biological Diversity v. California Department of Fish and Wildlife* (published on November 30, 2015) evaluated the methodology used to analyze GHG emissions in an Environmental Impact Report prepared for the Newhall Ranch development project that included approximately 20,885 dwelling units with 58,000 residents on 12,000 acres of undeveloped land in Los Angeles County. The Environmental Impact Report used a business-as-usual (BAU) approach to evaluate whether the project would be consistent with the AB 32 Scoping Plan. The Court found there was insufficient evidence in the record of that project to explain how a project that reduces its GHG emissions by the same percentage as the BAU reduction identified for the state to meet its statewide targets supported a conclusion that the project impacts were below the level of significance.

The California Supreme Court suggested regulatory consistency as a pathway to compliance by stating that a lead agency might assess consistency with the state's GHG reduction goals by

evaluating for compliance with regulations designed to reduce GHG emissions. This approach is consistent with CEQA Guidelines Section 15064.4(b), which provides that a determination of an impact is not cumulatively considerable to the extent to which the project complies with regulations or requirements implementing a statewide, regional, or local plan to reduce or mitigate GHG emissions. The Court also found that a lead agency may rely on numerical and efficiency-based thresholds of significance for GHG emissions, if supported by substantial evidence.

Golden Door Properties, LLC v. County of San Diego/Sierra Club, LLC v. County of San Diego (Case No. 072406)

The Fourth District Court of Appeal decision in the *Golden Door Properties, LLC v. County of San Diego* case (published on September 28, 2018) evaluated the County of San Diego's 2016 Guidance Document's GHG efficiency metric, which establishes a generally applicable threshold of significance for proposed projects. The Court held that the County of San Diego is barred from using its 2016 Guidance Document's threshold of significance for GHG analysis of 4.9 MT CO₂e per service person per year. The Fourth District Court of Appeal stated that the document violated CEQA because it was not adopted formally by ordinance, rule, resolution, or regulation through a public review process per CEQA Guidelines Section 15064.4(b)(3). The Fourth District Court of Appeal also found that the threshold was not supported by substantial evidence that adequately explained how a service population threshold derived from statewide data could constitute an appropriate GHG metric to be used for all projects in unincorporated San Diego County. Nevertheless, lead agencies may make project specific GHG threshold determinations.

5 Greenhouse Gas Impact Analysis

5.1 Methodology

Calculations of CO₂, CH₄, and N₂O emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO₂, CH₄, and N₂O because these make up 98 percent of all GHG emissions by volume and are the GHG emissions the project would emit in the largest quantities (IPCC 2014a). Emissions of all GHGs are converted into their equivalent GWP in terms of CO₂ (i.e., CO₂e). Minimal amounts of other GHGs (such as chlorofluorocarbons [CFCs]) would be emitted; however, these other GHG emissions would not substantially add to the total GHG emissions. GHG emissions associated with the proposed project were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (see Appendix A for calculations). Calculations are based on the methodologies discussed in the California Air Pollution Control Officers Association (CAPCOA) CEQA and Climate Change white paper (CAPCOA 2008).

Construction Emissions

Construction activities emit GHGs primarily through combustion of fuels (mostly diesel) in the engines of off-road construction equipment, on-road construction vehicles (e.g., water and material delivery trucks), and the commute vehicles of construction workers. Smaller amounts of GHGs are emitted indirectly through the energy required for water used for fugitive dust control and lighting for the construction activity. Every phase of the construction process, including site preparation, grading, building construction, paving, and architectural coating, emits GHG emissions in volumes proportional to the quantity and type of construction equipment used. Heavier equipment typically emits more GHGs per hour than lighter equipment because of its engine design and greater fuel consumption requirements.

CalEEMod estimates construction emissions by multiplying the time equipment is in operation by emission factors. Construction would begin in July 2022 and would be completed by November 2022. Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. As stated in the *CEQA and Climate Change* white paper, “more study is needed to make this assessment or to develop separate thresholds for construction activity” (CAPCOA 2008). Nevertheless, air districts such as the South Coast Air Quality Management District have recommended amortizing construction-related emissions over a 30-year period in conjunction with the proposed project’s operational emissions (SCAQMD 2008). This guidance is used in this analysis.

Operational Emissions

Area Source Emissions

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating, were calculated in CalEEMod and utilize standard emission rates from CARB, U.S. EPA, and emission factor values provided by the local air district (CAPCOA 2017).

Energy Use Emissions

GHGs are emitted on-site during the combustion of natural gas for space and water heating and off-site during the generation of electricity from fossil fuels in power plants. CalEEMod estimates GHG emissions from energy use by multiplying average rates of residential and non-residential energy consumption by the quantities of residential units and non-residential square footage entered in the land use module to obtain total projected energy use. This value is then multiplied by electricity and natural gas GHG emission factors applicable to the project location and utility provider.

Building energy use is typically divided into energy consumed by the built environment and energy consumed by uses that are independent of the building, such as plug-in appliances. Non-building energy use, or “plug-in energy use,” can be further subdivided by specific end-use (refrigeration, cooking, office equipment, etc.). In California, Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting.

The project would be served by Imperial Irrigation District (IID). Therefore, IID’s specific energy intensity factors (i.e., the amount of CO₂e per megawatt-hour) are used in the calculations of GHG emissions. However, per SB 100, the statewide RPS Program requires electricity providers to increase procurement from eligible renewable energy sources to 44 percent by 2024. To account for the continuing effects of the RPS, the energy intensity factors included in CalEEMod were reduced for year 2022 based on the percentage of renewables reported by IID. The percent procurement for 2022 was linearly interpolated using the RPS target for 2024. IID energy intensity factors that include this reduction are shown in Table 8.

Table 8 IID Energy Intensity Factors

	2015 (lbs./MWh)	2022 (lbs./MWh) ²
Percent procurement	22% ¹	39%
CO ₂	1,038	811
CH ₄	0.029	0.023
N ₂ O	0.00617	0.005

¹ Source: IID 2015, The Climate Registry 2021

² RPS goal established by SB 100

lbs. = pounds; MWh = megawatt-hour; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; RPS = Renewable Portfolio Standards; SB = Senate Bill

Mobile Source Emissions

For mobile sources, CO₂ and CH₄ emissions were quantified in CalEEMod based on trip generation rates provided by STC Traffic Inc. To calculate mobile source emissions, CalEEMod used CO₂ emission factors from the EMFAC2014 Emissions Inventory based on the aggregated model year and aggregated speed for the ICAPCD region and CH₄ emission factors provided by CARB for the project’s first year of full operations (2034; CAPCOA 2017, Appendix A). Because CalEEMod does not calculate N₂O emissions from mobile sources, N₂O emissions were quantified using guidance from CARB and the EMFAC2017 Emissions Inventory for the ICAPCD region for the year 2022 (first year of operation) using the EMFAC2011 categories (CARB 2018, 2021; see Appendix A for calculations).

Water and Wastewater Emissions

Water used and wastewater produced by a project generate indirect GHG emissions. These emissions are a result of the energy used to supply, convey, and treat water and wastewater. In addition to the indirect GHG emissions associated with energy use, the wastewater treatment process itself can directly emit both CH₄ and N₂O.

The indoor and outdoor water use consumption data for each land use subtype comes from the Pacific Institute's *Waste Not, Want Not: The Potential for Urban Water Conservation in California* (2003).⁶ Based on that report, a percentage of total water consumption was dedicated to landscape irrigation, which is used to determine outdoor water use. Wastewater generation was similarly based on a reported percentage of total indoor water use.

Solid Waste Emissions

The disposal of solid waste produces GHG emissions from the transportation of waste, anaerobic decomposition in landfills, and incineration. To calculate the GHG emissions generated by solid waste disposal, the total volume of solid waste was calculated using waste disposal rates identified by CalRecycle. The methods for quantifying GHG emissions from solid waste are based on the IPCC method, using the degradable organic content of waste. GHG emissions associated with the project's waste disposal were calculated using these parameters.

5.2 Significance Thresholds

Based on Appendix G of the CEQA Guidelines, impacts related to GHG emissions from the proposed project would be significant if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

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

According to *CEQA Guidelines* Section 15183.5, projects can tier off of a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP) in their white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions (AEP 2016). However, the City of Imperial has not published a qualified climate action plan nor has the County.

⁶ California Emissions Estimator Model User Guide, Appendix D (CAPCOA 2017)

The next best approach would be to use a quantitative threshold from the local air district. However, the ICAPCD has not adopted a numeric threshold nor guidance to address project level GHG emissions in regards to the 2030 target established by SB 32.

CEQA Guidelines section 15064.4 expressly provides that a “lead agency shall have discretion to determine, in the context of a particular project,” whether to “[u]se a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use.” A lead agency also has discretion under the *CEQA Guidelines* to “[r]ely on a qualitative analysis or [quantitative] performance-based standards.” Therefore, in light of the specific GHG guidance from the ICAPCD, it is appropriate to refer to guidance from other agencies when discussing GHG emissions. Thus, for the purposes of this analysis, thresholds developed by the SCAQMD are considered to determine the significance of GHG emissions

In guidance provided by the SCAQMD’s GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD considered a tiered approach to determine the significance of residential and commercial projects. The draft tiered approach is outlined in meeting minutes dated September 29, 2010 (SCAQMD 2008, 2010):

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in *CEQA Guidelines* Section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 10,000 MT CO₂e per year for industrial projects and 3,000 MT CO₂e per year for all non-industrial projects
- **Tier 4.** Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT CO₂e per year for land use projects.

The project would not be statutory or categorically exempt, and therefore Tier 1 does not apply. As previously stated, the City does not have a local, qualified GHG reduction plan for the project to tier off, thus Tier 2 would not apply. The SCAQMD Tier 3 bright-line quantitative threshold of 3,000 MT CO₂e per year threshold to analyze project GHG emissions would be a possible approach. The project would not have a service population since it would not have residents nor new employees, thus the Tier 4 approach would not apply. Therefore, the applicable threshold for the project would be a bright line-threshold of 3,000 MT CO₂e per year for non-industrial projects in accordance with Tier 3.

5.3 Project-level Impact Analysis

Threshold 1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

IMPACT GHG-1 CONSTRUCTION AND OPERATION OF THE PROPOSED PROJECT WOULD GENERATE TEMPORARY AND LONG-TERM INCREASES IN GHG EMISSIONS THAT WOULD NOT RESULT IN A SIGNIFICANT IMPACT ON THE ENVIRONMENT RELATED TO CLIMATE CHANGE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction and operation of the proposed project would generate GHG emissions. This analysis considers the combined impact of GHG emissions from both construction and operation. Calculations of CO₂, CH₄, and N₂O emissions are provided to identify the magnitude of potential project effects.

Construction Emissions

Construction of the proposed project would generate temporary GHG emissions primarily from the operation of construction equipment on-site as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport building materials and soil export. As shown in Table 9, construction of the proposed project would generate an estimated total of 164 MT CO₂e. Amortized over a 30-year period per SCAQMD guidance, construction of the proposed project would generate an estimated 5 MT CO₂e per year.

Table 9 Estimated Construction GHG Emissions

Construction	Project Emissions MT CO ₂ e
2022	164
Amortized over 30 Years	5

Source: Appendix A CalEEMod worksheets

Combined Annual Emissions

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. As shown in Table 10, annual operational emissions generated by the proposed project combined with amortized construction emissions would total approximately 298 MT CO₂e per year, which would not exceed the SCAMQD threshold of 3,000 MT CO₂e per year. Therefore, impacts would be less than significant.

Table 10 Combined Annual Emissions

Emission Source	Annual Emissions (MT CO₂e)
Construction¹	7
Operational	
Area	<1
Energy	3
Solid Waste	72
Water	27
Mobile	
CO ₂ and CH ₄	178
N ₂ O	11
Total	298
SCAQMD Threshold²	3,000
Exceed Threshold?	No

¹ Amortized construction related GHG emissions over 30 years

² The SCAQMD threshold of 3,000 MT CO₂e per year is the Tier 3 approach threshold for non-industrial projects.

Source: Appendix A CalEEMod worksheets

Threshold 2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?
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IMPACT GHG-2 THE PROPOSED PROJECT WOULD NOT CONFLICT WITH THE 2017 SCOPING PLAN NOR THE SCAG 2020-2045 RTP/SCS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Several plans and policies have been adopted to reduce GHG emissions in the southern California region, including the State's 2017 Scoping Plan and SCAG's 2020-2045 RTP/SCS. The proposed project's consistency with these plans is discussed in the following subsections. As discussed therein, the proposed project would not conflict with plans and policies aimed at reducing GHG emissions. Therefore, impacts would be less than significant.

2017 Scoping Plan

The principal state plans and policies are AB 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions. The 2017 Scoping Plan's strategies that are applicable to the proposed project include reducing fossil fuel use, energy demand, and vehicle miles traveled (VMT); maximizing recycling and diversion from landfills; and increasing water conservation. The project would be consistent with these goals through project design, which includes complying with the latest installing energy-efficient LED lighting, planting drought-tolerant plants, and using drip irrigation. The project would be served by IID, which is required to increase its renewable energy procurement in accordance with SB 100 targets. The project would also be located in centralized part of Imperial and would be a local-serving development. The project would be within walking and biking distance of schools and residential neighborhoods, which would reduce

future visitors' VMT and associated fossil fuel usage. Therefore, the project would be not conflict with the 2017 Scoping Plan.

Connect SoCal: 2020-2045 SCAG RTP/SCS

The SCAG *Connect SoCal RTP/SCS* is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. The 2020-2045 RTP/SCS includes ten goals with corresponding implementation strategies for focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The project would construct a recreational park with playground area, a skate park, multi-use courts, a competition sized pool, and walking trails that would serve the local community. As a result, Imperial residents would not have to travel further distances for these recreational amenities. Therefore, the project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

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Appendix B

California Emissions Estimator Model Output

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

Imperial Townsite Park Project AQ
Imperial County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	25.07	1000sqft	0.50	25,070.00	0
Parking Lot	100.00	Space	0.50	23,000.00	0
City Park	3.15	Acre	1.55	84,774.00	0
Recreational Swimming Pool	25.07	1000sqft	0.60	25,070.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	12
Climate Zone	15			Operational Year	2022
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MW hr)	811	CH4 Intensity (lb/MW hr)	0.023	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

Project Characteristics - Project located in Imperial City, Construction would begin in July 2022. Imperial Irrigation District is the utility provider. Adjusted intensity factor per SB 100

Land Use - 25,070 sf pool area, 25,070 sf multi-courts (other asphalt), 23,000 sf & 100 spaces parking lot, all other uses City Park. Using acreage based on traffic vmt memo

Construction Phase - Default construction schedule with a start of July 2022. Adjusting the construction schedule so building construction, paving, architectural coating all end in October 2022 to match schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Default equipment

On-road Fugitive Dust - assuming 95% of the trucks are traveling on paved roads to the project site

Architectural Coating - Rule 424 for non-residential uses, nonflat coating of 100 g/L

Vehicle Trips - Project Specific Trip Gen of 50 trips/acre to get 158 daily trips. The recreational pool would not generate seperate trips

Road Dust - 95 percent paved

Area Coating - Rule 424 for non-residential uses

Energy Use -

Construction Off-road Equipment Mitigation -

Water Mitigation - Park will include drip irrigation system.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	100
tblAreaCoating	Area_EF_Nonresidential_Interior	150	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblLandUse	LandUseSquareFeet	40,000.00	23,000.00
tblLandUse	LandUseSquareFeet	137,214.00	84,774.00
tblLandUse	LotAcreage	0.58	0.50

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

tblLandUse	LotAcreage	0.90	0.50
tblLandUse	LotAcreage	3.15	1.55
tblLandUse	LotAcreage	0.58	0.60
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	1270.9	811
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblRoadDust	RoadPercentPave	50	95
tblVehicleTrips	ST_TR	22.75	50.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	50.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	1.89	50.00

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

tblVehicleTrips	WD_TR	33.82	0.00
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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	6.4902	33.1515	34.3011	0.0613	70.9397	1.6132	72.3275	10.9210	1.4842	12.4051	0.0000	5,919.1735	5,919.1735	1.2758	0.0000	5,951.0674
Maximum	6.4902	33.1515	34.3011	0.0613	70.9397	1.6132	72.3275	10.9210	1.4842	12.4051	0.0000	5,919.1735	5,919.1735	1.2758	0.0000	5,951.0674

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					
2022	6.4902	33.1515	34.3011	0.0613	70.9397	1.6132	72.3275	10.9210	1.4842	12.4051	0.0000	5,919.1735	5,919.1735	1.2758	0.0000	5,951.0674
Maximum	6.4902	33.1515	34.3011	0.0613	70.9397	1.6132	72.3275	10.9210	1.4842	12.4051	0.0000	5,919.1735	5,919.1735	1.2758	0.0000	5,951.0674

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.3673	3.0143	3.7934	9.9900e-003	27.5429	6.8900e-003	27.5498	2.8350	6.4900e-003	2.8415		1,022.5291	1,022.5291	0.0955		1,024.9163
Total	0.4775	3.0145	3.8091	9.9900e-003	27.5429	6.9500e-003	27.5498	2.8350	6.5500e-003	2.8415		1,022.5627	1,022.5627	0.0956	0.0000	1,024.9521

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.3673	3.0143	3.7934	9.9900e-003	27.5429	6.8900e-003	27.5498	2.8350	6.4900e-003	2.8415		1,022.5291	1,022.5291	0.0955		1,024.9163
Total	0.4775	3.0145	3.8091	9.9900e-003	27.5429	6.9500e-003	27.5498	2.8350	6.5500e-003	2.8415		1,022.5627	1,022.5627	0.0956	0.0000	1,024.9521

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2022	7/7/2022	5	5	
2	Grading	Grading	7/8/2022	7/19/2022	5	8	
3	Building Construction	Building Construction	7/20/2022	10/31/2022	5	230	
4	Paving	Paving	10/6/2022	10/31/2022	5	18	
5	Architectural Coating	Architectural Coating	10/6/2022	10/31/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,130; Non-Residential Outdoor: 1,710; Striped Parking Area: 2,884 (Architectural Coating – sqft)

OffRoad Equipment

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	66.00	26.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0663	1.6126	19.6788	9.9307	1.4836	11.4143		3,686.0619	3,686.0619	1.1922		3,715.8655

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0880	0.0680	0.5778	8.0000e-004	9.7646	6.3000e-004	9.7652	0.9903	5.8000e-004	0.9909		79.5228	79.5228	5.8800e-003		79.6697
Total	0.0880	0.0680	0.5778	8.0000e-004	9.7646	6.3000e-004	9.7652	0.9903	5.8000e-004	0.9909		79.5228	79.5228	5.8800e-003		79.6697

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0663	1.6126	19.6788	9.9307	1.4836	11.4143	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0880	0.0680	0.5778	8.0000e-004	9.7646	6.3000e-004	9.7652	0.9903	5.8000e-004	0.9909		79.5228	79.5228	5.8800e-003		79.6697
Total	0.0880	0.0680	0.5778	8.0000e-004	9.7646	6.3000e-004	9.7652	0.9903	5.8000e-004	0.9909		79.5228	79.5228	5.8800e-003		79.6697

3.3 Grading - 2022

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.0464	2,872.0464	0.9289		2,895.2684

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0733	0.0567	0.4815	6.7000e-004	8.1372	5.2000e-004	8.1377	0.8253	4.8000e-004	0.8257		66.2690	66.2690	4.9000e-003		66.3914
Total	0.0733	0.0567	0.4815	6.7000e-004	8.1372	5.2000e-004	8.1377	0.8253	4.8000e-004	0.8257		66.2690	66.2690	4.9000e-003		66.3914

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0733	0.0567	0.4815	6.7000e-004	8.1372	5.2000e-004	8.1377	0.8253	4.8000e-004	0.8257		66.2690	66.2690	4.9000e-003		66.3914
Total	0.0733	0.0567	0.4815	6.7000e-004	8.1372	5.2000e-004	8.1377	0.8253	4.8000e-004	0.8257		66.2690	66.2690	4.9000e-003		66.3914

3.4 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0981	2.5200	0.7523	8.0400e-003	17.2344	5.9400e-003	17.2404	1.7591	5.6800e-003	1.7648		840.8866	840.8866	0.0460		842.0366
Worker	0.3227	0.2494	2.1186	2.9500e-003	35.8035	2.3000e-003	35.8058	3.6311	2.1200e-003	3.6332		291.5837	291.5837	0.0216		292.1223
Total	0.4208	2.7693	2.8708	0.0110	53.0379	8.2400e-003	53.0462	5.3902	7.8000e-003	5.3980		1,132.4703	1,132.4703	0.0676		1,134.1589

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0981	2.5200	0.7523	8.0400e-003	17.2344	5.9400e-003	17.2404	1.7591	5.6800e-003	1.7648		840.8866	840.8866	0.0460		842.0366
Worker	0.3227	0.2494	2.1186	2.9500e-003	35.8035	2.3000e-003	35.8058	3.6311	2.1200e-003	3.6332		291.5837	291.5837	0.0216		292.1223
Total	0.4208	2.7693	2.8708	0.0110	53.0379	8.2400e-003	53.0462	5.3902	7.8000e-003	5.3980		1,132.4703	1,132.4703	0.0676		1,134.1589

3.5 Paving - 2022

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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1221	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0978	0.0756	0.6420	8.9000e-004	10.8495	7.0000e-004	10.8502	1.1003	6.4000e-004	1.1010		88.3587	88.3587	6.5300e-003		88.5219
Total	0.0978	0.0756	0.6420	8.9000e-004	10.8495	7.0000e-004	10.8502	1.1003	6.4000e-004	1.1010		88.3587	88.3587	6.5300e-003		88.5219

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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1221	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0978	0.0756	0.6420	8.9000e-004	10.8495	7.0000e-004	10.8502	1.1003	6.4000e-004	1.1010		88.3587	88.3587	6.5300e-003		88.5219
Total	0.0978	0.0756	0.6420	8.9000e-004	10.8495	7.0000e-004	10.8502	1.1003	6.4000e-004	1.1010		88.3587	88.3587	6.5300e-003		88.5219

3.6 Architectural Coating - 2022

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	2.8753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	3.0798	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0636	0.0491	0.4173	5.8000e-004	7.0522	4.5000e-004	7.0527	0.7152	4.2000e-004	0.7156		57.4332	57.4332	4.2400e-003		57.5392
Total	0.0636	0.0491	0.4173	5.8000e-004	7.0522	4.5000e-004	7.0527	0.7152	4.2000e-004	0.7156		57.4332	57.4332	4.2400e-003		57.5392

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	2.8753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	3.0798	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0636	0.0491	0.4173	5.8000e-004	7.0522	4.5000e-004	7.0527	0.7152	4.2000e-004	0.7156		57.4332	57.4332	4.2400e-003		57.5392
Total	0.0636	0.0491	0.4173	5.8000e-004	7.0522	4.5000e-004	7.0527	0.7152	4.2000e-004	0.7156		57.4332	57.4332	4.2400e-003		57.5392

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3673	3.0143	3.7934	9.9900e-003	27.5429	6.8900e-003	27.5498	2.8350	6.4900e-003	2.8415		1,022.5291	1,022.5291	0.0955		1,024.9163
Unmitigated	0.3673	3.0143	3.7934	9.9900e-003	27.5429	6.8900e-003	27.5498	2.8350	6.4900e-003	2.8415		1,022.5291	1,022.5291	0.0955		1,024.9163

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	157.50	157.50	157.50	264,088	264,088
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	157.50	157.50	157.50	264,088	264,088

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	6.70	5.00	8.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	6.70	5.00	8.90	0.00	0.00	0.00	0	0	0
Parking Lot	6.70	5.00	8.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	6.70	5.00	8.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658
Other Asphalt Surfaces	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658
Parking Lot	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658
Recreational Swimming Pool	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Unmitigated	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358

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	0.0142					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0945					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4600e-003	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Total	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

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	0.0142					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0945					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4600e-003	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Total	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Winter

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

Imperial Townsite Park Project AQ
Imperial County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	25.07	1000sqft	0.50	25,070.00	0
Parking Lot	100.00	Space	0.50	23,000.00	0
City Park	3.15	Acre	1.55	84,774.00	0
Recreational Swimming Pool	25.07	1000sqft	0.60	25,070.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	12
Climate Zone	15			Operational Year	2022
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MW hr)	811	CH4 Intensity (lb/MW hr)	0.023	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

Project Characteristics - Project located in Imperial City, Construction would begin in July 2022. Imperial Irrigation District is the utility provider. Adjusted intensity factor per SB 100

Land Use - 25,070 sf pool area, 25,070 sf multi-courts (other asphalt), 23,000 sf & 100 spaces parking lot, all other uses City Park. Using acreage based on traffic vmt memo

Construction Phase - Default construction schedule with a start of July 2022. Adjusting the construction schedule so building construction, paving, architectural coating all end in October 2022 to match schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Default equipment

On-road Fugitive Dust - assuming 95% of the trucks are traveling on paved roads to the project site

Architectural Coating - Rule 424 for non-residential uses, nonflat coating of 100 g/L

Vehicle Trips - Project Specific Trip Gen of 50 trips/acre to get 158 daily trips. The recreational pool would not generate seperate trips

Road Dust - 95 percent paved

Area Coating - Rule 424 for non-residential uses

Energy Use -

Construction Off-road Equipment Mitigation -

Water Mitigation - Park will include drip irrigation system.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	100
tblAreaCoating	Area_EF_Nonresidential_Interior	150	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblLandUse	LandUseSquareFeet	40,000.00	23,000.00
tblLandUse	LandUseSquareFeet	137,214.00	84,774.00
tblLandUse	LotAcreage	0.58	0.50

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

tblLandUse	LotAcreage	0.90	0.50
tblLandUse	LotAcreage	3.15	1.55
tblLandUse	LotAcreage	0.58	0.60
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	1270.9	811
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblRoadDust	RoadPercentPave	50	95
tblVehicleTrips	ST_TR	22.75	50.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	50.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	1.89	50.00

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

tblVehicleTrips	WD_TR	33.82	0.00
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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	6.5995	33.1486	35.2423	0.0625	70.9397	1.6132	72.3272	10.9210	1.4842	12.4051	0.0000	6,034.8916	6,034.8916	1.2783	0.0000	6,066.8493
Maximum	6.5995	33.1486	35.2423	0.0625	70.9397	1.6132	72.3272	10.9210	1.4842	12.4051	0.0000	6,034.8916	6,034.8916	1.2783	0.0000	6,066.8493

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					
2022	6.5995	33.1486	35.2423	0.0625	70.9397	1.6132	72.3272	10.9210	1.4842	12.4051	0.0000	6,034.8916	6,034.8916	1.2783	0.0000	6,066.8493
Maximum	6.5995	33.1486	35.2423	0.0625	70.9397	1.6132	72.3272	10.9210	1.4842	12.4051	0.0000	6,034.8916	6,034.8916	1.2783	0.0000	6,066.8493

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4822	3.0391	4.4851	0.0112	27.5429	6.6200e-003	27.5495	2.8350	6.2400e-003	2.8412		1,141.0757	1,141.0757	0.0940		1,143.4262
Total	0.5923	3.0392	4.5008	0.0112	27.5429	6.6800e-003	27.5496	2.8350	6.3000e-003	2.8413		1,141.1093	1,141.1093	0.0941	0.0000	1,143.4620

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4822	3.0391	4.4851	0.0112	27.5429	6.6200e-003	27.5495	2.8350	6.2400e-003	2.8412		1,141.0757	1,141.0757	0.0940		1,143.4262
Total	0.5923	3.0392	4.5008	0.0112	27.5429	6.6800e-003	27.5496	2.8350	6.3000e-003	2.8413		1,141.1093	1,141.1093	0.0941	0.0000	1,143.4620

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2022	7/7/2022	5	5	
2	Grading	Grading	7/8/2022	7/19/2022	5	8	
3	Building Construction	Building Construction	7/20/2022	10/31/2022	5	230	
4	Paving	Paving	10/6/2022	10/31/2022	5	18	
5	Architectural Coating	Architectural Coating	10/6/2022	10/31/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,130; Non-Residential Outdoor: 1,710; Striped Parking Area: 2,884 (Architectural Coating – sqft)

OffRoad Equipment

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	66.00	26.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0663	1.6126	19.6788	9.9307	1.4836	11.4143		3,686.0619	3,686.0619	1.1922		3,715.8655

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1086	0.0650	0.7675	9.6000e-004	9.7646	6.3000e-004	9.7652	0.9903	5.8000e-004	0.9909		94.8190	94.8190	7.2300e-003		94.9998
Total	0.1086	0.0650	0.7675	9.6000e-004	9.7646	6.3000e-004	9.7652	0.9903	5.8000e-004	0.9909		94.8190	94.8190	7.2300e-003		94.9998

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0663	1.6126	19.6788	9.9307	1.4836	11.4143	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1086	0.0650	0.7675	9.6000e-004	9.7646	6.3000e-004	9.7652	0.9903	5.8000e-004	0.9909		94.8190	94.8190	7.2300e-003		94.9998
Total	0.1086	0.0650	0.7675	9.6000e-004	9.7646	6.3000e-004	9.7652	0.9903	5.8000e-004	0.9909		94.8190	94.8190	7.2300e-003		94.9998

3.3 Grading - 2022

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.0464	2,872.0464	0.9289		2,895.2684

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0905	0.0542	0.6396	8.0000e-004	8.1372	5.2000e-004	8.1377	0.8253	4.8000e-004	0.8257		79.0158	79.0158	6.0300e-003		79.1665
Total	0.0905	0.0542	0.6396	8.0000e-004	8.1372	5.2000e-004	8.1377	0.8253	4.8000e-004	0.8257		79.0158	79.0158	6.0300e-003		79.1665

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0905	0.0542	0.6396	8.0000e-004	8.1372	5.2000e-004	8.1377	0.8253	4.8000e-004	0.8257		79.0158	79.0158	6.0300e-003		79.1665
Total	0.0905	0.0542	0.6396	8.0000e-004	8.1372	5.2000e-004	8.1377	0.8253	4.8000e-004	0.8257		79.0158	79.0158	6.0300e-003		79.1665

3.4 Building Construction - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0942	2.4983	0.6500	8.3400e-003	17.2344	5.7400e-003	17.2402	1.7591	5.4900e-003	1.7646		872.4759	872.4759	0.0411		873.5029
Worker	0.3982	0.2385	2.8142	3.5200e-003	35.8035	2.3000e-003	35.8058	3.6311	2.1200e-003	3.6332		347.6696	347.6696	0.0265		348.3327
Total	0.4924	2.7368	3.4642	0.0119	53.0379	8.0400e-003	53.0460	5.3902	7.6100e-003	5.3978		1,220.1455	1,220.1455	0.0676		1,221.8355

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0942	2.4983	0.6500	8.3400e-003	17.2344	5.7400e-003	17.2402	1.7591	5.4900e-003	1.7646		872.4759	872.4759	0.0411		873.5029
Worker	0.3982	0.2385	2.8142	3.5200e-003	35.8035	2.3000e-003	35.8058	3.6311	2.1200e-003	3.6332		347.6696	347.6696	0.0265		348.3327
Total	0.4924	2.7368	3.4642	0.0119	53.0379	8.0400e-003	53.0460	5.3902	7.6100e-003	5.3978		1,220.1455	1,220.1455	0.0676		1,221.8355

3.5 Paving - 2022

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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1221	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1207	0.0723	0.8528	1.0700e-003	10.8495	7.0000e-004	10.8502	1.1003	6.4000e-004	1.1010		105.3544	105.3544	8.0400e-003		105.5554
Total	0.1207	0.0723	0.8528	1.0700e-003	10.8495	7.0000e-004	10.8502	1.1003	6.4000e-004	1.1010		105.3544	105.3544	8.0400e-003		105.5554

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	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1221	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1207	0.0723	0.8528	1.0700e-003	10.8495	7.0000e-004	10.8502	1.1003	6.4000e-004	1.1010		105.3544	105.3544	8.0400e-003		105.5554
Total	0.1207	0.0723	0.8528	1.0700e-003	10.8495	7.0000e-004	10.8502	1.1003	6.4000e-004	1.1010		105.3544	105.3544	8.0400e-003		105.5554

3.6 Architectural Coating - 2022

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	2.8753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	3.0798	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0784	0.0470	0.5543	6.9000e-004	7.0522	4.5000e-004	7.0527	0.7152	4.2000e-004	0.7156		68.4804	68.4804	5.2200e-003		68.6110
Total	0.0784	0.0470	0.5543	6.9000e-004	7.0522	4.5000e-004	7.0527	0.7152	4.2000e-004	0.7156		68.4804	68.4804	5.2200e-003		68.6110

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	2.8753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	3.0798	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0784	0.0470	0.5543	6.9000e-004	7.0522	4.5000e-004	7.0527	0.7152	4.2000e-004	0.7156		68.4804	68.4804	5.2200e-003		68.6110
Total	0.0784	0.0470	0.5543	6.9000e-004	7.0522	4.5000e-004	7.0527	0.7152	4.2000e-004	0.7156		68.4804	68.4804	5.2200e-003		68.6110

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4822	3.0391	4.4851	0.0112	27.5429	6.6200e-003	27.5495	2.8350	6.2400e-003	2.8412		1,141.0757	1,141.0757	0.0940		1,143.4262
Unmitigated	0.4822	3.0391	4.4851	0.0112	27.5429	6.6200e-003	27.5495	2.8350	6.2400e-003	2.8412		1,141.0757	1,141.0757	0.0940		1,143.4262

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	157.50	157.50	157.50	264,088	264,088
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	157.50	157.50	157.50	264,088	264,088

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	6.70	5.00	8.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	6.70	5.00	8.90	0.00	0.00	0.00	0	0	0
Parking Lot	6.70	5.00	8.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	6.70	5.00	8.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658
Other Asphalt Surfaces	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658
Parking Lot	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658
Recreational Swimming Pool	0.514862	0.031726	0.160627	0.119887	0.016529	0.004969	0.019101	0.120993	0.003465	0.001214	0.005236	0.000734	0.000658

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Unmitigated	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358

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	0.0142					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0945					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4600e-003	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Total	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

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	0.0142					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0945					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4600e-003	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358
Total	0.1101	1.4000e-004	0.0157	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0336	0.0336	9.0000e-005		0.0358

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Summer

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Annual

Imperial Townsite Park Project AQ
Imperial County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	25.07	1000sqft	0.50	25,070.00	0
Parking Lot	100.00	Space	0.50	23,000.00	0
City Park	3.15	Acre	1.55	84,774.00	0
Recreational Swimming Pool	25.07	1000sqft	0.60	25,070.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	12
Climate Zone	15			Operational Year	2022
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MW hr)	811	CH4 Intensity (lb/MW hr)	0.023	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Imperial Townsite Park Project AQ - Imperial County APCD Air District, Annual

Project Characteristics - Project located in Imperial City, Construction would begin in July 2022. Imperial Irrigation District is the utility provider. Adjusted intensity factor per SB 100

Land Use - 25,070 sf pool area, 25,070 sf multi-courts (other asphalt), 23,000 sf & 100 spaces parking lot, all other uses City Park. Using acreage based on traffic vmt memo

Construction Phase - Default construction schedule with a start of July 2022. Adjusting the construction schedule so building construction, paving, architectural coating all end in October 2022 to match schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Default equipment

On-road Fugitive Dust - assuming 95% of the trucks are traveling on paved roads to the project site

Architectural Coating - Rule 424 for non-residential uses, nonflat coating of 100 g/L

Vehicle Trips - Project Specific Trip Gen of 50 trips/acre to get 158 daily trips. The recreational pool would not generate seperate trips

Road Dust - 95 percent paved

Area Coating - Rule 424 for non-residential uses

Energy Use -

Construction Off-road Equipment Mitigation -

Water Mitigation - Park will include drip irrigation system.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	100
tblAreaCoating	Area_EF_Nonresidential_Interior	150	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblLandUse	LandUseSquareFeet	40,000.00	23,000.00
tblLandUse	LandUseSquareFeet	137,214.00	84,774.00
tblLandUse	LotAcreage	0.58	0.50

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tblLandUse	LotAcreage	0.90	0.50
tblLandUse	LotAcreage	3.15	1.55
tblLandUse	LotAcreage	0.58	0.60
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	1270.9	811
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblRoadDust	RoadPercentPave	50	95
tblVehicleTrips	ST_TR	22.75	50.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	50.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	1.89	50.00

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tblVehicleTrips	WD_TR	33.82	0.00
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1345	0.9471	0.9663	1.8500e-003	2.1808	0.0432	2.2239	0.2527	0.0404	0.2932	0.0000	162.6963	162.6963	0.0338	0.0000	163.5399
Maximum	0.1345	0.9471	0.9663	1.8500e-003	2.1808	0.0432	2.2239	0.2527	0.0404	0.2932	0.0000	162.6963	162.6963	0.0338	0.0000	163.5399

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1345	0.9471	0.9663	1.8500e-003	2.1808	0.0432	2.2239	0.2527	0.0404	0.2932	0.0000	162.6961	162.6961	0.0338	0.0000	163.5398
Maximum	0.1345	0.9471	0.9663	1.8500e-003	2.1808	0.0432	2.2239	0.2527	0.0404	0.2932	0.0000	162.6961	162.6961	0.0338	0.0000	163.5398

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2022	9-30-2022	0.7252	0.7252
		Highest	0.7252	0.7252

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0200	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9613	2.9613	8.0000e-005	2.0000e-005	2.9688
Mobile	0.0727	0.5554	0.7031	1.9200e-003	5.0121	1.2200e-003	5.0133	0.5158	1.1500e-003	0.5170	0.0000	177.9359	177.9359	0.0153	0.0000	178.3189
Waste						0.0000	0.0000		0.0000	0.0000	29.0622	0.0000	29.0622	1.7175	0.0000	72.0004
Water						0.0000	0.0000		0.0000	0.0000	0.4704	26.1553	26.6257	0.0491	1.3000e-003	28.2401
Total	0.0927	0.5554	0.7046	1.9200e-003	5.0121	1.2300e-003	5.0134	0.5158	1.1600e-003	0.5170	29.5326	207.0553	236.5879	1.7820	1.3200e-003	281.5312

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0200	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.9613	2.9613	8.0000e-005	2.0000e-005	2.9688
Mobile	0.0727	0.5554	0.7031	1.9200e-003	5.0121	1.2200e-003	5.0133	0.5158	1.1500e-003	0.5170	0.0000	177.9359	177.9359	0.0153	0.0000	178.3189
Waste						0.0000	0.0000		0.0000	0.0000	29.0622	0.0000	29.0622	1.7175	0.0000	72.0004
Water						0.0000	0.0000		0.0000	0.0000	0.4704	24.9930	25.4634	0.0490	1.2900e-003	27.0749
Total	0.0927	0.5554	0.7046	1.9200e-003	5.0121	1.2300e-003	5.0134	0.5158	1.1600e-003	0.5170	29.5326	205.8930	235.4256	1.7820	1.3100e-003	280.3660

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.49	0.00	0.76	0.41

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2022	7/7/2022	5	5	
2	Grading	Grading	7/8/2022	7/19/2022	5	8	
3	Building Construction	Building Construction	7/20/2022	10/31/2022	5	230	
4	Paving	Paving	10/6/2022	10/31/2022	5	18	
5	Architectural Coating	Architectural Coating	10/6/2022	10/31/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,130; Non-Residential Outdoor: 1,710; Striped Parking Area: 2,884 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	66.00	26.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	7.30	8.90	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e-003	0.0827	0.0492	1.0000e-004		4.0300e-003	4.0300e-003		3.7100e-003	3.7100e-003	0.0000	8.3599	8.3599	2.7000e-003	0.0000	8.4274
Total	7.9300e-003	0.0827	0.0492	1.0000e-004	0.0452	4.0300e-003	0.0492	0.0248	3.7100e-003	0.0285	0.0000	8.3599	8.3599	2.7000e-003	0.0000	8.4274

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3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.7000e-004	1.5700e-003	0.0000	0.0236	0.0000	0.0236	2.4000e-003	0.0000	2.4000e-003	0.0000	0.1946	0.1946	1.0000e-005	0.0000	0.1950
Total	2.3000e-004	1.7000e-004	1.5700e-003	0.0000	0.0236	0.0000	0.0236	2.4000e-003	0.0000	2.4000e-003	0.0000	0.1946	0.1946	1.0000e-005	0.0000	0.1950

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e-003	0.0827	0.0492	1.0000e-004		4.0300e-003	4.0300e-003		3.7100e-003	3.7100e-003	0.0000	8.3598	8.3598	2.7000e-003	0.0000	8.4274
Total	7.9300e-003	0.0827	0.0492	1.0000e-004	0.0452	4.0300e-003	0.0492	0.0248	3.7100e-003	0.0285	0.0000	8.3598	8.3598	2.7000e-003	0.0000	8.4274

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3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.7000e-004	1.5700e-003	0.0000	0.0236	0.0000	0.0236	2.4000e-003	0.0000	2.4000e-003	0.0000	0.1946	0.1946	1.0000e-005	0.0000	0.1950
Total	2.3000e-004	1.7000e-004	1.5700e-003	0.0000	0.0236	0.0000	0.0236	2.4000e-003	0.0000	2.4000e-003	0.0000	0.1946	0.1946	1.0000e-005	0.0000	0.1950

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.0834	0.0611	1.2000e-004		3.7600e-003	3.7600e-003		3.4600e-003	3.4600e-003	0.0000	10.4219	10.4219	3.3700e-003	0.0000	10.5062
Total	7.7900e-003	0.0834	0.0611	1.2000e-004	0.0262	3.7600e-003	0.0300	0.0135	3.4600e-003	0.0169	0.0000	10.4219	10.4219	3.3700e-003	0.0000	10.5062

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3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.2000e-004	2.0900e-003	0.0000	0.0315	0.0000	0.0315	3.1900e-003	0.0000	3.2000e-003	0.0000	0.2595	0.2595	2.0000e-005	0.0000	0.2600
Total	3.0000e-004	2.2000e-004	2.0900e-003	0.0000	0.0315	0.0000	0.0315	3.1900e-003	0.0000	3.2000e-003	0.0000	0.2595	0.2595	2.0000e-005	0.0000	0.2600

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.0834	0.0611	1.2000e-004		3.7600e-003	3.7600e-003		3.4600e-003	3.4600e-003	0.0000	10.4219	10.4219	3.3700e-003	0.0000	10.5062
Total	7.7900e-003	0.0834	0.0611	1.2000e-004	0.0262	3.7600e-003	0.0300	0.0135	3.4600e-003	0.0169	0.0000	10.4219	10.4219	3.3700e-003	0.0000	10.5062

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3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.2000e-004	2.0900e-003	0.0000	0.0315	0.0000	0.0315	3.1900e-003	0.0000	3.2000e-003	0.0000	0.2595	0.2595	2.0000e-005	0.0000	0.2600
Total	3.0000e-004	2.2000e-004	2.0900e-003	0.0000	0.0315	0.0000	0.0315	3.1900e-003	0.0000	3.2000e-003	0.0000	0.2595	0.2595	2.0000e-005	0.0000	0.2600

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0631	0.5778	0.6055	1.0000e-003		0.0299	0.0299		0.0282	0.0282	0.0000	85.7383	85.7383	0.0205	0.0000	86.2519
Total	0.0631	0.5778	0.6055	1.0000e-003		0.0299	0.0299		0.0282	0.0282	0.0000	85.7383	85.7383	0.0205	0.0000	86.2519

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3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.4900e-003	0.0942	0.0255	3.0000e-004	0.6169	2.2000e-004	0.6171	0.0630	2.1000e-004	0.0632	0.0000	28.8401	28.8401	1.4500e-003	0.0000	28.8762
Worker	0.0123	9.0900e-003	0.0850	1.2000e-004	1.2815	9.0000e-005	1.2816	0.1300	8.0000e-005	0.1301	0.0000	10.5613	10.5613	7.8000e-004	0.0000	10.5808
Total	0.0158	0.1033	0.1105	4.2000e-004	1.8984	3.1000e-004	1.8987	0.1930	2.9000e-004	0.1933	0.0000	39.4014	39.4014	2.2300e-003	0.0000	39.4570

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0631	0.5778	0.6055	1.0000e-003		0.0299	0.0299		0.0282	0.0282	0.0000	85.7382	85.7382	0.0205	0.0000	86.2518
Total	0.0631	0.5778	0.6055	1.0000e-003		0.0299	0.0299		0.0282	0.0282	0.0000	85.7382	85.7382	0.0205	0.0000	86.2518

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3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.4900e-003	0.0942	0.0255	3.0000e-004	0.6169	2.2000e-004	0.6171	0.0630	2.1000e-004	0.0632	0.0000	28.8401	28.8401	1.4500e-003	0.0000	28.8762
Worker	0.0123	9.0900e-003	0.0850	1.2000e-004	1.2815	9.0000e-005	1.2816	0.1300	8.0000e-005	0.1301	0.0000	10.5613	10.5613	7.8000e-004	0.0000	10.5808
Total	0.0158	0.1033	0.1105	4.2000e-004	1.8984	3.1000e-004	1.8987	0.1930	2.9000e-004	0.1933	0.0000	39.4014	39.4014	2.2300e-003	0.0000	39.4570

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7900e-003	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540
Paving	1.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0101	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540

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3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.1000e-004	6.7000e-004	6.2600e-003	1.0000e-005	0.0945	1.0000e-005	0.0945	9.5800e-003	1.0000e-005	9.5900e-003	0.0000	0.7785	0.7785	6.0000e-005	0.0000	0.7799
Total	9.1000e-004	6.7000e-004	6.2600e-003	1.0000e-005	0.0945	1.0000e-005	0.0945	9.5800e-003	1.0000e-005	9.5900e-003	0.0000	0.7785	0.7785	6.0000e-005	0.0000	0.7799

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7900e-003	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540
Paving	1.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0101	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540

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3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.1000e-004	6.7000e-004	6.2600e-003	1.0000e-005	0.0945	1.0000e-005	0.0945	9.5800e-003	1.0000e-005	9.5900e-003	0.0000	0.7785	0.7785	6.0000e-005	0.0000	0.7799
Total	9.1000e-004	6.7000e-004	6.2600e-003	1.0000e-005	0.0945	1.0000e-005	0.0945	9.5800e-003	1.0000e-005	9.5900e-003	0.0000	0.7785	0.7785	6.0000e-005	0.0000	0.7799

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0259					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017
Total	0.0277	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017

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3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.4000e-004	4.0700e-003	1.0000e-005	0.0614	0.0000	0.0614	6.2300e-003	0.0000	6.2300e-003	0.0000	0.5060	0.5060	4.0000e-005	0.0000	0.5069
Total	5.9000e-004	4.4000e-004	4.0700e-003	1.0000e-005	0.0614	0.0000	0.0614	6.2300e-003	0.0000	6.2300e-003	0.0000	0.5060	0.5060	4.0000e-005	0.0000	0.5069

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0259					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017
Total	0.0277	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017

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3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.4000e-004	4.0700e-003	1.0000e-005	0.0614	0.0000	0.0614	6.2300e-003	0.0000	6.2300e-003	0.0000	0.5060	0.5060	4.0000e-005	0.0000	0.5069
Total	5.9000e-004	4.4000e-004	4.0700e-003	1.0000e-005	0.0614	0.0000	0.0614	6.2300e-003	0.0000	6.2300e-003	0.0000	0.5060	0.5060	4.0000e-005	0.0000	0.5069

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0727	0.5554	0.7031	1.9200e-003	5.0121	1.2200e-003	5.0133	0.5158	1.1500e-003	0.5170	0.0000	177.9359	177.9359	0.0153	0.0000	178.3189
Unmitigated	0.0727	0.5554	0.7031	1.9200e-003	5.0121	1.2200e-003	5.0133	0.5158	1.1500e-003	0.5170	0.0000	177.9359	177.9359	0.0153	0.0000	178.3189

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	157.50	157.50	157.50	264,088	264,088
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	157.50	157.50	157.50	264,088	264,088

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	6.70	5.00	8.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	6.70	5.00	8.90	0.00	0.00	0.00	0	0	0
Parking Lot	6.70	5.00	8.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	6.70	5.00	8.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	8050	2.9613	8.0000e-005	2.0000e-005	2.9688
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		2.9613	8.0000e-005	2.0000e-005	2.9688

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	8050	2.9613	8.0000e-005	2.0000e-005	2.9688
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		2.9613	8.0000e-005	2.0000e-005	2.9688

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0200	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003
Unmitigated	0.0200	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.5900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003
Total	0.0200	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.5900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003
Total	0.0200	1.0000e-005	1.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.7400e-003	2.7400e-003	1.0000e-005	0.0000	2.9200e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	25.4634	0.0490	1.2900e-003	27.0749
Unmitigated	26.6257	0.0491	1.3000e-003	28.2401

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.75317	15.3391	4.4000e-004	9.0000e-005	15.3781
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	1.48272 / 0.908763	11.2866	0.0486	1.2100e-003	12.8620
Total		26.6257	0.0491	1.3000e-003	28.2401

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.52422	14.4034	4.1000e-004	9.0000e-005	14.4400
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	1.48272 / 0.853328	11.0601	0.0486	1.2100e-003	12.6349
Total		25.4634	0.0490	1.3000e-003	27.0749

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.0622	1.7175	0.0000	72.0004
Unmitigated	29.0622	1.7175	0.0000	72.0004

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1358
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	142.9	29.0074	1.7143	0.0000	71.8646
Total		29.0622	1.7175	0.0000	72.0004

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1358
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	142.9	29.0074	1.7143	0.0000	71.8646
Total		29.0622	1.7175	0.0000	72.0004

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

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Equipment Type	Number
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11.0 Vegetation

N2O Operational GHG Emission Mobile Calculations

Project Code & Title: 21-10840 Imperial Townsite Park Project

Vehicle Population Breakdown*	
277180	Gasoline vehicles
15788	Diesel vehicles
94.6%	Gasoline vehicle %
5.4%	Diesel vehicle %

VMT per Vehicle Type	
264,088	Project VMT (CalEEMod output)
249,856	Gasoline vehicle VMT
14,232	Diesel vehicle VMT

Gasoline Vehicles	
94.6%	Gasoline vehicle %
0.5554	Tons per year mobile NOX emissions (annual output in CalEEMod)
0.53	Gasoline vehicle tons per year NOX emissions
0.0391	Tons per year N2O emissions for gasoline vehicles**
0.0354	Metric tons per year N2O emissions for gasoline vehicles

Diesel Vehicles	
1.60	grams N2O per gallon of fuel for diesel vehicles**
18.43	Diesel average miles per gallon*
0.08681	grams per mile N2O for diesel vehicles
1235.4	grams per year N2O for diesel vehicles
0.0012354	Metric tons per year N2O emissions for diesel vehicles

CO2e Emissions from N2O	
0.0367	Metric tons per year from gasoline + diesel vehicles
298	GWP of N2O***
10.9	CO2e emissions per year from N2O emissions from gasoline + diesel vehicles

Sources
<p>*Vehicle population source: EMFAC2017 (v1.0.3) Emissions Inventory Region Type: Air District Region: Imperial County APCD Calendar Year: 2030 Season: Annual Vehicle Classification: EMFAC2011 Categories</p>
<p>**Methodology source: EMFAC2017 Volume III - Technical Documentation https://www.arb.ca.gov/msei/emfac2011-faq.htm</p>
<p>***GWP source: Intergovernmental Panel on Climate Change (IPCC). 2007. AR4 Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.</p>

Appendix C

Biological Resources Assessment



Rincon Consultants, Inc.

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February 26, 2021
Project No: 20-10840

Mr. Tony Lopez
City of Imperial
Park Superintendent
420 South Imperial Avenue
Imperial, California 92251
Via email: tlopez@cityofimperial.org

**Subject: Biological Resources Assessment for the Imperial Town Site Park Project,
618 West Barioni Boulevard, City of Imperial, Imperial County, California 92215**

Dear Mr. Lopez,

This report documents the findings of a Biological Resources Assessment (BRA) conducted by Rincon Consultants, Inc. (Rincon), for the proposed Imperial Town Site Park Project (project) in the city of Imperial, California. The purpose of this BRA is to address the status and condition of special-status biological resources and rare, threatened, and endangered species with the potential to occur at the project site or be affected by the proposed development activities.

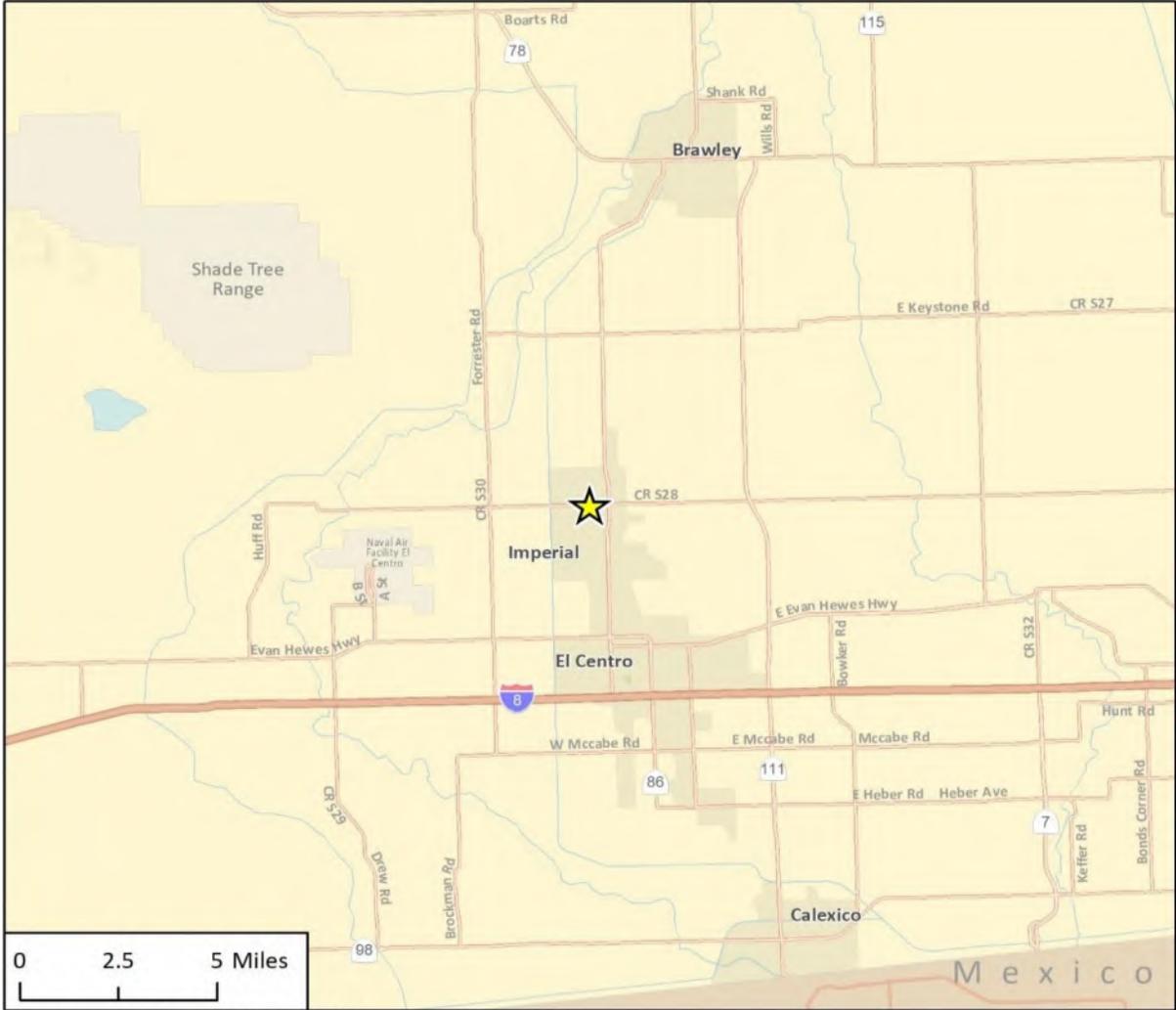
The project impacts, regulations, and mitigation measures are discussed in accordance with the California Environmental Quality Act (CEQA) and anticipated environmental review related to the project. The city of Imperial is the lead agency under CEQA.

Project Location and Description

Location

The 3.15-acre project site is in the city of Imperial in Imperial County, California. The project site is located south of West Barioni Boulevard, east of South B Street, west of South D Street, and is approximately 0.25 mile north of Imperial County Airport (see Figure 1 and Figure 2). The project site has been previously disturbed and partially developed and is currently used as a recreational area consisting of a lap pool, storage building, parking lot, and grass fields. Project site access would be provided via a driveway on West Barioni Boulevard. The property is identified as Assessor's Parcel Number (APN) 063-250-011 and is depicted on Township 15 South, Range 14 East, Section 18, of the United States Geological Survey (USGS) San Bernardino, California 7.5-Minute Quadrangle. The surrounding land uses are predominately built out and consist of urban institutional and residential uses. The project site is surrounded by Imperial High School to the north, Ben Hulse Elementary School to the south, and residential uses to the east and west.

Figure 1 Regional Location



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★ Project Location



Fig. 1 Imperial location

Figure 2 Project Site





Description

The project is community driven and funded by the State of California Proposition 68 allocations, available in the fourth round of California Department of Parks and Recreation Statewide Park Development and Community Revitalization Program. The city of Imperial, in partnership with Imperial High School District, will be applying for the maximum funds available to develop new recreational features for the project site.

The project will serve as a recreational area for the surrounding community and will include the development of approximately 22,724 square feet (sf) of picnic and playground area, a 9,349 sf park square and 25,070 sf of pool area. The project will also include 20,953 sf of new skate park features, a 23,000 sf parking lot with approximately 80 to 100 vehicle spaces and 4 bicycle parking spaces, and 25,070 sf of multi-use courts. This will require the addition of a 1,920 sf restroom and shower structure and 12,526 sf of Americans with Disabilities Act (ADA) compliant walking trails surrounding the perimeter and connecting the project's amenities. A 1,500 sf atrium will also be added to the landscaping. The existing lap pool would be demolished and replaced with a competition size pool (50 meters long by 25 meters wide). The pool area would be expanded to include grandstand seating, canopy shading, and an outside shower station. The existing storage structure would be repurposed to include ADA compliant restrooms. Landscaping will be placed throughout the project including drought tolerant trees and shrubs on drip irrigation. Existing lawn areas and irrigation systems would be augmented or reduced to fit the needs of this project. Other park amenities include benches, gazebos, and light-emitting diode (LED) lighting for the park features and parking lot. All construction would occur within the boundary of the project site.

The project will require the mobilization of grading, excavating, and trenching equipment as well as import and export of building materials. Electrical, plumbing, and other on-site improvements would also be required. Construction is expected to begin in July 2022, with the facility opening to the public by November 2022. This schedule is contingent on the award date and availability of funds. Due to the nature of funding for this project, construction could occur in phases depending on the amount of funds awarded through the Statewide Park Development and Community Revitalization Program.

Methodology

Regulatory Overview

Regulated or sensitive resources studied and analyzed herein include special-status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees. For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes:

Federal

- Federal Endangered Species Act (ESA)
- Federal Clean Water Act (CWA)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act



- U.S. Bureau of Land Management (BLM) Desert Renewable Energy Conservation Plan (DRECP) and California Desert Conservation Area (CDCA)
- Navigable Waters Protection Rule

State

- CEQA
- California Endangered Species Act (CESA)
- California Fish and Game Code (CFGC)
- Porter-Cologne Water Quality Control Act (Porter-Cologne)

Local

- City of Imperial Municipal Code
- Imperial Valley Natural Community Conservation Plan (NCCP) and Habitat Conservation Plan (HCP)

Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the CEQA Guidelines Attachment G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the project would have a significant effect on biological resources if it would:

- 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.*
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal areas, etc.) through direct removal, filling, hydrological interruption, or other means.*
- 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.*
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.*



Literature Review

A literature review was conducted to establish the environmental and regulatory setting of the proposed project. Specific literature reviewed for the subject analysis is provided in the references section of this document. Queries of the United States Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2021a), USFWS Environmental Conservation Online System (ECOS): Information, Planning and Conservation System (IPaC) (USFWS 2021b), USFWS National Wetland Inventory (NWI) (USFWS 2021c), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (CDFW 2021a), CDFW Biogeographic Information and Observation System (BIOS) (CDFW 2021b), and California Native Plant Society (CNPS) Online Inventory of Rare, Threatened and Endangered Plants of California (CNPS 2021) were conducted. The queries were conducted to obtain comprehensive information regarding state and federally listed species, sensitive communities and federally designated critical habitat known to or considered to have potential to occur within the vicinity of the project site.

The reviewed literature also included the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2021), and literature detailing the habitat requirements of subject species. Aerial photographs, topographic maps, and soil survey maps were also examined.

Field Reconnaissance Survey

The field reconnaissance survey was limited to providing an overview of site biological constraints and the potential presence of sensitive biological resources, including sensitive plant and wildlife species, sensitive plant communities, jurisdictional waters and wetlands, protected trees, wildlife movement, and habitat for nesting birds. The study area consisted of the approximately 3.15-acre project site and a 100-foot buffer.

An initial field reconnaissance survey was conducted by Rincon Biologist Kevin Gugerty on January 28, 2021 from 7:50 am to 9:50 am. The survey was performed by walking the proposed project site to characterize the existing biological resources present (e.g., vegetation communities, potential presence of sensitive species and/or habitats, and presence of potentially jurisdictional waters). Where portions of the study area were inaccessible on foot (e.g., private property and fenced areas), the biologist visually inspected these areas with binoculars (10 x 42). Weather conditions during the survey included an average temperature of 45 degrees Fahrenheit, with winds between 0 and 5 miles per hour and cloudy skies.

During the survey, an inventory of all plant and animal species observed was compiled (Attachment A). Plant species nomenclature and taxonomy follows *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012), and the Jepson Online Interchange for California Floristics (Jepson Flora Project 2019). Species encountered during the survey were noted and identified to the lowest possible taxonomic level. Vegetation mapping and classification used for this analysis is based on the classification system provided in *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009) and modified as needed to more accurately describe the existing vegetation communities observed on-site.

The habitat requirements for each regionally occurring special-status species were assessed and compared to the type and quality of the habitats observed within the study area during the site visit.



The survey was conducted to make an initial determination regarding the presence or absence of terrestrial biological resources including plants, birds, and wildlife.

Based on the results of the site visit, literature review, and species known to occur regionally, Rincon assessed the potential for the project to impact special-status species within the study area. This analysis is intended to assess habitat suitability within the study area. Definitive surveys to confirm the presence or absence of special-status species were not performed and are not included within this analysis. The findings and opinions conveyed in this report are based on the methodology described above.

Existing Conditions

Physical Characteristics

The approximately 3.15-acre project site consists of a previously developed recreational area with an existing lap pool, storage building, parking lot, and grass fields. The study area is surrounded by Imperial High School to the north, Ben Hulse Elementary School to the south, and residential neighborhoods to the east and west.

The project site is in a developed residential and agricultural area of the Imperial Valley Floodplain located approximately -20 meters (-61 feet) below mean sea level. The study area contains two soil types, Imperial silty clay, wet and Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes. These soils are deep (more than 80 inches), moderately well drained soils formed in basin floors from mixed clay lacustrine sources common for farmland but are not considered hydric soils (USDA 2021).

Hydrology

The project site is within the 8,360-square mile Salton Sea Transboundary Watershed (Hydrologic Unit 18100200), which comprises one-third of the larger Colorado River Basin Region. This area is considered a priority for restoration and maintenance activities by the United States Environmental Protection Agency (EPA). The watershed has over 1,450 miles of surface agricultural drains that discharge into the Alamo and New River channels which flow north from the border of Mexico and then into the Salton Sea. Agricultural discharges in the Imperial Valley average about 830,000 acre-feet/year. The sole source of water to the watershed is the Colorado River, a waterbody once naturally hydrologically connected to the Salton Sea Basin, but today hydrologically connected through a vast system of water projects. Most of the watershed is within Imperial County, but the watershed also receives drainage from Coachella Valley in Riverside County and the Mexicali Valley in Mexico (via the New River).

The project site does not contain any federally regulated waters or wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.). A single-edged berm exists along the northwestern edge of the project site near the elementary school playground and appears to convey sprinkler system water due to poor drainage. This feature has no outlet or connectivity to any stormwater or irrigation systems, contains no bed/bank or Ordinary High Water Mark (OHWM), and does not contain any riparian vegetation. The nearest mapped jurisdictional water feature is a freshwater pond, approximately 0.2 mile southwest of the project site. The closest riverine resource is over 0.9 mile west of the study area. The nearest designated Wild and Scenic River is a portion of Palm Canyon Creek approximately 70 miles northwest of the project site. A formal jurisdictional delineation was not conducted.



Land Cover

Only one land cover type exists in the study area: Developed/Disturbed. Ornamental vegetation is included in the Developed/Disturbed category. The east and west portions of the study area contain non-native grass species with scattered ornamental vegetation which is regularly mowed and maintained. The center of the study area consists of a paved parking lot, paved roads (West Barioni Boulevard and South D Street), and an existing recreational facility with a pool and associated buildings. A total of 11 plant species was observed within the study area during the site reconnaissance survey (Attachment A).

Developed/Disturbed

Developed land includes areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. It is characterized by paved roads, hardscape, and landscaped areas. Disturbed habitats have been physically disturbed (by previous human activity) and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate.

Developed/disturbed habitat covers the entire study area. Ornamental trees within the study area include olive tree (*Olea europea*), curtain fig (*Ficus microcarpa*), Texas sage (*Leucophyllum frutescens*), saltcedar (*Tamarix ramosissima*), smooth mesquite (*Prosopis laevigata*), oleander (*Nerrium oleander*), Mexican fan palm (*Washingtonia* sp.), peacock flower (*Caesalpinia pulcherrima*), silver wattle (*Acacia dealbata*), natal plum (*Carissa macrocarpa*), and crabgrass (*Digitaria* sp.). The majority of these ornamental species are concentrated on the east side of the project site. The west side of the project site is dominated by disturbed grass with small mammal holes.

General Wildlife

The study area likely supports common wildlife adapted to urban and suburban areas (e.g., raccoon [*Procyon lotor*], striped skunk [*Mephitis mephitis*], and a variety of common avian species). Wildlife species observed directly or detected from calls, tracks, scat, nests, or other signs were documented. The detection of wildlife species was limited by seasonal and temporal factors. Given the project site's history of disturbance and lack of connectivity with larger expanses of natural habitat, it is unlikely that the site would support special-status species. Some of the wildlife species detected within the study area include rock pigeon (*Columba livia*), European starling (*Sturnus vulgaris*), and northern mockingbird (*Mimus polyglottos*). A complete list of wildlife species observed during the survey are included in Attachment A.

Nesting Birds

Established ornamental trees in the study area could provide nesting habitat for common nesting birds protected under the CFGC Section 3503 and the MBTA. No nesting behavior or active nests were observed during the survey.

Sensitive Biological Resources

Based on review of aerial photographs and the January 28, 2021 field reconnaissance survey, Rincon evaluated the potential presence of sensitive biological resources on and adjacent to the project site.



Special-Status Species

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the Federal ESA; those considered “Species of Concern” by the USFWS; those listed or candidates for listing as Rare, Threatened, or Endangered by the CDFW under the CESA; animals designated as “Fully Protected” by the CFGC; animals listed as “Species of Special Concern” (SSC) by the CDFW; CDFW Special Plants, specifically those with California Rare Plant Ranks (CRPR) of 1B, 2, 3, and 4 in the CNPS’s Inventory of Rare and Endangered Vascular Plants of California (CNPS 2021).

Local, state, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted on-site prior to the approval of proposed development on a property. This section discusses sensitive biological resources observed on the project site and evaluates the potential for the project site to support other sensitive biological resources. A list of special-status plant and animal species with potential to occur on-site was developed based on a review of a 5-mile search of the CNDDDB (2021b) and a 9-quad search of the CNPS’s online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2021) and can be found in Attachment B. These search areas were determined based on the surrounding urban, agricultural, and residential land uses and significant change in habitat types outside of this area (e.g., desert habitats that are not relevant to the project site). Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB, and species occurrence records from other sites near the study area. The potential for each special-status species to occur in the study area was evaluated according to the following criteria:

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

The CNDDDB and CNPS contain records for 15 sensitive plant species and 8 sensitive wildlife species within five miles of the project site (Attachment B). No sensitive plant communities are documented in the study area. No special-status plants have potential to occur within the study area.

Of the 8 sensitive wildlife species identified, none have moderate or high potential to occur on-site. Burrowing owl (*Athene cunicularia*) and western yellow bat (*Lasiurus xanthinus*) have low potential to occur in the study area due to the presence of small mammal burrows and palm trees. However, these



species are unlikely to occur on-site given the poor habitat quality and high level of disturbance in the study area. Neither species was detected during the January 28, 2021 survey.

Special-Status Plant Species

None of the 15 special-status plant species identified within 5 miles of the study area are expected to occur on-site. Due to high levels of historic and existing disturbance from anthropogenic activities and existing development (agricultural farms, nearby schools, and residential development), the site is not suitable for special-status plant species. Further, many of the special-status plants identified by the CNDDDB query require sandy or gravelly soils and/or higher elevations which are not present within the study area. Additionally, no special-status plant species were identified during the January 28, 2021 survey.

Special-Status Wildlife Species

The project site is located within a developed/disturbed urban and suburban area. Due to high levels of historic and existing disturbance from anthropogenic activities, and the lack of specific desert habitats or suitable substrates, the site is not suitable for most special-status wildlife species.

The ornamental trees detected within the study area may provide low quality foraging and daytime or nighttime roosts for the western yellow bat. It is unlikely that any bats are currently using the trees for maternity roosts as no guano was observed during the field reconnaissance survey on January 28, 2021. This species is not geographically restricted to the vicinity of the project site.

Burrowing owl prefer open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The species uses burrows created by other species, and artificial features that provide similar coverage as a burrow, for shelter and for nesting. Small mammal burrows were observed on the western edge of the study area, but none of the burrows had diagnostic sign of burrowing owl (pellets, whitewash, or feathers). The species is known to occur within the surrounding agricultural lands and could potentially forage on-site or occupy these burrows in the future.

Nesting Birds

While common birds are not designated as special-status species, destruction of their eggs, nests, and nestlings is prohibited by federal and state law. Section 3503.5 of the CFGC specifically protects birds of prey, and their nests and eggs against take, possession, or destruction. Section 3503 of the CFGC also incorporates restrictions imposed by the federal MBTA with respect to migratory birds (which consists of most native bird species). Trees and other vegetation on-site could provide suitable nesting habitat for several common avian species.

Sensitive Plant Communities

Plant communities are also considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as “threatened” or “very threatened” and keeps records of their occurrences in the CNDDDB. CNDDDB vegetation alliances are ranked 1 through 5 based on NatureServe’s (2018) methodology, with those alliances ranked globally (G) or state (S) as 1 through 3 generally considered sensitive, though some communities with other ranks may also be considered sensitive (CDFW 2021a).



The CNDDDB has no records of sensitive terrestrial natural communities or habitat types that are reported from historical information within a 5-mile radius of the project site. Additionally, the IPaC did not identify any critical habitat within the study area (USFW 2021b).

Jurisdictional Wetlands and Waters

In accordance with Section 1602 of the CFGC, the CDFW has jurisdiction over lakes and streambeds (including adjacent floodplain resources). CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake. Under Section 404 of the CWA, the United States Army Corps of Engineers (USACE) has authority to regulate activities that discharge dredge or fill material into wetlands or other “waters of the United States” through issuance of a Section 404 permit. Finally, the Colorado River Regional Water Quality Control Board (RWQCB) has jurisdiction over “waters of the State” pursuant to Porter-Cologne and has the responsibility for review of the project water quality certification per Section 401 of the federal CWA. The EPA’s Navigable Waters Protection Rule (NWPR) covers four categories of federally regulated waters including territorial seas and traditional navigable waters, perennial and intermittent tributaries to those waters, certain lakes/ponds/impoundments, and wetlands adjacent to jurisdictional waters.

As described above, a single-edged berm exists along the northwestern edge of the project site near the elementary school playground and appears to convey sprinkler system water due to poor drainage. This feature has no outlet or connectivity to any stormwater or irrigation systems, contains no bed/bank or Ordinary High Water Mark (OHWM), and does not contain any riparian vegetation. Therefore, it is not considered waters of the U.S. nor streambed and thus, is not regulated by the USACE, CDFW, or the Colorado River RWQCB.

Wildlife Movement

Wildlife corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature, allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Examples of barriers or impediments to movement include housing and other urban development, roads, fencing, unsuitable habitat, or open areas with little vegetative cover. Regional and local wildlife movements are expected to be concentrated near topographic features that allow convenient passage, including roads, drainages, and ridgelines.

The CDFW BIOS (2021b) does not include any mapped essential habitat connectivity areas near the project site. The nearest habitat connectivity area is over 16 miles east of the study area in the Little Mule Mountains. In addition, the project site is surrounded by existing development and heavily traveled transportation corridors, including State Route 111, and is therefore not expected to serve as a significant migratory wildlife corridor.

Resources Protected by Local Policies and Ordinances

The city of Imperial Municipal Code does not include any ordinances related to the protection/conservation of biological resources.



Habitat Conservation Plans

The study area is within the Imperial Valley NCCP and the BLM Desert DRECP area boundaries. The Imperial Valley NCCP is being prepared by the Imperial Valley Irrigation District (IID) in consultation with the California Department of Fish and Game and the USFWS. While the study area is in the IID plan area, the entire project site and surrounding areas are entirely developed. Furthermore, the study area does not contain any navigable irrigation systems and does not involve any alterations to irrigation features specified as 'covered activities' in the Imperial Valley NCCP. The BLM Desert DRECP area covers land use for renewable energy and conservation areas. The study area is not in a designated renewable energy or conservation area under the DRECP due to the developed nature of the surrounding space.

Impact Analysis and Mitigation Measures

The criteria used to evaluate potential project-related impacts to biological resources are presented below. This section discusses the possible adverse impacts to biological resources that may occur from implementation of the project and recommends appropriate avoidance, minimization, and mitigation measures that would reduce those impacts to less than significant levels.

Special-Status Species

As mentioned above, 15 sensitive plant species and 8 sensitive wildlife species are known to occur or have potential to occur within a five-mile radius of the project site. Of these 23 species evaluated, none have moderate or high potential to occur within the study area.

Special-Status Plant Species

No special-status plant species have potential to occur on-site and none were observed during the January 28, 2021 field survey. No impact to special-status plant species would occur.

Special-Status Wildlife Species

The project site is located within a developed/disturbed urban and suburban area. Due to high levels of historic and existing disturbance from anthropogenic activities, and the lack of specific desert habitats or suitable substrates, the site is not suitable for most special-status wildlife species. study area

Low quality or marginal foraging and/or nesting habitat is present on-site for two sensitive wildlife species, burrowing owl and western yellow bat. While both species are considered Species of Special Concern (SSC) under CDFW, burrowing owl is a covered species under the Imperial Valley NCCP and western yellow bat is not. The project site is entirely developed/disturbed, and burrowing owl and western yellow bat have a low potential to occur on the project site. These species are unlikely to occur on-site given the poor habitat quality and high level of disturbance in the study area. Therefore, construction of the project is not likely to impact these species. Due to the developed nature of the site and high levels of existing disturbance, the project site is not expected to provide viable long-term habitat for these species and therefore, would not result in loss of suitable habitat for the species. Impacts to these two species are not evaluated further due to their low potential to occur.

Migratory or other common nesting birds, while not designated as special-status species, are protected by the CFGC (Sections 3503, 3503.5, 3511, and 3513) and MBTA and may nest on-site. Therefore,



construction of the project has the potential to directly (by destroying a nest) or indirectly (construction noise, dust, and other human disturbances that may cause a nest to fail) impact nesting birds protected under the CFGC and MBTA. Implementation of BIO-1 would reduce the potential impact on nesting birds to a less than significant level.

Mitigation Measures

BIO-1 Nesting Birds Impact Avoidance and Minimization

If site preparation and construction activities are initiated during the breeding season (generally February 1 through August 31, but variable based on seasonal and annual climatic conditions), a pre-construction nesting bird survey shall be conducted by a qualified biologist no more than 7 days prior to initial ground disturbance or vegetation removal to determine the presence/absence, location, and status of any active nests on-site or within 100 feet of the site for common nesting birds, or within 300 feet of the site for nesting raptors. In areas where site access is limited or prohibited (e.g., private property), the area will be surveyed using binoculars. Should land clearing activities pause for more than one week during the breeding season, another nesting bird survey will be conducted prior to re-initiation of those activities.

If active passerine nests are found, the qualified biologist will establish and demarcate with fencing or flagging an appropriate buffer (dependent upon the species, proposed work activity, and existing disturbances associated with land uses outside of the site) around the active nest(s). No ground disturbing activities will occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. The qualified biologist will monitor the active nest(s) to determine the adequacy of the buffer. Encroachment into the buffer would occur only at the discretion of the qualified biologist.

The methods and results of the nesting bird survey(s), any nesting bird avoidance efforts, and the success of the avoidance buffers will be documented in a letter report to the City no later than 3 weeks following the completion of the survey(s) and/or active nest monitoring activities.

Sensitive Plant Communities

No sensitive plant communities were observed on-site and none are present within 5 miles of the study area. No impacts to sensitive plant communities would occur.

Jurisdictional Waters and Wetlands

The single-edged berm exists along the northwestern edge of the project site is not navigable to any major tributaries, is not adjacent to any other jurisdictional features; does not contain any common jurisdictional features (OHWM, bed/bank), and does not support any riparian or wetland vegetation; therefore not it is not considered to be a jurisdictional feature and the project will not have any impact on jurisdictional waters or wetlands.

Wildlife Movement

As discussed above, the proposed project is not located within any known regional wildlife movement corridors (e.g., Essential Connective Area or Natural Landscape Block identified in Spencer et al. 2010). The immediate surrounding area consists primarily of developed residential and agricultural landscapes.



Given the developed nature of the surroundings, the site would not function as a wildlife corridor or linkage, or as a wildlife nursery site. Therefore, impacts would be less than significant, and no mitigation is required.

Local Policies and Ordinances

The city of Imperial Municipal Code does not include specific protections for biological resources therefore the project is not anticipated to conflict with any local policies and/or ordinances. No impacts would occur and no mitigation would be required.

Habitat Conservation Plans

The project site is within the Imperial Valley NCCP plan area, however the project is not considered a 'covered activity' by the Imperial Valley NCCP and the study area consists of disturbed and developed lands that do not include irrigation areas or habitat for special-status species covered by the NCCP. The project site is also within the BLM Desert DRECP boundary, but is entirely within developed land not designated for conservation or renewable energy development and is therefore not subject to the DRECP. The project would not conflict with the conservation goals and objectives of the Imperial Valley NCCP or the BLM Desert DRECP. Therefore, impacts would be less than significant and no mitigation would be required.

Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Biological surveys for the presence or absence of certain taxa have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, review of CNDDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDDB, may vary with regard to accuracy and completeness. In particular, the CNDDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.



Thank you for the opportunity to provide this Biological Resources Assessment. Please contact the undersigned with any questions.

Sincerely,

Rincon Consultants, Inc.

A handwritten signature in black ink that reads "Gayle Bufo".

Gayle Bufo
Biologist

A handwritten signature in black ink that reads "Christina Shushnar".

Christina Shushnar
Senior Project Manager/Biologist

A handwritten signature in blue ink that reads "Sherri Miller".

Sherri Miller
Principal Biologist

Attachments

- Attachment A Inventory of Plant and Animal Species Observed On-site
- Attachment B CNDDDB/CNPS Query Results and Occurrence Potentials
- Attachment C Site Photographs – January 28, 2021



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Attachment A

Inventory of Plants and Animal Species Observed On-Site



Species Observed During January 28, 2021 Survey

Common Name	Scientific Name
Avian Species	
California gull	<i>Larus californicus</i>
Eurasian collared dove	<i>Streptopelia decaoto</i>
European starling	<i>Sturnus vulgaris</i>
great egret	<i>Ardea alba</i>
northern mockingbird	<i>Mimus polyglottos</i>
rock pigeon	<i>Columba livia</i>
snowy egret	<i>Egretta thula</i>
Plant Species	
curtain fig	<i>Ficus microcarpa</i>
Mexican fan palm	<i>Washingtonia robusta</i>
natal plum	<i>Carissa macrocarpa</i>
oleander	<i>Nerium oleander</i>
olive tree	<i>Olea europaea</i>
peacock flower	<i>Caesalpinia pulcherrima</i>
silver wattle	<i>Arcacia dealbata</i>
smooth mesquite	<i>Prosopis laevigata</i>
tamarisk	<i>Tamarix ramosissima</i>
Texas sage	<i>Leucophyllum frutescens</i>

Attachment B

CNDDDB/CNPS Query Results and Occurrence Potentials



Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Plants and Lichens				
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	None/None G5T2?/S2 1B.1	Annual herb. Blooms Jan-Sept. Occurs in chaparral, coastal scrub. Sandy areas of the South Coast and Sonoran Desert Floristic Provinces. 80-1600m (260-5250ft).	None	The study area is outside of elevation range for this species. No chaparral, coastal scrub, or desert habitat present.
<i>Amaranthus watsonii</i> Watson's amaranth	None/None G5?/S3 4.3	Mojavean desert scrub, Sonoran desert scrub. 20 - 1700 m. annual herb. Blooms Apr-Sep	None	No desert scrub habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas.
<i>Astragalus sabulorum</i> gravel milk-vetch	None/None G4G5/S2 2B.2	Desert dunes, Mojavean desert scrub, Sonoran desert scrub. Usually sandy, sometimes gravelly. Flats, washes, and roadsides. -60 - 930 m. annual/perennial herb. Blooms Feb-Jun	None	No desert scrub or desert dune habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas. No sandy or gravelly substrate in study area.
<i>Cylindropuntia wolfii</i> Wolf's cholla	None/None G4/S3 4.3	Sonoran desert scrub. 100 - 1200 m. perennial stem succulent. Blooms Mar-May	None	The study area is outside of elevation range for this species. No desert scrub habitat present.
<i>Eucnide rupestris</i> annual rock-nettle	None/None G3/S1 2B.2	Sonoran desert scrub. 500 - 600 m. annual herb. Blooms Dec-Apr	None	The study area is outside of elevation range for this species. No desert scrub habitat present.
<i>Euphorbia abramsiana</i> Abrams' spurge	None/None G4/S2 2B.2	Mojavean desert scrub, Sonoran desert scrub. sandy. -5 - 1310 m. annual herb. Blooms (Aug)Sep-Nov	None	No desert scrub habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas. No sandy substrate in study area.
<i>Imperata brevifolia</i> California satintail	None/None G4/S3 2B.1	Chaparral, Coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), Riparian scrub. mesic. 0 - 1215 m. perennial rhizomatous herb. Blooms Sep-May	None	No chaparral, coastal scrub, desert scrub, meadow/seep, or riparian scrub habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas.
<i>Johnstonella costata</i> ribbed cryptantha	None/None G4G5/S4 4.3	Desert dunes, Mojavean desert scrub, Sonoran desert scrub. sandy. -60 - 500 m. annual herb. Blooms Feb-May	None	No desert scrub or dune habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas. No sandy substrate in study area.



Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
<i>Johnstonella holoptera</i> winged cryptantha	None/None G4G5/S4 4.3	Mojavean desert scrub, Sonoran desert scrub. 100 - 1690 m. annual herb. Blooms Mar-Apr	None	No desert scrub or desert dune habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas.
<i>Lycium parishii</i> Parish's desert-thorn	None/None G3?/S1 2B.3	Coastal scrub, Sonoran desert scrub. 135 - 1000 m. perennial shrub. Blooms Mar-Apr	None	The study area is outside of elevation range for this species. No desert or coastal scrub habitat present.
<i>Malperia tenuis</i> brown turbans	None/None G4?/S2? 2B.3	Sonoran desert scrub (sandy, gravelly). 15 - 335 m. annual herb. Blooms (Feb)Mar-Apr	None	No desert scrub habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas. No sandy or gravelly substrate in study area.
<i>Mentzelia hirsutissima</i> hairy stickleaf	None/None G4?/S3 2B.3	Sonoran desert scrub (rocky). 0 - 700 m. annual herb. Blooms Mar-May	None	No desert scrub habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas. No rocky substrate in study area.
<i>Nama stenocarpa</i> mud nama	None/None G4G5/S1S2 2B.2	Marshes and swamps (lake margins, riverbanks). 5 - 500 m. annual/perennial herb. Blooms Jan-Jul	None	No marsh or swamp habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas.
<i>Pholisma sonorae</i> sand food	None/None G2/S2 1B.2	Desert dunes, Sonoran desert scrub (sandy). 0 - 200 m. perennial herb (parasitic). Blooms (Mar)Apr-Jun	None	No desert scrub or dune habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas. No sandy substrate in study area.
<i>Pilostyles thurberi</i> Thurber's pilostyles	None/None G5/S4 4.3	Sonoran desert scrub. 0 - 365 m. perennial herb (parasitic). Blooms Dec- Apr	None	No desert scrub habitat present in study area. Entire project site is in on developed land surrounded by paved roads and residential areas.



Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Amphibians				
<i>Lithobates pipiens</i> northern leopard frog	None/None G5/S2 SSC	Native range is east of Sierra Nevada-Cascade Crest. Near permanent or semi-permanent water in a variety of habitats. Highly aquatic species. Shoreline cover, submerged and emergent aquatic vegetation are important habitat characteristics.	None	No aquatic habitat on or near site. V-ditch on northwest side of site is not suitable for this species due to lack of connectivity to a permanent water source. V-ditch is not submerged most of the year.
<i>Lithobates yavapaiensis</i> lowland leopard frog	None/None G4/SX SSC	Were found along the Colorado River and in streams near the Salton Sea.	None	No aquatic habitat on or near site. Single-edge berm on northwest side of site is not suitable for this species due to lack of connectivity to a permanent water source. Single-edge berm is not submerged most of the year. Salton Sea is over 15 miles north of the study area.
Reptiles				
<i>Phrynosoma mcallii</i> flat-tailed horned lizard	None/None G3/S2 SSC	Restricted to desert washes and desert flats in central Riverside, eastern San Diego, and Imperial counties. Critical habitat element is fine sand, into which lizards burrow to avoid temperature extremes; requires vegetative cover and ants.	None	No desert wash or desert flat habitats near study area. study area is highly disturbed and surrounded by paved roads and residential/ agricultural land not suitable for this species. study area does not contain any sandy patches or suitable vegetation cover.
Birds				
<i>Athene cunicularia</i> burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Low	Small mammal burrows present on western side of the study area are potentially suitable for this species. However, the study area is heavily disturbed and surrounded by developed residential space. Agricultural fields nearby are more suitable for this species. The closest CNDDDB record is approximately 1.7 miles northwest of the study area in the agricultural fields.



Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Mammals				
<i>Lasiurus xanthinus</i> western yellow bat	None/None G5/S3 SSC	Occurs in arid regions of the southwestern United States. Typically found in riparian woodlands, oak or pinyon-juniper woodland, desert wash, palm oasis habitats, and urban or suburban areas. Roosts in trees, often between palm fronds.	Low	No riparian, oak, or pinyon-juniper woodland habitats in the study area. Additionally, the study area is not near any desert wash or palm oasis habitats. However, the study area is in an urban/suburban area with palm trees present and the CNDDDB record for this species covers the study area. Palm trees in the study area would provide suitable roosting habitat.
<i>Neotoma albigula venusta</i> Colorado Valley woodrat	None/None G5T3T4/ S1S2	Low-lying desert areas in southeastern California. Closely associated with beaver-tail cactus & mesquite. Intolerant of cold temps. Eats mainly succulent plants. Distribution influenced by abundance of nest building material	None	No desert habitats occur in the study area. No beaver-tail cactus or other cactus species necessary for dietary needs is present. Nest building material is also not present in the study area due to high level of disturbance/frequent activity.
<i>Nyctinomops macrotis</i> big free-tailed bat	None/None G5/S3 SSC	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	None	No high cliffs or rocky outcrops in the study area. Existing buildings and trees in the study area are not suitable roosting sites for this species.
<i>Sigmodon hispidus eremicus</i> Yuma hispid cotton rat	None/None G5T2T3/S2 SSC	Along the Colorado River and in grass and agricultural areas near irrigation waters. Wetlands and uplands with dense grass and herbaceous plants. Makes runways through vegetation. Nests on surface and in burrows.	None	No agricultural areas with irrigation waters occur within the study area. Grass within study area is poor quality and is regularly disturbed and contains no herbaceous plants necessary for burrowing.

Regional Vicinity refers to within a 9-quad search radius of site.

Status (Federal/State)

- FE = Federal Endangered
- FT = Federal Threatened
- FPE = Federal Proposed Endangered
- FPT = Federal Proposed Threatened
- FD = Federal Delisted
- FC = Federal Candidate
- SE = State Endangered
- ST = State Threatened
- SCE = State Candidate Endangered

CRPR (CNPS California Rare Plant Rank)

- 1A = Presumed extirpated in California, and rare or extinct elsewhere
- 1B = Rare, Threatened, or Endangered in California and elsewhere
- 2A = Presumed extirpated in California, but common elsewhere
- 2B = Rare, Threatened, or Endangered in California, but more common elsewhere
- 3 = Need more information (Review List)
- 4 = Limited Distribution (Watch List)

CRPR Threat Code Extension



SCT = State Candidate Threatened	.1 = Seriously endangered in California (>80% of occurrences threatened/ high degree and immediacy of threat)
SR = State Rare	.2 = Moderately threatened in California (20-80% of occurrences threatened/ moderate degree and immediacy of threat)
SD = State Delisted	.3 = Not very endangered in California (<20% of occurrences threatened/ low degree and immediacy of threat)
SSC = CDFW Species of Special Concern	
FP = CDFW Fully Protected	
WL = CDFW Watch List	

Other Statuses

G1 or S1	Critically Imperiled Globally or Subnationally (state)
G2 or S2	Imperiled Globally or Subnationally (state)
G3 or S3	Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5	Apparently secure, common and abundant
GH or SH	Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery

Additional notations may be provided as follows

T –	Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
Q –	Questionable taxonomy that may reduce conservation priority
? –	Inexact numeric rank

Attachment C

Site Photographs – January 28, 2021



Photograph 1. View of lawn and vehicle tracks in the mud, facing west from South D Street.



Photograph 2. View of small mammal burrows on eastern edge of project site facing southeast.



Photograph 3. View of project site facing southwest from corner of West Barioni Boulevard and South D Street.



Photograph 4. View of ornamental vegetation and grass within project site, facing northwest from South D Street.



Photograph 5. View of project site facing north towards West Barioni Boulevard.



Photograph 6. View of the single-edge berm on northwest corner of project site facing east.



Photograph 7. View of existing pool in center of the project site, facing south.



Photograph 8. View of water pump station, facing east from West Barioni Boulevard and South B Street.

Appendix D

Cultural Resources Assessment Memorandum



Rincon Consultants, Inc.

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March 3, 2021
Project No: 21-10840

Mr. Tony Lopez
City of Imperial
Park Superintendent
420 South Imperial Avenue
Imperial, California 92251
Via email: tlopez@cityofimperial.org

Subject: Cultural Resources Assessment Memorandum for the Townsite Park Project, 618 Barioni Boulevard, City of Imperial, Imperial County, California 92215

Dear Mr. Lopez:

The City of Imperial retained Rincon Consultants, Inc. (Rincon) to conduct a cultural resources assessment for the Townsite Park Project (project) in the City of Imperial, Imperial County, California. The assessment included cultural resources records and Sacred Lands File (SLF) searches, site visit, historical aerial imagery review, historic property evaluation, and preparation of this technical memorandum. This study has been prepared to support the project's compliance with the California Environmental Quality Act (CEQA); the City of Imperial (City) is the lead CEQA agency.

Project Location and Description

The 3.15-acre project site lies south of Barioni Boulevard, east of South B Street, west of South D Street, and is approximately 0.25-mile north of Imperial County Airport (Figure 1 and Figure 2, Attachment A). The project site is currently developed as a recreational area consisting of a lap pool with associated shade structures, three permanent buildings, one portable building, grass fields, and a parking lot. The property is identified as Assessor's Parcel Number (APN) 063-250-011 and is depicted on Township 15 South, Range 14 East, Section 18, of the United States Geological Survey (USGS) *El Centro*, California 7.5-Minute Quadrangle. The surrounding area is characterized by urban residential and institutional development, with Imperial High School located to the north, Ben Hulse Elementary School to the south, and residential uses to the east and west.

The project would construct a new recreational area for the surrounding community. The existing lap pool and buildings would be demolished and a competition-size pool measuring 50 meters long by 25 meters wide would be constructed at the site. Although design plans are not finalized at this time, Rincon does not expect ground disturbance for pool construction to exceed 20 feet below ground surface. The pool area would also be expanded to include grandstand seating, canopy shading, and an outside shower station. The existing storage building would be altered to include American with Disabilities Act-compliant restrooms. Existing lawn areas and irrigation system would be augmented or reduced to fit the needs of this project. Other park amenities include benches, gazebos, and light-



emitting diode lighting for the park features and parking lot. Project site access would be provided via a driveway on Barioni Boulevard.

The project will require the mobilization of grading, excavating, and trenching equipment as well as import and export of building materials. Electrical, plumbing, and other on-site improvements would also be required. Construction is expected to begin in July 2022 and be open to the public by November 2022. This schedule is contingent on the award date and availability of funds. The project is community driven and funded by the State of California Proposition 68 allocations, available in the fourth round of California Department of Parks and Recreation Statewide Park Development and Community Revitalization Program. The City of Imperial, in partnership with Imperial High School District, will be applying for the maximum funds available to develop new recreational features for this proposed project site. Due to the nature of funding for this project, construction could occur in phases depending on the amount of funds awarded through the Statewide Park Development and Community Revitalization Program.

Regulatory Setting

This section includes a discussion of the applicable State and local laws, ordinances, regulations, and standards governing cultural resources, which must be adhered to before and during implementation of the proposed project. The City of Imperial Municipal Code does not currently include provisions which address the identification and treatment of cultural resources.

California Environmental Quality Act

PRC §5024.1, Section 15064.5 of the CEQA Guidelines, and PRC §§21083.2 and 21084.1 were used as the basic guidelines for this cultural resources study. CEQA (§21084.1) requires that a lead agency determine if a project could have a significant effect on historical resources. A historical resource is one listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (§21084.1), included in a local register of historical resources (§15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (§15064.5[a][3]). Resources listed in the National Register of Historic Places (NRHP) are automatically listed in the CRHR.

According to CEQA, impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. These impacts could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines §15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register (CEQA Guidelines §15064.5[b][2][A]).

California Environmental Quality Act

CEQA (Section 21084.1) requires that a lead agency determine whether a project could have a significant effect on historical resources. A *historical resource* is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (Section 21084.1), a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site,



area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

PRC Section 5024.1, Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1 were used as the basic guidelines for this cultural resource study. PRC Section 5024.1 requires an evaluation of historical resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the state's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below.

According to PRC Section 5024.1(c)(1–4), a resource is considered *historically significant* if it: 1) retains substantial integrity, and 2) meets at least one of the following CRHR criteria.

- Criterion 1** It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Criterion 2** It is associated with the lives of persons important in our past.
- Criterion 3** It embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possesses high artistic values.
- Criterion 4** It has yielded or may be likely to yield information important in prehistory or history.

According to the Office of Historic Preservation (OHP) guidelines, all buildings constructed over 45 years ago may be considered for potential historical resources. Most resources must meet the 45-year threshold for historic significance; however, resources less than 45 years in age may be eligible for listing on the CRHR if it can be demonstrated that sufficient time has passed to understand their historical importance (California State Office of Historic Preservation n.d. 1995).

National Register of Historic Places

The National Register of Historic Places (NRHP) was established by the National Historic Preservation Act of 1966 as "an authoritative guide to be used by Federal, state, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 Code of Federal Regulations 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it meets any one of the following criteria:

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



In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined in the following manner:

- Location** The place where the historic property was constructed or the place where the historic event occurred.
- Design** The combination of elements that create the form, plan, space, structure, and style of a property.
- Setting** The physical environment of a historic property.
- Materials** Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- Workmanship** The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Feeling** A property's expression of the aesthetic or historic sense of a particular period of time.
- Association** The direct link between an important historic event or person and a historic property.



Cultural Resources Records Search

A search of the California Historical Resources Information System (CHRIS) at the South Coastal Information Center (SCIC) located at San Diego State University was completed on January 27, 2021. The search was performed by SCIC staff to identify previously recorded cultural resources, as well as previously conducted cultural resource studies, within the project site and a half-mile buffer surrounding it. The CHRIS search included a review of the NRHP, the CRHR, the Office of Historic Preservation Built Environment Resources Directory, and the Archaeological Determinations of Eligibility list.

The SCIC records search identified six cultural resources studies previously conducted within 0.5-mile of the project site (Attachment B). A portion of two of these studies (IM-00264 and IM-01634) overlap with the current project site; neither study resulted in the identification of cultural resources within the current project site. The SCIC records search identified four previously recorded cultural resources within a 0.5-mile buffer of the project site; none of these cultural resources are located within the project site (Table 1; Attachment B). The previously recorded resources date to the historic-period and include three residential structures and one water tower.

Table 1 Previously Recorded Cultural Resources within 0.5-mile of the Project Site

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Status
P-13-008003	N/A	Historic-period residence	197 H Street, residence constructed in 1925	Unknown	Not stated
P-13-008426	N/A	Historic-period water tower	Water tower constructed in 1941	Von Werlhof 2001	Recommended NRHP eligible
P-13-008637	N/A	Historic-period residence	393 S. D Street, residence constructed circa 1920	Von Werlhof 2001	Not stated
P-13-014923	N/A	Historic-period residence	610 W. Worthington Road, residence constructed circa 1950	Murphy and Stankowski 2015	Not stated

Source: SCIC 2021

Sacred Lands File Search

Rincon contacted the NAHC on January 26, 2021, to request an SLF search of the project site and a 0.5-mile radius. As part of this request, Rincon asked the NAHC to provide a list of Native American groups and/or individuals culturally affiliated with the area who may have knowledge of cultural resources within the project site. The NAHC responded on February 9, 2021, stating the results of the SLF search were negative with instructions to contact the local Native American groups (Appendix B). As the CEQA lead agency, the City of Imperial will be conducting Native American consultation for the project with the NAHC-provided contacts in compliance with Assembly Bill 52.

Historical Map and Aerial Imagery Review

A review of historical aerial photographs indicates the entirety of the project site and much of the surrounding vicinity was used for agriculture as early as 1937 (UCSB 1937). Aerial photographs taken in 1953 (NETROnline 1953) depict several small structures scattered throughout the project site. These structures are no longer present in 1968 aerial photography (UCSB 1968). Aerial photography from 1968 depicts the project site as it is today with the pool facility, portable restroom building, storage building, parking lot, and adjacent lawn areas at the eastern and western extents. Aerial imagery indicates no discernable landscape alteration between 1968 and present-day.

Field Survey

Rincon Archaeologist Mark Strother, MA, RPA, conducted a pedestrian survey of the proposed project site on February 4, 2021. Overall, ground visibility was poor (approximately 10 percent) as much of the project site is developed with the existing facilities and landscaping (Figures 4 through 10, Attachment A). Minimal areas of exposed ground surface are present at the southcentral edge and southwestern corner of the project site (Figures 11 and 12, Attachment A). Exposed soils throughout the project site consist of medium-brown sandy loam, typically intermixed with gravel. No archaeological resources were identified during the survey. As part of the survey, the historic-period built environment features that comprise the pool facility, portable restroom building, and storage building were documented with field notes and digital photographs.

Historical Resources Evaluation

As a result of the field survey, one historic-age built environment property was identified within the project site and recorded and evaluated for eligibility as a historical resource on the attached California Department of Parks and Recreation (DPR) 523 series forms (Attachment D). The subject property is a recreational area consisting of a swimming pool, a permanent restroom building, a portable restroom building, a permanent utility building, a permanent storage building, grass fields, and a surface parking lot. The subject property is located on the same assessor's parcel as Ben Hulse Elementary School. While related to the elementary school and adjacent Imperial High School, Rincon understands the subject property functions independently and therefore evaluated the pool and associated buildings as a single property at the direction of the City of Imperial. According to historical aerial photographs, the swimming pool and permanent restroom and utility buildings were constructed sometime between 1953 and 1968. The permanent storage building, which formerly functioned as a music room for Ben Hulse Elementary, was also constructed between 1953 and 1968. The portable restroom building was installed circa 2010. The location of the subject property and its components relative to Ben Hulse Elementary School is depicted in Figure 3, Attachment A.

Physical Description

The subject property is a 3.15-acre recreational area consisting of a swimming pool, three permanent and one portable building, grass fields, and a surface parking lot. The below-ground swimming pool has an L-shaped plan and is surrounded by a concrete deck and concrete coping (Figure 4, Attachment A). Ranging from one to twelve feet deep, the pool is accessed at various locations by three ladders and one set of built-in steps. Marked with lanes for lap swimming, the eastern section of the pool includes five starting blocks with metal supports and plastic platforms. The west end of the pool is

smaller and shallower. Open-frame shade structures are located on all but the north side of the pool and consist of simple metal framework supporting fabric spread horizontally across the tops of the structures. Two utilitarian concrete-block buildings with rectangular plans and low-pitched pent roofs are located just west of the pool (Figure 5, Attachment A). The larger of the two is the permanent restroom building, which includes concrete-block modesty screens in front of the east-facing doorways and a pair of metal-sash windows on the rear (west) elevation. Located immediately south of the permanent restroom building is the smaller permanent utility building, which includes a stuccoed addition, wood-clad exterior boiler room, and a west-facing solid-wood door. A chain-link fence encloses the pool and its associated features.

Located immediately to the east of the pool is a portable restroom building with no discernible architectural style (Figure 6, Attachment A). Constructed on a rectangular plan, the one-story building has a concrete foundation and a very low-pitched gabled roof with wide eave-end overhangs. Cladding is T1-11 siding. On the west elevation, a concrete ramp with metal rails leads to a pair of centrally placed solid wood doors. There are no windows or additional doors.

The one-story permanent storage building is located east of the portable restrooms (Figure 7, Attachment A). Built in no discernible architectural style, the building has a rectangular plan, concrete foundation, and low-pitched side-gabled roof with standing-seam metal cladding and heavy eave-end overhangs. Stucco cladding sheaths the structural system. Entrances are located on the east and west elevations and feature a combination of solid-wood double and single doors. Windows are likewise located on the east and west elevations and feature metal hopper and fixed metal sashes, in addition to windows whose types were obscured by louvered shades. A wood plaque affixed to the north elevation reads, "Music Room dedicated in memory of Maggie Rau, 1927-1971." It is presumed to have been installed as a posthumous recognition of a teacher who used the building, and there is no evidence the dates inscribed reflect the building's construction date of construction. Alterations are concentrated at the main entrance on the east elevation and include a pent-roof shade structure over the main entrance and on either side of the shade structure, wood and metal fences securing electrical equipment adjacent to the building.

The property is on level terrain and is minimally landscaped with a large lawn near the storage building, mature palms, and decorative trees and shrubs. Hardscaping consists of a concrete-paved parking lot and concrete pedestrian paths linking the buildings to the parking lot. The far west end of the area is unimproved. The landscaping and hardscaping are depicted in Figures 8 through 10, Attachment A.

Property History

The subject property was constructed during a period of rapid growth in both the city and county of Imperial between 1940 and 1970. Following the completion of the All American Canal in the early 1940s, a wave of in-migration brought thousands to the Imperial Valley farm lands. Amid this influx, Imperial's population roughly doubled to 3,100 (Anonymous n.d.). Historic aerial photographs show that, as late as 1953, the subject property was situated at the western fringe of Imperial's urban development. A cluster of single-family houses fronting Baroni Boulevard occupied the site, with a residential neighborhood located to the west and farmland to the east. Just south of the subject site, Ben Hulse Elementary School had been constructed, though at the time the campus was smaller than it is now and consisted of only one building. Imperial High School (extant) was located across Baroni Boulevard, to the north (NETROnline 1953). An article published in the National City and Chula Vista Star-News in 1956, announced that the Cotton Construction Corporation of Chula Vista was awarded a \$504,000 contract to build additions to the elementary school (National City and Chula Vista Star-News 3/26/1956). An

advertisement for the firm published in December 1957 cited its work at Ben Hulse Elementary School as recently completed (Chula Vista Star-News 12/5/1957). Neither the article nor the advertisement indicated whether the storage building, which previously functioned as a music room and is presumed to have been constructed as part of the elementary school, was completed under this contract. Regardless, historical aerial photographs taken indicate the storage building, as well as the Imperial Pool, associated permanent restroom and utility buildings, and shade structures were constructed by 1968 (UCSB 1968). Circa 1971, a plaque was installed on the storage building dedicating the building to Maggie Rau. There have been few evident changes to the property since 1968, excepting the installation of the portable restroom building in 2009 or 2010 (NETROnline 2009; 2010). A search of the Newspapers.com and Historicaerials.com databases did not identify any individuals responsible for the design of the facilities comprising the subject property or provide any further information of consequence regarding their construction, ownership, or operation.

National Register of Historic Places and California Register of Historical Resources Evaluation

The subject property is recommended ineligible for listing in the NRHP or CRHR under any significance criteria because it lacks historical or architectural significance. The permanent features of the property were constructed sometime between 1953 and 1968, during Imperial's period of growth following the completion of the All American Canal. However, research for this study did not indicate the property was important in this context or in the context of any other event that was significant to the history of the city, region, state, or nation. Therefore, the property is recommended ineligible for listing under Criteria A/1. Research for this study failed to find any information or consequence pertaining to the life of Maggie Rau, in whose memory the storage building was dedicated, or identify any other individuals directly involved in the establishment or operation of the property. Because it is not known to be associated with any person who has made important historical contributions, the property is recommended ineligible for listing under Criteria B/2. The recreational area consists of a swimming pool and buildings of no discernable architectural style and collectively make up a grouping of buildings and structures of unremarkable design. They do not, either individually or collectively embody the distinctive characteristics of a type, period, or method of construction or possess high artistic values. Although the designer of the subject buildings and structures are not known, their designs are not such that they would be considered exemplary of the work of any master architect or designer. Research for this study did not determine whether the storage building was constructed by Cotton Construction Corporation, which built additions to the campus circa 1957. In any event, no available evidence suggests the firm is considered an important builder or that the subject property would derive historical significance from any association with the company. The subject property is therefore recommended ineligible for listing under Criteria C/3. The results of the background research and the records search do not suggest the property may yield important information about prehistory or history. As a result, the property is recommended ineligible under Criteria D/4. Finally, the subject property is not recommended eligible as a contributor to any known or potential historic district.

Findings and Recommendations

As detailed above, the subject property, a recreational area consisting of a swimming pool and four permanent and portable buildings, is recommended ineligible for listing in the NRHP and CRHR; as such, it is not considered a historical resource under CEQA. The demolition of and redevelopment of this



property would not impact any historical resources; Rincon therefore recommends a finding of **no impact to historical resources** for the purposes of CEQA.

No prehistoric or historic-period archaeological sites were documented on the project site and no prehistoric archaeological resources have been identified within the vicinity of the project. Given the prior development of the property and limited potential to encounter intact native soils during ground disturbing activities, there is a relatively low potential for intact archaeological deposits to be encountered during construction. However, Rincon recommends a finding of **less than significant impact with mitigation** for archaeological resources. Rincon recommends the following mitigation measure for the unanticipated discovery of archaeological resources. The project is also required to adhere to regulations regarding the unanticipated discovery of human remains, detailed below.

Unanticipated Discovery of Archaeological Resources

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

Unanticipated Discovery of Human Remains

If human remains are found, existing regulations outlined in the State of California Health and Safety Code Section 7050.5 state that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access and provide recommendations as to the treatment of the remains to the landowner and the City of Imperial.

Please do not hesitate to contact Rincon with any questions regarding this cultural resource study.

Sincerely,

Rincon Consultants, Inc.

Mark Strother, MA, RPA
Archaeologist

Breana Campbell-King, MA, RPA
Principal Investigator

Steven Treffers
Senior Architectural Historian

James Williams, MA
Architectural Historian



Attachments

- Attachment A Figures
- Attachment B SCIC Records Search Summary
- Attachment C SLF Search Results
- Attachment D DPR 523 Series Evaluation Forms



References

Anonymous

- n.d. A History of the Imperial Valley. Electronic document online at: <https://nrmsecure.dfg.ca.gov/FileHandler.ashx?DocumentID=8630>. Accessed February 22, 2021.

California State Office of Historic Preservation

- n.d. California Office of Historic Preservation Technical Assistance Series #6 California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register). Available online at: <https://ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202021%20update.pdf>. Accessed February 25, 2021.
- 1995 Instructions for Recording Historical Resources. Sacramento, California. Electronic document, online at <http://scic.org/docs/OHP/manual95.pdf>.

Chula Vista Star-News

- 1957 Advertisement for Cotton Construction Corporation. December 5. www.newspapers.com. Accessed February 25, 2021.

National City and Chula Vista Star-News

- 1956 "Cotton Company Awarded \$1 Million in School Jobs," March 26. www.newspapers.com. Accessed February 25, 2021.

NETROnline

- Var. Historic aerial photographs of 618 Barioni Boulevard, Imperial, California. Available online at: <https://www.historicaerials.com/viewer>. Accessed February 25, 2021.

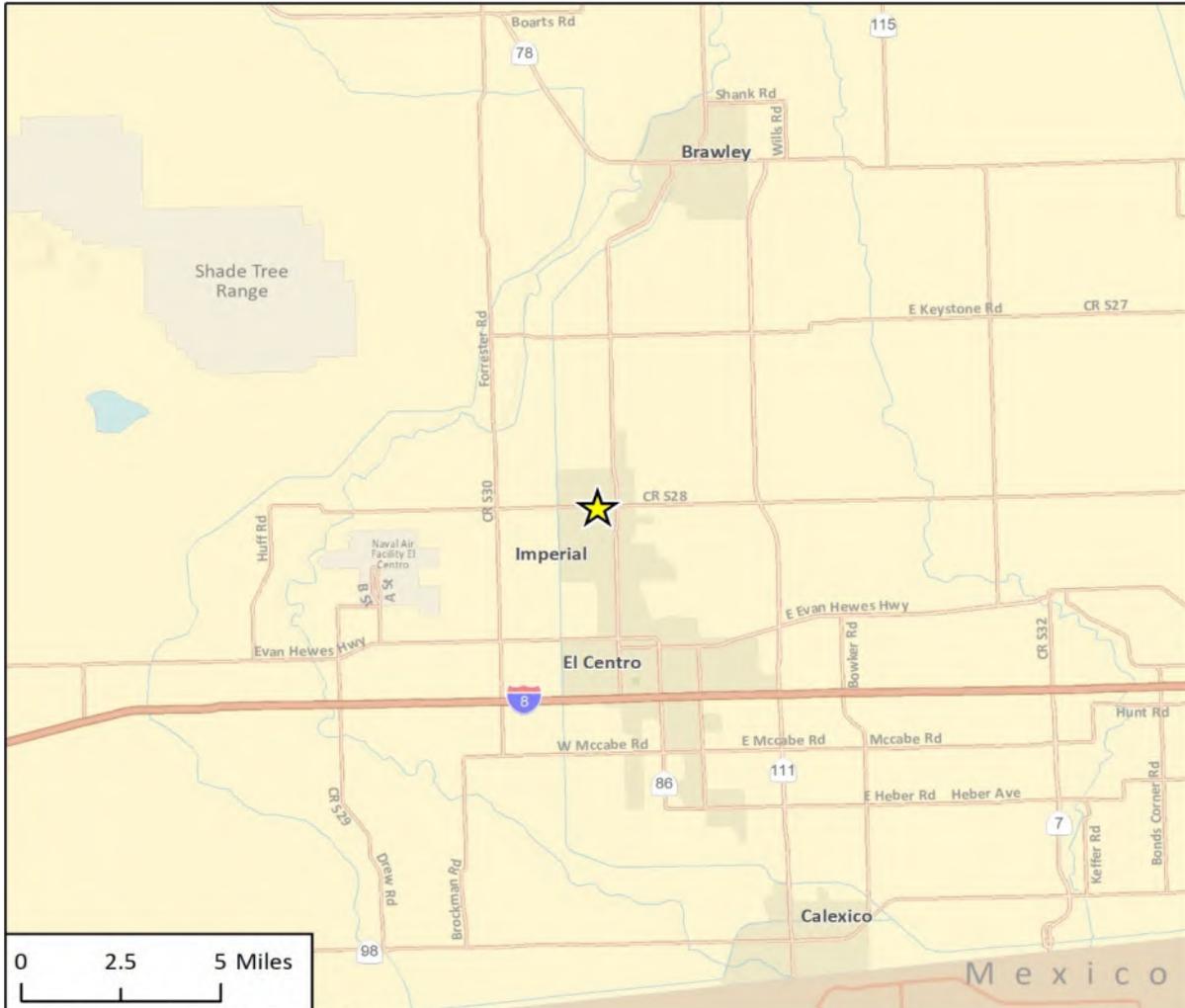
University of California at Santa Barbara (UCSB) Frame Finder

- 1937 Flight #13-ABN. Frame 4-34. November 19, 1937. Available online at: https://mil.library.ucsb.edu/ap_indexes/FrameFinder/. Accessed February 22, 2021.
- 1968 Flight #WAS-G04. Frame 10-8. June 17, 1968. Available online at: https://mil.library.ucsb.edu/ap_indexes/FrameFinder/. Accessed February 22, 2021.

Attachment A

Figures

Figure 1 Project Vicinity Map



Imagery provided by Esri and its licensors © 2021.

★ Project Location



Map © National Geographic

Figure 2 Project Location Map



Figure 3 Site Map

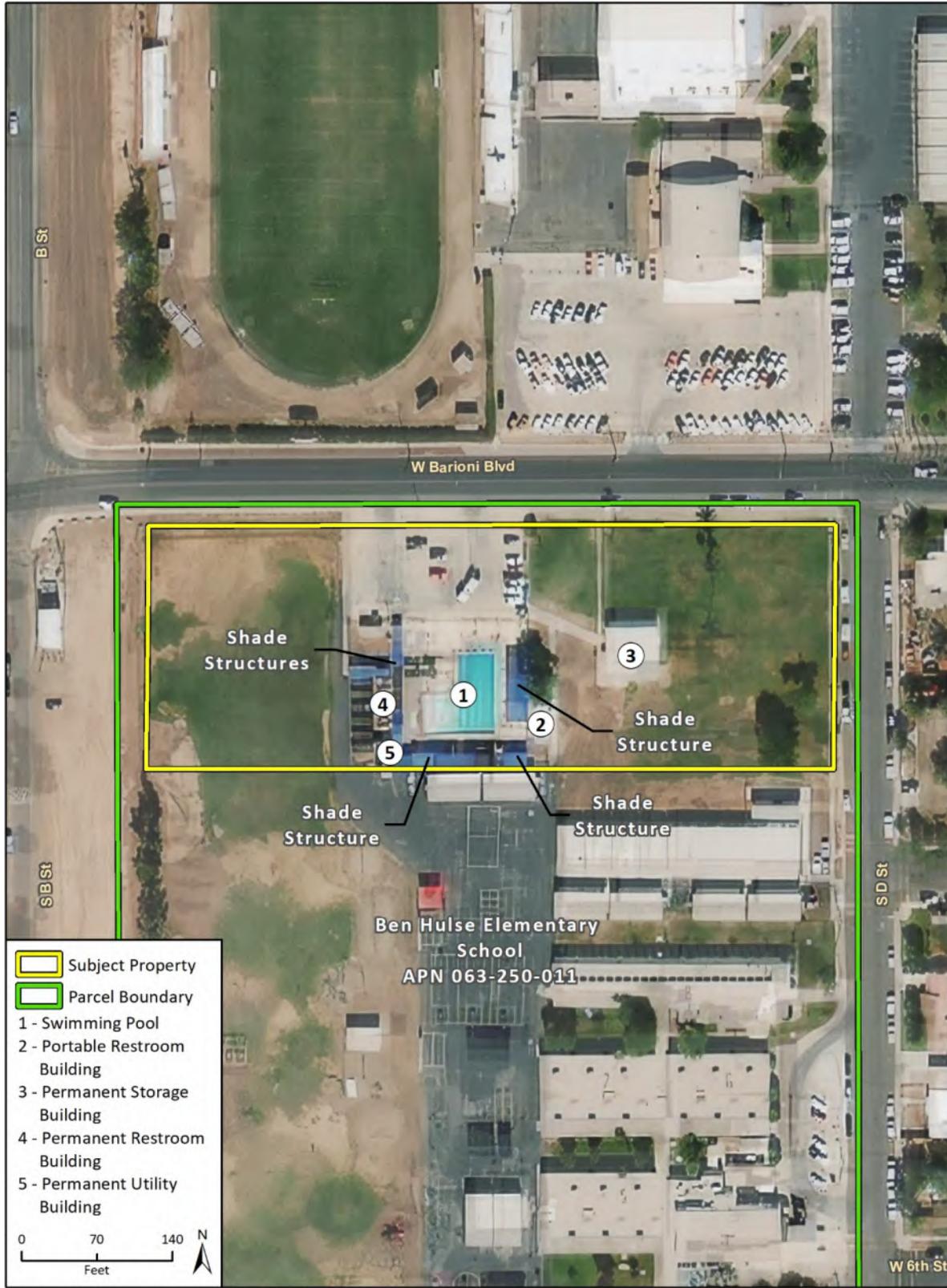


Figure 4 Imperial Pool with Portable Restroom Building at Left, View South



Figure 5 Imperial Pool and Permanent Utility and Restroom Buildings, View Northwest



Figure 6 Portable Restroom Building, North and West Elevations, View Northeast



Figure 7 Permanent Storage Building West Elevation, View East



Figure 8 Parking Lot at North-Central Extent of Project Site, View South



Figure 9 Grass Lawn at Eastern Extent of Project Site, View West



Figure 10 Grass Lawn at Western Extent of Project Site, View East



Figure 11 Exposed Soils at Southwestern Extent of Project Site, View Northwest



Figure 12 Exposed Soils Near South-Central Edge of Project Site, View Northeast



Attachment B

Records Search Results

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
IM-00076	NADB-R - 1100076; Voided - IVCM02	1976	IMPERIAL VALLEY COLLEGE MUSEUM	ARCHAEOLOGICAL, HISTORICAL, AND PALEONTOLOGICAL ASSESSMENT OF CERTAIN LOCATIONS OF THE CAMPUS OF IMPERIAL HIGH SCHOOL	IMPERIAL VALLEY COLLEGE MUSEUM	
IM-00182	NADB-R - 1100182; Voided - HSAPS01	1979	HODGES & SHUTT AVIATION PLANNING SERVICES	DRAFT ENVIRONMENTAL IMPACT REPORT FOR CROSSWIND RUNWAY PROJECT, IMPERIAL COUNTY AIRPORT	HODGES & SHUTT AVIATION PLANNING SERVICES	
IM-00264	NADB-R - 1100264; Voided - STUARB01	1982	STUART, BOB	DRAFT ENVIRONMENTAL IMPACT REPORT CURRENT LAND USE PLAN IMPERIAL PLANNING UNIT	IMPERIAL COUNTY PLANNING DEPARTMENT	
IM-00266	NADB-R - 1100266; Voided - STUARB02	1982	STUART, BOB	DRAFT ENVIRONMENTAL IMPACT REPORT AIRPORT LAND USE PLAN	IMPERIAL COUNTY PLANNING DEPARTMENT	
IM-00767	NADB-R - 1100767; Voided - VONWEJ185	2001	VON WERLHOF, JAY	ARCHAEOLOGICAL EXAMINATIONS OF THE REDESIGNED MUNICIPAL WATER PLANT IN THE CITY OF IMPERIAL		
IM-01634	NADB-R - 1101634	2015	YERKA, NATHANIAL	REQUEST FOR STATE HISTORIC PRESERVATION OFFICER CONCURRENCE FOR THE NECKEL ROAD UTILITY AND ROADWAY INFRASTRUCTURE PROJECT IN THE CITY OF IMPERIAL AND IMPERIAL COUNTY (RECON NUMBER 5919.2)	RECON	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-13-008003		Other - 197 H Street				2009	
P-13-008426		Other - City of Imperial Water Plant				2009 (IVC Museum)	
P-13-008637		Other - Hall Residence				2009 (IVC Museum)	
P-13-014923		IC Informal - RNID-2930					

Attachment C

SLF Search Results

NATIVE AMERICAN HERITAGE COMMISSION

February 9, 2021

Othon Mora
City of Imperial

Via Email to: omora@cityofimperial.org

Re: Native American Consultation, Pursuant to Senate Bill 18 (SB18), Government Codes §65352.3 and §65352.4, as well as Assembly Bill 52 (AB52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2, Imperial Townsite Park Project, Imperial County

Dear Mr. Mora:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties or projects.

Government Codes §65352.3 and §65352.4 require local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to cultural places when creating or amending General Plans, Specific Plans and Community Plans.

Public Resources Codes §21080.3.1 and §21080.3.2 requires public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to tribal cultural resources as defined, for California Environmental Quality Act (CEQA) projects.

The law does not preclude local governments and agencies from initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction. The NAHC believes that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

Best practice for the AB52 process and in accordance with Public Resources Code §21080.3.1 (d), is to do the following:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The NAHC also recommends, but does not require that lead agencies include in their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential affect (APE), such as:



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE, such as known archaeological sites;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the APE; and
 - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.
2. The results of any archaeological inventory survey that was conducted, including:
 - Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.
3. The result of the Sacred Lands File (SFL) check conducted through the Native American Heritage Commission was negative.
4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event, that they do, having the information beforehand well help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Cultural Resources Analyst

Attachment

**Native American Heritage Commission
Tribal Consultation List
Imperial County
2/9/2021**

Barona Group of the Capitan Grande

Edwin Romero, Chairperson
1095 Barona Road Diegueno
Lakeside, CA, 92040
Phone: (619) 443 - 6612
Fax: (619) 443-0681
cloyd@barona-nsn.gov

Jamul Indian Village

Erica Pinto, Chairperson
P.O. Box 612 Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4785
Fax: (619) 669-4817
epinto@jiv-nsn.gov

Campo Band of Diegueno Mission Indians

Ralph Goff, Chairperson
36190 Church Road, Suite 1 Diegueno
Campo, CA, 91906
Phone: (619) 478 - 9046
Fax: (619) 478-5818
rgoff@campo-nsn.gov

Jamul Indian Village

Lisa Cumper, Tribal Historic Preservation Officer
P.O. Box 612 Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4855
lcumper@jiv-nsn.gov

Ewiiapaayp Band of Kumeyaay Indians

Robert Pinto, Chairperson
4054 Willows Road Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 6315
Fax: (619) 445-9126
wmicklin@leaningrock.net

Kwaaymii Laguna Band of Mission Indians

Carmen Lucas,
P.O. Box 775 Diegueno
Pine Valley, CA, 91962 Kwaaymii
Phone: (619) 709 - 4207

Ewiiapaayp Band of Kumeyaay Indians

Michael Garcia, Vice Chairperson
4054 Willows Road Diegueno
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Fax: (619) 445-9126
michaelg@leaningrock.net

La Posta Band of Diegueno Mission Indians

Gwendolyn Parada, Chairperson
8 Crestwood Road Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
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LP13boots@aol.com

Iipay Nation of Santa Ysabel

Virgil Perez, Chairperson
P.O. Box 130 Diegueno
Santa Ysabel, CA, 92070
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Fax: (760) 765-0320

La Posta Band of Diegueno Mission Indians

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Fax: (619) 478-2125
jmiller@LPtribe.net

Inaja-Cosmit Band of Indians

Rebecca Osuna, Chairperson
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Escondido, CA, 92025
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Fax: (760) 747-8568

Manzanita Band of Kumeyaay Nation

Angela Elliott Santos, Chairperson
P.O. Box 1302 Diegueno
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Sections 65352.3, 65352.4 et seq. and Public Resources Code Sections 21080.3.1 for the proposed Imperial Townsite Park Project, Imperial County.

**Native American Heritage Commission
Tribal Consultation List
Imperial County
2/9/2021**

***Mesa Grande Band of Diegueno
Mission Indians***

Michael Linton, Chairperson
P.O Box 270 Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 782 - 3818
Fax: (760) 782-9092
mesagrandeband@msn.com

***Quechan Tribe of the Fort Yuma
Reservation***

Jill McCormick, Historic
Preservation Officer
P.O. Box 1899 Quechan
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

***San Pasqual Band of Diegueno
Mission Indians***

Allen Lawson, Chairperson
P.O. Box 365 Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
allenl@sanpasqualtribe.org

***Sycuan Band of the Kumeyaay
Nation***

Cody Martinez, Chairperson
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 2613
Fax: (619) 445-1927
ssilva@sycuan-nsn.gov

***Viejas Band of Kumeyaay
Indians***

John Christman, Chairperson
1 Viejas Grade Road Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 3810
Fax: (619) 445-5337

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Sections 65352.3, 65352.4 et seq. and Public Resources Code Sections 21080.3.1 for the proposed Imperial Townsite Park Project, Imperial County.

Attachment D

DPR Series 523 Evaluation Forms

Confidential Data

This data has been removed from the Public Report for confidentiality and protection of sensitive resources.

Appendix E

Preliminary Hazardous Materials Study



Rincon Consultants, Inc.

8825 Aero Drive
Suite 120
San Diego, California 92123

760 918 9444 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

February 8, 2021
Project No: 21-10840

Tony Lopez, Park Superintendent
City of Imperial Department of Community Services
420 South Imperial Avenue
Imperial, California, 92251
Via email: tlopez@cityofimperial.org

**Subject: Imperial Town Site Park, Preliminary Hazardous Materials Study
Imperial, California, 92251**

Dear Mr. Lopez:

Rincon is pleased to present this Preliminary Hazardous Materials Study for the Imperial Town Site Park project located south of Barioni Boulevard, east of South B Street, and west of South D Street in Imperial, California (Project Site). The technical study is composed of examining online agency and regulatory databases and resources to determine if hazardous materials are present onsite and if they could affect the proposed project during construction.

Hazardous Material Research

The following online resources were reviewed to determine if hazardous materials may be present at the Project Site, including:

- Cortese List database¹ (DTSC Envirostor 2021a),
- California State Water Resource Control Board's (SWRCB) online GeoTracker database (SWRCB GeoTracker, 2021a),
- California Department of Toxic Substances Control's (DTSC) online EnviroStor database (DTSC EnviroStor, 2021b),
- Environmental Data Resources (EDR), Aerial Photographs on February 8, 2021 (EDR, 2021),
- Online historic topographic maps dating back to 1955² (Topos 2021),
- State of California Geologic Energy Management Division (CalGEM) Online Mapping System³ (CalGEM 2021),
- CalRecycle Solid Waste Information System (SWIS) Facility/Site Search⁴ (CalRecycle 2021)
- National Pipeline Mapping System (NPMS) online Public Map Viewer⁵ (NMPS 2021), and

¹ https://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG.COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST

² <https://www.historicaerials.com/viewer>

³ <https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx>

⁴ <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>

⁵ <https://www.npms.phmsa.dot.gov/PublicViewer/>



- SWRCB polyfluoroalkyl substances (PFAS) database⁶ (SWRCB 2021b).

The Project Site is not currently listed as a Cortese site compiled pursuant to Government Code Section 65962.5¹. According to the SWRCB's online GeoTracker database, no unauthorized release sites were identified within 1,500 feet of the Project Site and according to the DTSC's online EnviroStor database, no unauthorized release sites were identified within one-half mile of the Project Site. The nearest listed site is located at the intersection of 15th Street and Highway 86, located approximately 1,800 feet to the northeast of the Project Site.

According to a review of available online aerial photographs (1937, 1949, 1953, 1986, 1984, 1996, 2002, 2006, 2009, 2012, and 2016) and a review of available historic topographic maps (1955, 1958, 1961, 1973, 1980, 2012, 2015, and 2018) indicate the Project Site has been used for residential, recreational, and possibly educational purposes. The western adjacent property is vacant and appears to be part of a north-south trending underground canal named New Side Drain. The historical aerial photographs and topographic maps also reveal the following information for the Project Site:

- At least five structures (likely residential) were present on the Project Site in 1937
- At least eight structures (likely residential) were present on the Project Site in 1949 and 1953
- One non-residential structure was present on the Project Site in 1976
- A non-residential structure, parking area, and one pool (similar to today) were present on the Project Site in 1984 and 1996
- A non-residential structure, parking area, pool, three structures adjacent to the pool, and irrigation circles were present in 2002
- In 2006 and 2009, a non-residential structure, parking area, pool, and two structures are present onsite
- By 2012, a non-residential structure, parking area, pool, and multiple ancillary structures are present onsite

On January 27, 2021, Rincon contacted the City of Imperial Parks Department regarding the aerial photograph data gap (1953 through 1976). Tony Lopez, Park Superintendent of the City Imperial Parks Department responded and indicated that there has been no agricultural use on the Project Site within the last 70 years.

A review of the CalGEM Online Mapping System indicates that no oil wells are located on the Project Site, adjacent properties, or within a quarter mile of the Project Site.

A review of the CalRecycle Solid Waste Information System (SWIS) Facility/Site Search indicates that no municipal landfills are located on the Project Site, adjacent properties, or within 2,000 feet of the Project Site.

A review of the National Pipeline Mapping System (NPMS) online Public Map Viewer indicates that no natural gas transmission pipelines or hazardous liquid pipelines are located on the Project Site or adjacent properties.

⁶ <https://www.waterboards.ca.gov/pfas/>



In 2019, the California SWRCB sent assessment requirements to property owners of sites that may be potential sources of PFAS. These sites currently include select landfills, airports, and chrome plating facilities. According to the SWRCB, “PFAS are a large group of human-made substances that do not occur naturally in the environment and are resistant to heat, water, and oil” (SWRCB 2019). Review of the California 2019 Statewide PFAS Investigation online Public Map Viewer indicates that there are no current chrome plating, airport, or landfill PFAS orders at any facilities located within one-half mile of the Project Site. Additionally, review of the California 2019 Statewide Drinking Water System Quarterly Testing Results online Public Map Viewer indicates that no drinking water wells have been tested for PFAS within two miles of the Project Site.

Hazardous Materials Impact Summary

Based on our hazardous materials review, hazardous material building materials may be encountered during demolition of the onsite features. Based on the varying age of the onsite structures, building materials containing lead, asbestos, mercury, etc. (other hazardous materials) may be present onsite. If lead, asbestos, or other hazardous material containing building materials are present, current state and federal regulations shall be followed.

The Project Site was formerly occupied by residences and has been operated as a pool facility since approximately 1976. Since the Project Site is not currently listed as a Cortese listed site compiled pursuant to Government Code Section 65962.5 and past uses involving hazardous materials were not identified, hazardous material impacts during construction (grading) are not expected.

The proposed project will have a **less than significant impact** during construction (grading).

Thank you for selecting Rincon for this project. If you have any questions, or if we can be of any future assistance, please contact us.

Sincerely,

Rincon Consultants, Inc.

Amanda Duval
Environmental Scientist, Due Diligence

Julie Welch Marshall
Director, Due Diligence

Appendix F

Noise and Vibration Study



Imperial Townsite Park Project

Noise and Vibration Study

prepared for

City of Imperial

400 South Imperial Avenue, Suite 101

Imperial, California 92251

Contact: Othon Mora, Community Development Director

prepared by

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March 2021



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Appendices

Appendix A	Noise Modeling Results
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1 Project Description and Impact Summary

1.1 Introduction

This study analyzes the potential noise and vibration impacts of the proposed Imperial Townsite Park Project (project) in the City of Imperial, Imperial County, California. Rincon Consultants, Inc. (Rincon) prepared this study under contract to the City in support of the environmental documentation for the project. The purpose of this study is to analyze the project's noise and vibration impacts related to both temporary construction activity and long-term operation of the project. Table 1 provides a summary of project impacts.

Table 1 Summary of Impacts

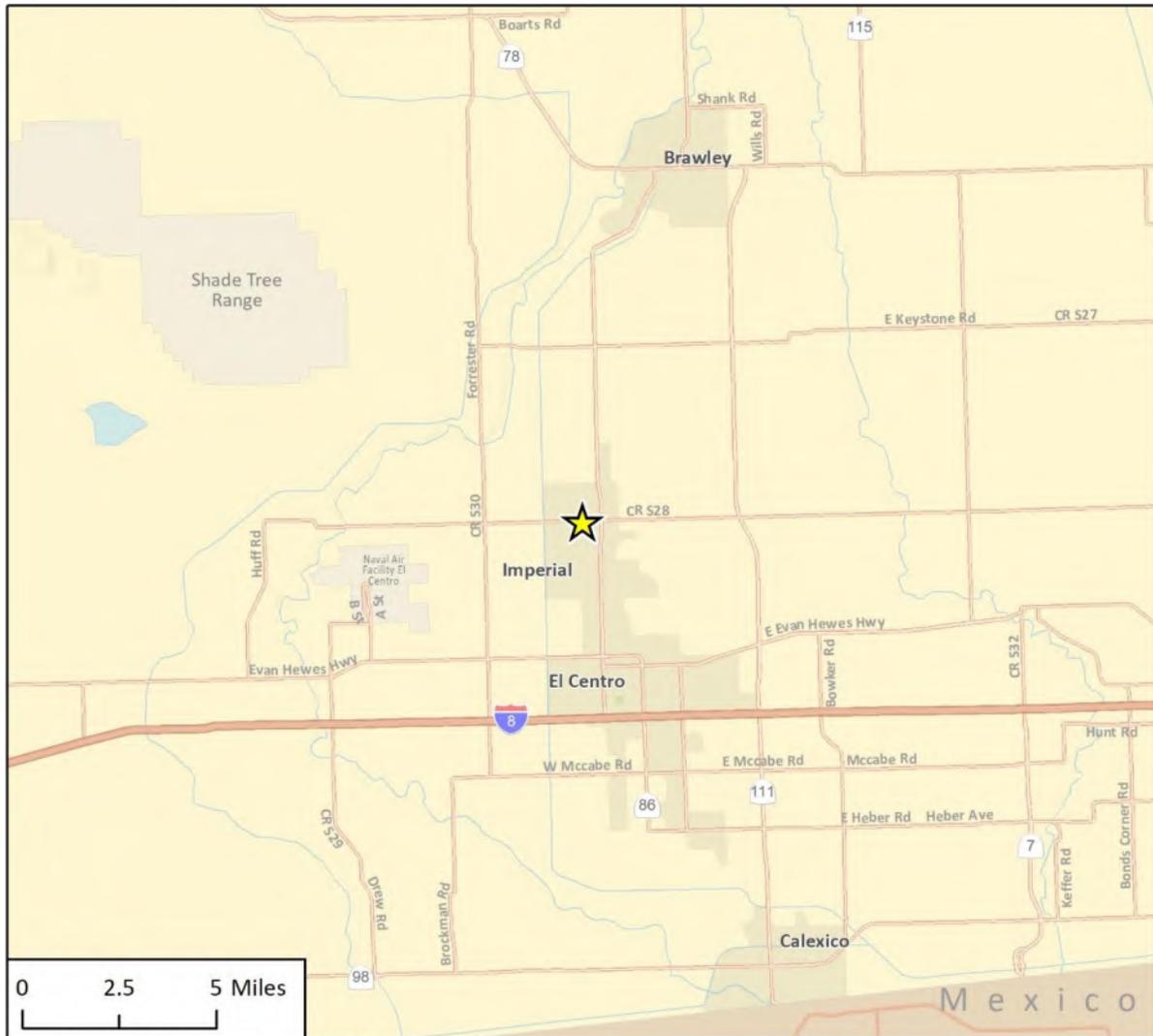
Issue	Level of Significance	Applicable Recommendations
Issue 1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Less Than Significant Impact (Construction) Less Than Significant Impact (Operation)	None
Issue 2: Generation of excessive ground-borne vibration or ground-borne noise levels.	Less Than Significant Impact	None
Issue 3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.	No Impact	None
Issue 4: Would the project conflict with land use compatibility guidelines for noise?	No conflicts	None

1.2 Project Summary

Project Location

The 3.15-acre project site is located in the City of Imperial in Imperial County, California. The project site lies south of Worthington Road, east of South B Street, west of South D Street, and is approximately 0.25 mile north of Imperial County Airport (see Figure 1 and Figure 2). The project site has been previously disturbed and is currently used as a recreational area consisting of a lap pool, storage building, parking lot, and grass fields. Project site access would be provided via a driveway on Worthington Road.

Figure 1 Regional Location



Imagery provided by Esri and its licensors © 2021.

★ Project Location



Figure 2 Project Vicinity



Project Description

The project would include the development of approximately 22,724-square foot picnic and playground area, 9,349-square foot park square, 25,070-square foot pool area, 20,953-square foot skate park, 23,000-square foot parking lot with approximately 80 to 100 vehicle spaces and 4 bicycle parking spaces, 25,070 square feet of multi-use basketball, volleyball and tennis courts, 1,920-square foot restroom and shower structure, 1,500-square foot atrium, and 12,526 square feet of ADA compliant walking trails surrounding the perimeter and connecting the project's amenities. See Figure 3 for the site plan layout. The existing lap pool would be demolished and replaced with a competition size pool (50 meters long by 25 meters wide). The pool area would be expanded to include grandstand seating, canopy shading, and an outside shower station. The existing storage structure would be repurposed to include ADA compliant restrooms. The project site layout indicates a wall is proposed along the southern project boundary as part of the project and it is assumed to be a 6-foot-tall masonry wall. Landscaping will be placed throughout the project including drought tolerant trees and shrubs on drip irrigation. The project will serve as a recreational area for the surrounding community.

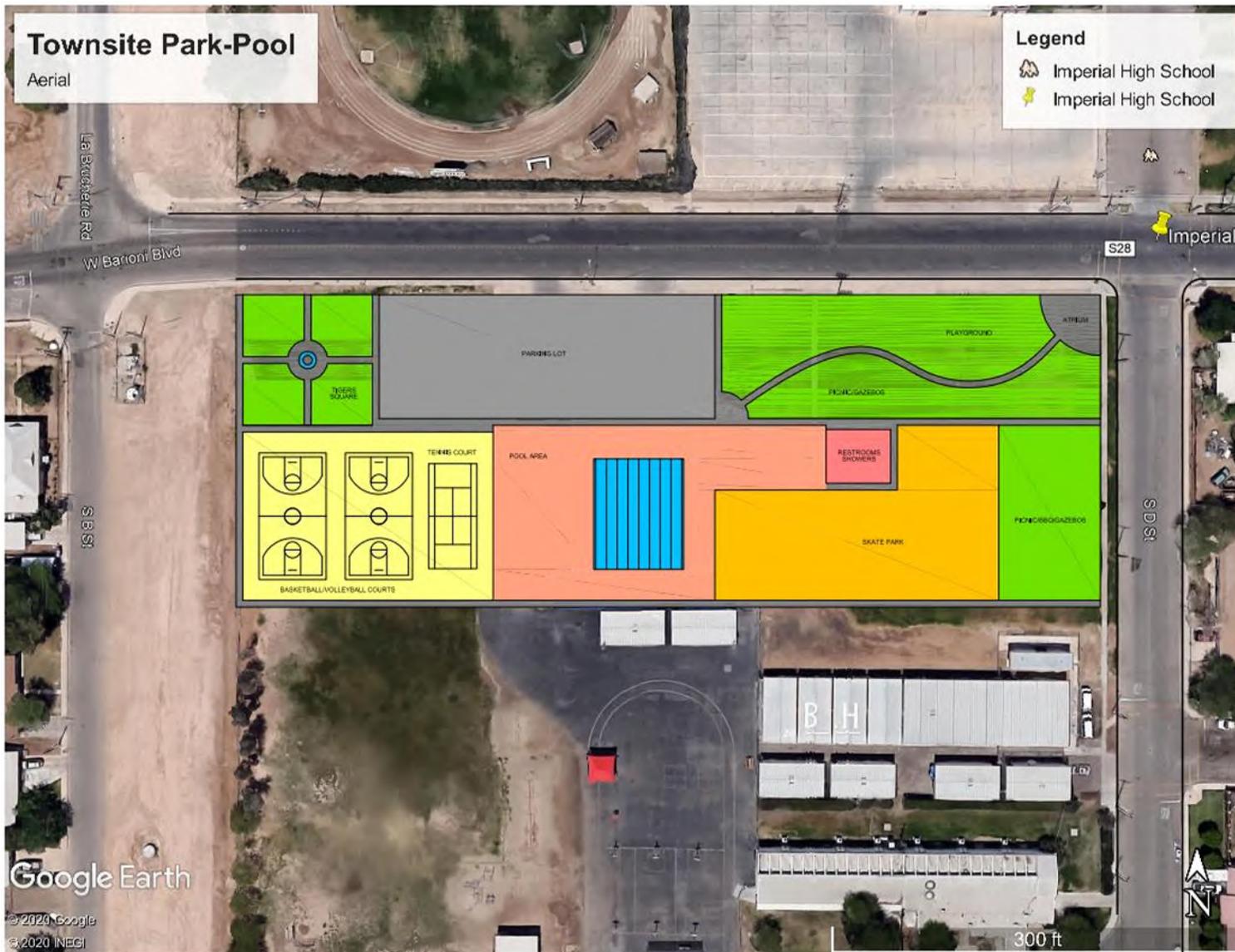
Sustainability Features

The project would include drought tolerant trees and shrubs on drip irrigation. Existing lawn areas and irrigation system would be augmented or reduced to fit the needs of this project. Other park amenities include light-emitting diode (LED) lighting for the park features and parking lot.

Construction

All construction would occur within the current conceptual limits of the project. The project will require the mobilization of grading, excavating, and trenching equipment as well as import and export of building materials. Electrical, plumbing and other on-site improvements would also be required. Construction is expected to begin in July 2022 and be open to the public by November 2022. This schedule is contingent on the award date and availability of funds. For this analysis, it was assumed all construction would end in October 2022 and the park would be operational in November 2022.

Figure 3 Site Plan



2 Background

2.1 Overview of Sound Measurement

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy. The perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (eight times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud ([10.5x the sound energy] Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound will travel, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2018). Structures can substantially reduce exposure to noise as well. The FHWA’s guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time. Typically, L_{eq} is summed over a one-hour period. L_{max} is the highest root mean squared (RMS) sound pressure level within the sampling period, and L_{min} is the lowest RMS sound pressure level within the measuring period (Crocker 2007).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (DNL), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours; it is also measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by DNL and CNEL usually differ by about 1 dBA. The relationship between the peak-hour L_{eq} value and the DNL/CNEL depends on the distribution of traffic during the day, evening, and night. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 dBA, while areas near arterial streets are in the 50 to 60-plus CNEL range. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

2.2 Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2020). When a building is impacted by

vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in./sec.). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

2.3 Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The City of Imperial's Noise Element of the General Plan defines residential uses as the most sensitive, and agricultural uses as the most tolerant (City of Imperial 1992). Noise sensitive receivers also typically include hospitals, convalescent homes, schools, and churches. Noise sensitive receivers near the site include single family residences 70 feet to the east, Ben Hulse Elementary School 60 feet to the south, and Imperial High School 215 feet to the northeast.

Vibration sensitive receivers are similar to noise sensitive receivers, such as residences, and institutional uses, such as schools, churches, and hospitals. However, vibration sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment, affected by levels that may be well below those associated with human annoyance.

2.4 Project Noise Setting

The most common source of noise in the project site vicinity is vehicular traffic from Worthington Road Boulevard and aircraft operations associated with Imperial County Airport. According to Figure 3.11-1 of City of Imperial Land Use and Circulation Element Update Draft Environmental Impact Report, the project site is situated within the 60 dBA CNEL airport noise contour (City of Imperial 2017). Noise associated with school activities (i.e., student drop off/pick up, school bell, students playing and talking, and sporting events) also make up the noise environment of project site area.

2.5 Regulatory Setting

Federal

FTA Transit and Noise Vibration Impact Assessment Manual

The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction in their *Transit and Noise Vibration Impact Assessment Manual* (FTA 2018). For residential, commercial, and industrial uses, the daytime noise threshold is 80 dBA L_{eq} , 85 dBA L_{eq} , and 90 dBA L_{eq} for an 8-hour period, respectively.

State

The state of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires each county and city to adopt a General Plan that includes a

Noise Element prepared per guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. The California Environmental Quality Act requires all known environmental effects of a project be analyzed, including environmental noise impacts.

California Noise Control Act of 1973

California Health and Safety Code Sections 46000 through 46080, known as the California Noise Control Act, find that excessive noise is a serious hazard to public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. The act also finds that there is a continuous and increasing bombardment of noise in urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians that is free from noise that jeopardizes their health or welfare.

Local

City of Imperial General Plan

The Imperial General Plan was adopted in 1992. The goal and policies of the noise element are intended to maintain the quiet rural residential nature of the community through the use of sensitive land use planning practices and appropriate noise mitigation measures Chapter 3 of the City of Imperial's General Plan sets forth policies and standards for evaluating community noise in the City. At the time of developing the 1992 General Plan, stationary source noise was not a concern, however, the City shall require appropriate noise buffers and screening to ensure that noise levels of greater than 55 dBA CNEL are not transmitted offsite to noise sensitive land uses. The following are applicable to the proposed project:

Acceptable Noise Levels

Policy 1.

- A. 60 dBA CNEL is established as the acceptable outdoor noise exposure level for rural and single-family residential areas.
- B. 65 dBA CNEL is established as the acceptable outdoor noise exposure level for multiple-family residential areas.
- C. In the event that acceptable outdoor noise exposure levels cannot be attained by various noise attenuation measures, indoor noise levels shall not exceed 45 dBA CNEL.
- D. 70 dBA CNEL is established as the maximum outdoor noise exposure level for schools (public and private), libraries, churches, hospitals, nursing homes, parks and recreation areas.

Land Use Compatibility

Policy 2.

- E. The location and distribution of land uses throughout the City shall take into account the compatibility of different uses with the various levels of noise.
- F. Any new development within the Airport Land Use Planning Area shall be limited to those uses defined as sensitive, moderately sensitive and insensitive.

- G. The City shall encourage the Airport Management to maximize the use of the east/west runway and minimize the use of the north/south runway.
- H. The review of development applications shall consider the impact of the use on the noise environment of existing or planned contiguous uses.
- I. Where necessary because of incompatibilities, noise attenuation measures shall be required by the City to achieve the acceptable noise exposure levels.

Noise Ordinance

Policy 4.

- A. The City shall maintain a community noise ordinance to resolve noise complaints; the ordinance should address the following as a minimum:
 - 1. Prohibition of construction activities between the hours of 8:00 p.m. and 7:00 a.m.; however, the following zones will the opportunity to obtain an exemption:
 - General Industrial
 - Rail-Served Industrial
 - Public
 - Agriculture

3 Methodology

3.1 Construction Noise

Construction and demolition noise were estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction related equipment noise levels for a variety of construction and demolition operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction and demolition noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FHWA 2018). Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels.

Construction activity would result in temporary noise in the project area, exposing surrounding sensitive receivers to increased noise levels. The project would involve demolition, site preparation, grading, excavation, and trenching. Construction noise would typically be higher during the heavier periods of initial construction (i.e., grading) and would be lower during the later construction phases. Typical heavy construction equipment during project grading could include dozers, backhoes, and graders. It is assumed that diesel engines would power all construction equipment. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

A potential construction scenario includes a dozer, excavator, and a grader working to grade the site. Therefore, a dozer, excavator, and a grader were analyzed together for construction noise impacts due to their likelihood of being used in conjunction at the same time and therefore a reasonable scenario for the greatest noise generation during construction. At a distance of 100 feet, a dozer, excavator, and a grader would generate a noise level of 78 dBA L_{eq} (RCNM calculations are included in Appendix A).

3.2 Groundborne Vibration

Operation of the proposed project would not include any substantial vibration sources. Thus, construction activities have the greatest potential to generate ground-borne vibration affecting nearby receivers, especially during grading and excavation of the project site. The greatest vibratory source during construction would be a dozer. Neither blasting nor pile driving would be required for construction of the proposed project. Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020, FTA 2018). Table 2 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018).

Table 2 Vibration Levels Measured during Construction Activities

Equipment	PPV at 25 ft. (in./sec.)
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003

Source: FTA 2018

Vibration limits used in this analysis to determine a potential impact to local land uses from construction activities, such as blasting, pile-driving, vibratory compaction, demolition, drilling, and excavation, are based on information contained in Caltrans’ *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020). Maximum recommended vibration limits by the American Association of State Highway and Transportation Officials (AASHTO) are identified in Table 3.

Table 3 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in./sec.)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Source: Caltrans 2020

Based on AASHTO recommendations, limiting vibration levels to below 0.4 in./sec. PPV at residential structures would prevent structural damage (plastered walls is indicative of construction processes that have not been common for over a 100 years and are therefore not anticipated to be near project construction). These limits are applicable regardless of the frequency of the source. However, as shown in Table 4 and Table 5 potential human annoyance associated with vibration is usually different if it is generated by a steady state or a transient vibration source.

Table 4 Human Response to Steady State Vibration

PPV (in./sec.)	Human Response
3.6 (at 2 Hz)–0.4 (at 20 Hz)	Very disturbing
0.7 (at 2 Hz)–0.17 (at 20 Hz)	Disturbing
0.10	Strongly perceptible
0.035	Distinctly perceptible
0.012	Slightly perceptible

Source: Caltrans 2020

Table 5 Human Response to Transient Vibration

PPV (in./sec.)	Human Response
2.0	Severe
0.9	Strongly perceptible
0.24	Distinctly perceptible
0.035	Barely perceptible

Source: Caltrans 2020

As shown in Table 4, the vibration level threshold at which steady vibration sources are considered to be distinctly perceptible is 0.035 in./sec. PPV. However, as shown in Table 5, the vibration level threshold at which transient vibration sources (such as construction equipment) are considered to be distinctly perceptible is 0.24 in./sec. PPV. This analysis uses the distinctly perceptible threshold for purposes of assessing vibration impacts.

Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors and the vibration level threshold for human perception is assessed at occupied structures (FTA 2018). Therefore, vibration impacts are assessed at the structure of an affected property.

3.3 Operational Noise Sources

On site-noise sources were modeled based on collected reference data. Propagation of modeled stationary noise sources was based on ISO Standard 9613-2, "Attenuation of Sound during Propagation Outdoors, Part 2: General Method of Calculation." The assessment methodology assumes that all receivers would be downwind of stationary sources. This is a worst-case assumption for total noise impacts since only some receivers would be downwind at any one time.

Noise sources associated with operation of the proposed project would consist of low speed on-site vehicular parking noise, landscaping maintenance, general conversations, skateboard park activity and general playground noise.

Traffic Noise

Noise levels affecting the proposed project site would be primarily influenced by traffic noise from West Barioni Boulevard, Worthington Road, Nance Road, Brewer Road, and Austin Road. West Barioni Boulevard, Nance Road, and Brewer Road are two-lane roadways with a posted speed limit of 25 miles per hour (mph) near the project site; Worthington Road is a two-lane roadway with a posted speed limit of 25 mph from P street to B street and 35 mph from B street to Nance Street; and Austin Road is a two-lane roadway with a posted speed limit of 55 mph. The FHWA Highway Traffic Noise Prediction Model (FHWA RD 77-108) was used to calculate traffic noise levels along project area roadways. Traffic noise-model inputs includes roadways, distance to noise sensitive receivers, vehicle volumes and speeds, type of vehicle, and existing shielding factors. Traffic noise modeling was conducted based on traffic volumes from the traffic analysis prepared for this project (STC Traffic, Inc. 2020).

The project's contribution to the existing traffic noise levels along area roadways was determined by comparing the predicted noise levels at a reference distance of 50 feet from the roadway centerline

for Opening Year (2020) conditions with and without project-generated traffic. Trip generation is based on the project's traffic analysis, which determined the project would result in a total of 207 daily trips distributed throughout the roadway network. Exterior transportation noise levels were modeled at the future park use areas, with the receivers placed at 5 feet above ground level. Model results are included in Appendix A.

The CNEL is calculated based on the daily traffic volumes with additional project trips. To determine the CNEL, the daytime traffic volume was assumed to represent 80 percent of the average daily traffic (ADT) volume, evening volumes represent 15 percent of the ADT, and nighttime volumes represent 5 percent of the ADT. Using ADT volumes with this day/evening/nighttime ADT split results in a predicted daily traffic noise level that is expressed in dBA CNEL. To determine the vehicle classification mix for modeling, Caltrans vehicle classification for the nearest segment of Highway 86 were used (Caltrans 2018), with a mix of 88 percent automobiles, 6 percent medium trucks, and 6 percent heavy trucks.

Park Noise

Analysis of proposed park noise is based on measured noise levels for other similar park projects. (County of Sacramento 2011; American Journal of Audiology 1998; Illingworth & Rodkin 2015; Mach Group 2020). Children playing, people gathering, and skate park activities would be the dominant noise sources anticipated at the project site.

Parking Lot Noise

Parking lot noise typically includes vehicular circulation, screeching tires, engines, door slams, car alarms, and human voices. Based on the FTA General Transit Noise Assessment methodology, parking lot noise levels were calculated with the CREATE noise model (HMMH 2006). The CREATE noise model calculates parking lot noise based on reference single event noise levels (SEL), the number of peak hour vehicle trips, and distance to receivers. The project proposes to provide 80 to 100 parking stalls. Assuming 100 parking stalls are filled in the peak hour, noise levels would be 45 dBA L_{eq} at 100 feet.

Skate Park Noise

Skate park noise typically consists of rolling noise and impact noise. Rolling noise is the noise resulting from the interaction of skate wheels with concrete surfaces; rougher surfaces would produce higher rolling noise. Impact noise is an impulsive noise source resulting from the impact of the user's skateboard, roller blades, or scooter with park features, from user falls or from shouting and cheering. Skate park noise data applied to analysis for this project are summarized in Table 6.

Table 6 Skate Park Noise Levels

Description	Distance Measured (feet)	Noise Level (dBA, L _{eq})	Noise Level at 100 feet (dBA, L _{eq})
Sunnyvale Skate Park ¹ with ramps, bowls, banks, quarter pipes, and grind rails and 5 to 12 skaters at any given time	75	57	55
	60	56	52
	75	55	53
	13	64	46
Jose Avenue Skate Park ¹ with ramps, bowls, quarter pipes, grind rails and 4 to 5 skaters at any given time	30	56	46
Ettington Community Skate Park ²	15	69	53

sqft=quare feet; dBA=A-weighted decibels; L_{eq}=equivalent continuous noise level over a stated period of time

¹ Illingworth & Rodkin. 2015. Monterey Avenue Skatepark Project Noise and Vibration Assessment Capitola, California. September 2.

² Mach Group, 2020. RP 200206 – Ettington Community Skate Park – Noise Impact Assessment.

Park User Noise

Average noise levels from social conversations and children playing are approximately 60 dBA at 50 feet for approximately 20 children playing and approximately 63 dBA L_{eq} at three feet for 20 people talking simultaneously (County of Sacramento 2011; American Journal of Audiology 1998). For the purposes of this analysis, it is assumed that peak operations of the playground area on the eastern portion of the project site would consist of approximately 20 children utilizing the playground and approximately 40 people utilizing the picnic and seating areas. This analysis also assumes that 180 people could be attending swim meets at the pool area.

3.4 Significance Thresholds

The following thresholds are based on City noise standards and Appendix G of the CEQA guidelines. Noise impacts would be considered significant if:

- **Issue 1 – Noise in Excess of Established Standards:** The project would result in the 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.
 - **Temporary:** Construction noise would be significant if:
 - Noise levels exceed the FTA criteria of 80 dBA L_{eq}, 85 dBA L_{eq}, and 90 dBA L_{eq} for an 8-hour period for residential, commercial, and industrial land uses, respectively; or
 - Construction noise is generated outside of allowable construction hours as stated in the City of Imperial General Plan Noise Element (construction activities are prohibited between the hours of 8:00 p.m. and 7:00 a.m.).
 - **Permanent:** Operational noise would be significant if:
 - Per the City of Imperial General Plan Noise Element, the City shall require stationary noise sources of more than 55 dBA CNEL are not transmitted offsite to noise sensitive land uses.

Imperial Townsite Park Project

- For traffic-related noise, impacts would be considered significant if project-generated traffic would result in exposure of sensitive receivers to an unacceptable increase in noise levels by 3 dBA.
- **Issue 2 - Vibration:** The project would result in the generation of excessive ground-borne vibration or ground-borne noise levels.
 - This would occur if the project would subject vibration-sensitive land uses to construction-related ground-borne vibration that exceeds the distinctly perceptible vibration annoyance potential criteria for human receivers of 0.24 in./sec. PPV, or the residential structural damage criteria of 0.4 in./sec. PPV.
- **Issue 3 – Airport Noise:** For a project located in 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, if the project exposes people residing or working in the project area to excessive noise levels.
- **Issue 4 – Land Use Compatibility:** The project’s on-site uses would be subject to noise exceeding City Noise Element land use compatibility standards.
 - This would occur if exterior use areas of the project are subject to noise levels in excess of 70 dBA CNEL.

4 Impact Analysis

4.1 Issue 1 – Temporary and Permanent Noise Increase

Issue 1: 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*)

Construction

Over the course of a typical construction or demolition day, construction equipment would be located as close as 75 feet to the nearest noise sensitive school use to the south (Ben Hulse Elementary School). Construction related equipment would typically be located at an average distance further away over an 8-hour period due to the nature of construction where equipment is mobile throughout the day. Therefore, it is conservatively assumed that over the course of a typical construction day the construction equipment would operate at an average of 85 feet from the nearby properties.

At a distance of 85 feet, a dozer, excavator and grader would generate a noise level of 79 dBA L_{eq} (8-hour) at the nearest noise sensitive use to the project site. Therefore, construction noise levels with this equipment would not exceed the FTA construction noise threshold of 80 dBA L_{eq} (8-hour) at residential and school land uses. Other construction activities, such as trenching construction, would be anticipated to use equipment of intensity similar to or less than the simultaneous use of a dozer, excavator, and grader. In addition, construction would occur within the allowed hours of the City's Noise Element. Given the aforementioned, impacts would be less than significant.

Operation

The project would introduce new sources of operational noise to the site due to skate park activity, children playing, parking lot activities, and people gathering and talking while utilizing the new park. The site currently has a swimming pool with grandstands for spectators and is considered as part of the existing noise environment. Assumptions for park noise are discussed in Section 3.3. For a conservative analysis, combined noise levels from all park uses at the nearest properties from the project are shown in Table 7. The project site layout indicates a wall is proposed along the southern project boundary as part of the project. For this analysis it is assumed to be a 6-foot-tall masonry wall. A conservative 3 dBA reduction has been applied to modeled noise levels for receivers that would benefit from shielded park users, specifically, Ben Hulse Elementary School. The proposed park layout is shown on Figure 3.

As shown in the table, operational noise levels from the project are below the City's General Plan Noise Element standard of 55 dBA CNEL. Therefore, operational noise from the project would be less than significant.

Table 7 Operational Noise Levels at Off-site Receivers

Receiver	Park Use	Distance (feet)	Noise Levels (dBA L _{eq})	Combined Noise Levels (dBA L _{eq})	Exceed Threshold? ²
D Street Residence	Basketball/Tiger Square	170	28	41	No
	Parking Lot	250	31		
	Skate Park	500	40		
	Playground	540	25		
	Pool Area	400	31		
B Street Residences	Picnic Area	100	33	47 ¹	No
	Parking Lot	375	34		
	Skate Park	175	50		
	Playground	100	33		
	Pool Area	425	30		
Imperial High School	Playground	200	27	46	No
	Parking Lot	200	39		
	Skate Park	300	45		
	Picnic Area	300	23		
	Pool Area	450	29		
Ben Hulse Elementary School	Skate Park	100	55	52 ¹	No
	Picnic Area	100	33		
	Playground	160	28		
	Parking Lot	170	40		
	Pool Area	150	39		

dBA=A-weighted decibels; L_{eq}=equivalent continuous noise level over a stated period of time

¹A conservative -3 dBA applied to combined noise level to account for proposed western and southern wall.

² In accordance with City's General Plan Noise Element, the applicable threshold is that operational noise shall not exceed 55 dBA CNEL at any point on the property line of the premises upon which the noise or sound is generated or produced

Off-site Traffic Noise

Based on the project's traffic volume analysis, the project would result in 207 vehicle trips per day (STC 2020). With an additional 207 vehicle trips added to daily roadway volumes and distributed throughout the roadway network, the largest increase of ADT volumes would be experienced on Worthington Road that has an existing ADT of 7,358. Daily traffic volumes on Worthington Road would increase by 207 per day, all other studied roadways resulted in daily increase of 119 or less. The project would result in traffic noise level increase of less than 0.5 dBA on Worthington Road and on all other studied roadway segments. Therefore, the project's traffic noise increases would not exceed 3 dBA, the threshold for a noticeable noise increase, and impacts would be less than significant.

4.2 Issue 2 – Vibration

Issue 2: Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels? (*Less Than Significant Impact*)

Construction activities known to generate excessive ground-borne vibration, such as pile driving, would not be conducted by the project. The greatest anticipated source of vibration during general project construction activities would be from a dozer, which may be used within 75 feet of the nearest off-site structures to the south. A dozer would create approximately 0.089 in/sec PPV at a distance of 25 feet and 0.017 in/sec PPV at a distance of 75 feet (Caltrans 2020). This would be

lower than what is considered a distinctly perceptible impact for humans of 0.24 in/sec PPV, and the structural damage impact of 0.4 in/sec PPV. Therefore, although a dozer may be perceptible to nearby human receptors, temporary impacts associated with the dozer (and other potential equipment) would be less than significant.

Operation of the project would not include any substantial vibration sources. Therefore, operational vibration impacts would be less than significant.

4.3 Issue 3 – Airport Noise

Issue 3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? *(No Impact)*

The Imperial County Airport is approximately 0.25 mile to the south of the project site. The City's land use compatibility threshold for a recreational use is 70 dBA CNEL. Based on Figure 3.11-1 of City of Imperial Land Use and Circulation Element Update Draft Environmental Impact Report, the project site is situated within the 60 dBA CNEL airport noise contour and outside the 65 dBA CNEL airport noise contour (City of Imperial 2017). Therefore, no substantial noise exposure would occur to construction workers or users of the project site from aircraft noise, and no impacts would occur.

4.4 Issue 4 – Land Use Compatibility

Issue 4: Would the project be subjected to noise levels in excess of the City's land use compatibility guidelines for noise? *(No conflict with exterior or interior noise standard)*

Following the methodology discussed in Section 3.4, noise levels at the project's future park use areas were modeled. On-site park noise levels were modeled at ground-level. Daily on-site traffic noise levels that future park users would be exposed to would be 66 dBA CNEL at 50 feet. Therefore, noise levels at park use areas of the project would not exceed the City's 70 dBA CNEL normally acceptable exterior noise standard for park uses and would not conflict with the City General Plan.

5 Conclusions

Construction noise would generate noise levels of up to 79 dBA L_{eq} (8-hour), which would not exceed the FTA construction noise thresholds at nearby residential properties of 80 dBA L_{eq} (8-hour). In addition, construction would be limited to hours allowed by the City's Noise Ordinance, prohibiting construction activities between the hours of 8:00 p.m. and 7:00 a.m. Impacts would be less than significant.

The project would introduce sources of operational noise to the site with skate park, parking lot, playground, and picnic area noise. Operational noise levels would reach up to 52 dBA L_{eq} at the nearest noise sensitive receiver, which would be well below City General Plan Noise Element standard of 55 dBA CNEL. Therefore, operational noise from the project would be less than significant.

The vehicle trips associated with the project would increase noise levels by less than 0.5 dBA, which would not increase noise levels beyond the 3 dBA threshold and impacts would be less than significant.

Operation of the project would not include any substantial vibration sources. Groundborne vibration from construction activities, such as the use of a dozer, would not exceed the applicable vibration thresholds. Therefore, vibration impacts would be less than significant.

The project is located within the noise contours for Imperial County Airport. The project site is situated within the 60 dBA CNEL airport noise contour and outside the 65 dBA CNEL airport noise contour. The City's land use compatibility threshold for a recreational use is 70 dBA CNEL. Therefore, no substantial noise exposure would occur to construction workers or users of the project site from aircraft noise, and impacts would be less than significant.

Traffic noise levels at exterior areas of the project would not exceed the City's 70 CNEL normally acceptable exterior noise standard for recreational uses and therefore would not conflict with the City General Plan.

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Appendix G

Roadway Construction Noise Model Output

Appendix H

VMT and Traffic Volume Analysis

Technical Memorandum

Project: Townsite Community Park Project, VMT and Traffic Volume Analysis
Date: February 23, 2020
To: Lorraine Ahlquist, Rincon Consultants, Inc.
From: David DiPierro, TE, Senior Principal Manager

STC is pleased to present this technical memorandum to support the proposed Townsite Community Park project in the City of Imperial, California. This memorandum explains why the project is screened out from further VMT Analysis and establishes traffic volume data to support air quality and noise and vibration impact assessments.

Introduction

The Townsite Community Park project is located in the City of Imperial in Imperial County, California on a 3.15-acre project site. The project site lies south of Baroni Boulevard, east of South B Street, west of South D Street, and is approximately 0.25 mile north of Imperial County Airport as shown on **Figure 1**.

Figure 1 Project Site Location



The project proposes a number of recreational facilities including the development of a 1.0-acre picnic and playground area, 0.6-acre pool area, 0.5-acre of new skate park features, a 0.5-acre parking lot with approximately 80 to 100 vehicle spaces and 4 bicycle parking spaces, 0.5-acre of multi-use basketball, volleyball and tennis courts, a 0.05-acre restroom structure, and ADA compliant walking trails surrounding the perimeter and connecting the project's amenities. The project is expected to be open to the public in 2022.

The surrounding urban land uses are predominately built out and consist of institutional and residential uses that complement the project. The project site is surrounded by Imperial High School to the north, Ben Hulse Elementary School to the south, and residential areas to the east and west.

This memorandum is structured as follows:

- VMT Analysis
- Traffic Volumes Analysis
 - Trip Generation
 - Project Trip Distribution and Assignment
 - Traffic Volumes
- Findings & Recommendations

VMT Analysis

The City of Imperial and Imperial County has not yet published guidelines on evaluating VMT impacts for CEQA following the implementation of Senate Bill 743. This memorandum is therefore consistent with the Governor's Office of Planning and Research (OPR) Technical Advisory (December 2018).

For comparison purposes the Technical Advisory (Page 16) states that "local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than-significant transportation impact". The same concept can be applied to park and recreational land uses. Currently, local residents travel further to park and recreational services than they would if the Townsite Community Park was open.

Page 17 of the Technical Advisory states "Because lead agencies will best understand their own communities and the likely travel behaviors of future project users, they are likely in the best position to decide when a project will likely be local-serving." The project is defined on the City's website as a community park project and has held various community outreach events to establish the community's input on design and functionality. Per the characteristics of a community park, which typically generates short vehicle trips the project can be considered local-serving and the City may presume, based on OPR's guidance, that the project creates a less than significant VMT impact. Therefore, the project can be screened out from any further VMT analysis.

Traffic Volumes Analysis

Project Traffic volumes were established for affected roadways in the project area for the following analysis conditions:

- Existing Year (2021)
- Opening year without Project (2022).

- Opening year with Project (2022)

The following list identifies the study area roadway segments analyzed in this memorandum:

1. Worthington Road between Nance Road and “B” Street
2. Nance Road between Worthington Road and Banta Road
3. Brewer Road between Russell Road and Austin Road
4. Austin Road south of Brewer Road

Trip Generation

Trip generation rates were derived from a comparison between the Institute of Transportation Engineers (ITE) Trip Generation 10th Edition and SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region. **Table 1** shows that the SANDAG rate is the higher rate, therefore, this rate was used to derive project trip generation and is considered a conservative analysis.

Table 1 Trip Generation Comparison

Trip Rate	Rate	Size (acres)	Daily	AM			PM		
				Total	In	Out	Total	In	Out
SANDAG Not So Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region									
Parks - City (developed w/meeting rooms and sports facilities)	50/acre	1	50	13%	50:50		9%	50:50	
Townsite Community Park		3.15	158	21	11	11	14	7	7
ITE Trip Generation Manual (10th Edition)									
Land Use Category 411 - Public Park*	2.19/acre	1	2.19	0.31	39%	61%	0.31	39%	61%
Townsite Community Park		3.15	7	1	0	1	1	0	1

*Sunday rate used for Daily and Sunday Peak Hour of Generator rate used for AM and PM

Trip Distribution and Assignment

A recent traffic study for the Russell Court Subdivision project was carried out by *The Perfect Solution* in 2015. The Russell Court project site is located approximately 1 mile to the south west of the Townsite Community Park project. The Townsite Community Park project used trip distribution proportions shown in **Figure 2** which were based on the Russell Court Subdivision distribution proportions provided in **Attachment A**.

The project trip generation from the SANDAG Not So Brief Guide, as shown in Table 1, was assigned to the project trip distribution proportions shown in Figure 2 to derive the project trip assignment as shown in **Figure 3**.

Figure 2 Project Trip Distribution



Figure 3 Project Trip Assignment



Traffic Volumes

The Russell Court Subdivision project traffic study used 2015 traffic counts and added a compounded 1.5% per year growth factor to account for cumulative project traffic to derive an opening year (2017) volumes. To ensure that this analysis included traffic volumes from the Russell Court Subdivision project, the cumulative plus project (2017) volumes, from the Russell Court traffic study were used as a baseline. A copy of the cumulative plus project traffic volume table from the Russell Court traffic study is included in **Attachment B**.

For this analysis, the compounded 1.5% growth factor was applied to the 2017 volumes from the Russell Court study, to account for cumulative project traffic and derive existing (2021) and opening year (2022) traffic volumes. The project trip assignment shown in Figure 3 was then added to the opening year (2022) volumes to derive the opening year (2022) plus project volumes. This was considered a conservative methodology which negates any short-term reduction in traffic volumes due to the COVID-19 pandemic. The traffic volumes for each condition/ scenario are shown in **Table 2**.

Table 2 Baseline (2017), Existing (2021) and Opening Year (2022) Traffic Volumes

Roadway Segment	2015 ¹	2017 ²	2021	2022 ³	Project	2022 + Project
1. Worthington Road between Nance Road and “B” Street	5,745	6,933	7,358	7,469	24	7,493
2. Nance Road between Worthington Road and Banta Road	1,680	2,848	3,023	3,068	8	3,076
3. Brewer Road between Russell Road and Austin Road	1,810	1,939	2,058	2,089	8	2,097
4. Austin Road south of Brewer Road	5,924	6,198	6,578	6,677	16	6,693

¹Russell Court Subdivision Traffic Study Existing ADT Counts (July 2015)

²Russell Court Subdivision Traffic Study Cumulative + Project (2017) Roadway Segment Volumes (= 2015 + 1.5% per year). See Attachment B.

³= 2017 volumes increased by factor of 1.5% per year to 2022 (Townsite Community Park Opening Year) compounded.

Formula: 2022 ADT = 2017 ADT*(1+1.5%)⁵

Table 2 shows that there is a minimal increase in traffic between the opening year (2022) and the opening year (2022) plus project conditions for the study area roadway segments.

Findings & Recommendations

This technical memorandum explains that the project will predominately be for the use and benefit of the local community. It can therefore be considered local-serving and “screened out” from further VMT analysis.

Table 2 provides traffic volume data for study roadway segments to support the air quality and noise and vibration impact assessments.

Please do not hesitate to contact either myself, or Phil Wragg (philip.wragg@stctraffic.com) should you have any further questions or concerns.



Sincerely,

A handwritten signature in black ink, appearing to read 'D. DiPierro', is written over a light gray horizontal line.

David DiPierro, TE
Senior Principal Manager
STC Traffic, Inc.

Attachment A – Russell Court Subdivision Traffic Study Distribution Proportions
Attachment B - Russell Court Subdivision Traffic Study Cumulative + Project Roadway Segment Volume
Table

B. TRIP DISTRIBUTION & ASSIGNMENT

The project trip distribution was assumed to be reflected in the existing traffic patterns. **Table 2** (Project Trip Distribution) represents the estimated traveled directions for traffic accessing the proposed project site. These assumptions were used to assign project traffic to the existing street system. Project traffic distribution was estimated based on the existing land uses within the City of Imperial and the surrounding Cities. Existing Traffic Counts were also reviewed to determine local travel patterns, and to be used to estimate potential project trip patterns.

Table 2 (Project Trip Distribution) identifies the basic compass directions and key roadways used as a basis for assigning project generated trips to the local street system.

Table 2
Project Trip Distribution

Direction	Roadways	Trip Percentages
East	Barioni Boulevard	10%
West	Worthington Road	2%
North	State Route 86	35%
South	State Route 86	40%
North	Austin Road	5%
South	Austin Road	8%

Traffic volumes generated by the project were then assigned to the local street systems based on the distribution percentages as shown above. **Figure 7** (Project AM Peak Hour Volumes) and **Figure 8** (Project PM Peak Hour Volumes) show how the forecasted traffic travels through each of the study intersections.

These figures also indicate that the scope of the traffic analysis covers those intersections that have been determined to be potentially significantly impacted by project traffic. Locally accepted traffic impact guidelines suggest using 50 peak hour trips through an intersection to determine the scope of the traffic analysis, in an area currently experiencing acceptably service levels. Caltrans suggests using more than 100 peak hour trips, for determining the scope of a traffic analysis in an area currently experiencing acceptably service levels.

Attachment B - Russell Court Subdivision Traffic Study Cumulative + Project Roadway Segment Volume Table

2. Roadway Segments

For the purposes of this traffic analysis, the roadway geometries for our cumulative analysis were assumed to be the same as the existing conditions. The Levels-of-Services shown in **Table 10** (Cumulative plus Project Roadway Segment - Levels of Service) reflect acceptable service levels for cumulative plus project conditions.

Table 10
Cumulative plus Project Roadway Segments - Levels of Service

Roadway Segment - <i>Classification</i>	ADT	LOS	Volume/ Capacity (Change in V/C)
Worthington Road – Major Arterial between Nance Road and “B” Street	6,933	C	0.43 (0.05)
Nance Road – Major Collector between Worthington Road and Banta Road	2,848	B	0.18 (0.07)
Brewer Road – Major Collector between Russell Road and Austin Road	1,939	B	0.12 (0.00)
Austin Road – Secondary Arterial south of Brewer Road	6,198	C	0.38 (0.08)

V. MITIGATION MEASURES

Based on the project generated traffic volumes calculated to pass through each of the study intersections and roadway links, we recommend changes at four failing intersections.

To improve operations along the Worthington/Barioni corridor we recommend the following:

5. Barioni Blvd at State Route 86. Change the phasing to eliminate the split phase timing configuration will improve efficiency to eliminate significant impacts. This will improve capacity but may increase collision potential.
6. Barioni Blvd at “B” Street. Remove stop controls on Barioni Blvd.
7. Worthington Road at Nance Road. Add stop controls to “B” Street
8. Worthington Road at Austin Road. Add a 100' northbound right turn lane and a 200' westbound left turn.

Appendix I

Stakeholder Comments

Stakeholder Comments

This section includes comments received from stakeholders regarding the Draft Initial Study-Mitigated Negative Declaration (IS-MND) prepared for the Imperial Townsite Park Project (project).

The City of Imperial received three stakeholder comment letters on the Draft IS-MND. The commenters and the page number on which each commenter's letter appear are listed below.

Letter No. and Commenter		Page No.
Stakeholder		
1	Donald Vargas, Compliance Administrator II, Miya Edmonson, Imperial Irrigation District (May 11, 2021)	2
2	Carlos Ortiz, Imperial County Agricultural Commissioner (April 26, 2021)	5
3	Curtis Blondell, APC Environmental Coordinator, Imperial County Air Pollution Control District (May 13, 2021)	7

The comment letters have been numbered sequentially and each issue raised by the commenter has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.1, for example, indicates that the response is for the first issue raised in comment Letter 1).



May 11, 2021

Ms. Debra Jackson
City Clerk
City of Imperial
420 South Imperial Avenue
Imperial, CA 92251

SUBJECT: NOI to Adopt an MND the Townsite Park Project in Imperial, CA

Dear Ms. Jackson

On April 19, 2021, the Imperial Irrigation District received from the City of Imperial a Notice of Intent to adopt a Mitigated Negative Declaration for the Townsite Park Project. The project proposes the development of approximately 22,724 sq. ft. of picnic and playground area, a 9,349 sq. ft. park square, a 25,070 sq. ft. pool area, a 20,953 sq. ft. skate park, a 23,000 sq. ft. parking lot for vehicle and bicycles, 25,070 sq. ft. of multi-use basketball, volleyball and tennis courts, a 1,920 sq. ft. restroom & shower structure, a 1,500 sq. ft. atrium and 12,526 sq. ft. of ADA-compliant walking trails surrounding the perimeter and connecting the project's amenities. The 3.15-acre project site lies south of Barioni Boulevard, east of South B Street, west of South D Street, and is approximately 0.25 mile north of Imperial County Airport in the city of Imperial in Imperial County, California.

The Imperial Irrigation District has reviewed the information and has the following comments:

1. The project site is currently provided electrical service from IID power pole no. 62609 on the south side of Barioni Boulevard. However, if the City is contemplating additional temporary service or an upgrade to its existing electrical service for the project, the applicant should be advised to contact Ernie Benitez, IID Customer Project Development Planner, at (760) 482-3405 or e-mail Mr. Benitez at eibenitez@iid.com to initiate the customer service application process. In addition to submitting a formal application (available for download at <http://www.iid.com/home/showdocument?id=12923>), the applicant will be required submit a complete set of approved plans (in PDF and CAD formats), construction schedule, electrical loads, panel size and voltage; and the applicable fees, permits, easements and environmental compliance documentation pertaining to the provision of electrical service to the project. The applicant shall be responsible for all costs and mitigation measures related to providing electrical service to the project.
2. Please note that energy capacity is limited in the project area and a circuit study may be required. If the study indicates circuit improvements are needed to allow for electrical service to the project, the applicant shall be financially responsible for the improvements identified in the circuit study.

1.1

1.2

City of Imperial
Imperial Townsite Park Project

Debra Jackson
May 11, 2021
Page 2

3. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to: surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances). The IID encroachment permit application and instructions are available at <https://www.iid.com/about-iid/department-directory/real-estate>. The IID Real Estate Section should be contacted at (760) 339-9239 for additional information regarding encroachment permits or agreements.
4. Any new, relocated, modified or reconstructed IID facilities required for and by the project (which can include but is not limited to electrical utility substations, electrical transmission and distribution lines, canals, drain, etc.) need to be included as part of the project's CEQA and/or NEPA documentation, environmental impact analysis and mitigation. Failure to do so will result in postponement of any construction and/or modification of IID facilities until such time as the environmental documentation is amended and environmental impacts are fully analyzed. **Any and all mitigation necessary as a result of the construction, relocation and/or upgrade of IID facilities is the responsibility of the project proponent.**

1.3

1.4

Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at dvargas@iid.com. Thank you for the opportunity to comment on this matter.

Respectfully,



Donald Vargas
Compliance Administrator II

Stakeholder Comment Letter 1

COMMENTER: Donald Vargas, Compliance Administrator II, Imperial Irrigation District

DATE: May 11, 2021

Response 1.1

The Imperial Irrigation District (IID) states that, should the City decide to upgrade its existing electrical service for the project, the City should contact Ernie Benitez, IID's designated contact, to initiate the application process. IID further states that an application for electrical service would require a complete set of approved plans, construction schedule, electrical loads, panel size and voltage; and the applicable fees, permits, easements, and environmental compliance documentation pertaining to the provision of electrical service to the project.

This comment is noted. The City will contact Mr. Benitez should they decide to upgrade the existing electrical service for the project. Any formal application will have all of the required components stated above. This comment pertains to Section 6, *Energy*.

Response 1.2

IID states that energy capacity is limited in the project area and a circuit study may be required. IID further states that, should circuit improvements be needed, the City shall be financially responsible for the improvements identified in the circuit study.

This comment is noted. This comment pertains to Section 6, *Energy*.

Response 1.3

IID states that any construction or operation on IID property or within its existing and proposed right of way will require an encroachment permit or encroachment agreement.

This comment is noted. The project does not propose construction or operation on IID property. The City will contact IID's Real Estate Section for additional information should the need arise. This comment does not pertain to any specific section in the IS-MND.

Response 1.4

IID states that any new, relocated, modified, or reconstructed IID facilities required for the project needs to be included as part of the project's CEQA and/or NEPA documentation, environmental impact analysis and mitigation. IID further states that any and all mitigation necessary as a result of the construction, relocation, and/or upgrade of IID facilities is the responsibility of the City.

This comment is noted. The project would not propose any new, relocated, modified, or reconstructed IID facilities. This comment does not pertain to any specific section in the IS-MND.

City of Imperial
Imperial Townsite Park Project

Stakeholder Comment Letter 2



Office of the
Agricultural Commissioner
Sealer of Weights and Measures

Carlos Ortiz
Agricultural Commissioner
Sealer of Weights and Measures

Jolene Dessert
Asst. Agricultural Commissioner
Asst. Sealer of Weights and
Measures

April 20, 2021

Debra Jackson
City Clerk
City of Imperial
420 South Imperial Avenue
Imperial, CA 92251

Re: Initial Study and Mitigated Negative Declaration of the Townsite Park Project

Ms. Jackson:

Our department has received the Notice of Intent to Adopt a Mitigated Negative Declaration for the Townsite Park Project from the applicant Tony Lopez, Park Superintendent who proposes to develop a new recreational facility that includes the development of park facilities on a 4.16 acre site within the City of Imperial including a possible zone change to Open Space Recreational.

Due to the nature of this project and the need for landscaping, the applicant must follow the requirements for movement of plant material into Imperial County from other counties or from out of state. The applicant can contact our Pest Detection and Eradication Division for any questions regarding the quarantines for movement of plant material, as there are several quarantines that must be observed. Attached is a letter further detailing the requirements to be met in the event the applicant sources their plant material from out of the county.

2.1

If you or the applicant has any questions, please feel free to contact our office at (442) 265-1500.

Regards,

Handwritten signature of Carlos Ortiz.

Carlos Ortiz
Agricultural Commissioner
Sealer of Weights & Measures

APR 26 2021

Stakeholder Comment Letter 2

COMMENTER: Carlos Ortiz, Agricultural Commissioner – Imperial County

DATE: April 26, 2021

Response 2.1

The Agricultural Commissioner states that the City must follow all necessary requirements for the movement of plant material from outside Imperial County.

This comment is noted. The City of Imperial will adhere to all requirements regulating transportation of plant material, should the plant material be sourced from outside of the County. This comment pertains to Section 4, *Biological Resources*.

Stakeholder Comment Letter 3

150 SOUTH NINTH STREET
EL CENTRO, CA 92243-2850



TELEPHONE: (442) 265-1806
FAX: (442) 265-1799

May 13, 2021

Ms. Debra Jackson
City Clerk, City of Imperial
420 S. Imperial Avenue
Imperial, CA 92251

SUBJECT: Notice of Intent for a Mitigated Negative Declaration—Townsite Park Project

Dear Mr. Mora:

The Imperial County Air Pollution Control District ("Air District") appreciates the opportunity to review and comment on the Notice of Intent for a Mitigated Negative Declaration (NOI-MND) for the Townsite Park Project ("Project") that would allow development of approximately 3.5 acres of park facilities on a 4.16 acre site within the City of Imperial. The Project includes a picnic and playground area, a park square, a pool area, a skate park, a parking lot with approximately 80 to 100 vehicle spaces and 4 bicycle parking spaces, a multi-use basketball, volleyball and tennis courts, a restroom and shower structure, an atrium, and ADA compliant walking trails surrounding the perimeter and connecting the project's amenities. The existing lap pool would be demolished and replaced with a competition size pool (50 meters long by 25 meters wide). The Project is located south of Barioni Boulevard between B Street to the west and D Street to the east and 0.25 miles north of Imperial County Airport.

The Air District reviews projects for completeness and consistency as one of the basic purposes of the California Environmental Quality Act (CEQA) is to inform both governmental agencies and the public about potential environmental effects of a proposed action. While the Air District agrees that the proposed Project is Tier for both construction and operational air quality impacts, due to sufficient inconsistencies in changes to the default settings of the California Emissions Estimator Model (CalEEMod) and noncommittal vagueness to standard mitigation measures, the Air District is formally requiring the following mitigation measures to ensure that PM10 emissions remain consistent with Tier 1 standards:

- The Project must adhere to **Regulation VIII—Fugitive Dust Rules** and submit a **Construction Dust Control Plan (CDCP)** and provide formal written **notification 10 days** prior to the start of construction. **3.1**

- The CDCP will include enhanced mitigation measures such as the placement of windscreen fencing around the perimeter of the Project; increased frequency of daily watering, and; other feasibly enhanced additional discretionary measures for construction mitigation as described on page 24, Section 7.1 of the Imperial County CEQA Air Quality Handbook.

3.2

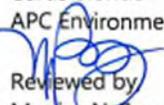
These enhanced mitigation measures are meant to address inconsistencies in the CalEEMod output such as changes to the default from 50 percent paved roads to 95 percent, and an inconsistent construction period of July 20, 2022 to October 31, 2022, while the Building Construction Phase shows 230 days for construction activities. Further, some swimming pools installed up through the 1990s have been known to contain asbestos. There was no discussion of precautions to be taken during demolition of the existing pool.

Air District rules and regulations can be accessed online at <https://apcd.imperialcounty.org>. Air District offices can be contacted at 442 (265)-1800.

Respectfully submitted,



Curtis Blondell
APC Environmental Coordinator



Reviewed by
Monica N. Soucier
APC Division Manager

cc:

Othon Mora, Community Development Director
Tony Lopez, Park Superintendent

Stakeholder Comment Letter 3

COMMENTER: Curtis Blondell, APC Environmental Coordinator, Imperial County Air Pollution Control District

DATE: May 13, 2021

Response 3.1

The Air Pollution Control District requests that the project adhere to Regulation VIII – Fugitive Dust Rules and submit a Construction Dust Control Plan (CDCP) prior to the start of construction.

The project would adhere to the most current rules adopted for fugitive dust control in addition to the standard mitigation measures for construction equipment. Regulation VIII – Fugitive Dust Control Measures, as well as other standard and discretionary mitigation measures for fugitive PM₁₀ control, are included in the IS-MND. This comment pertains to Section 3, *Air Quality*.

Response 3.2

The Air Pollution Control District states that the CDCP will include enhanced mitigation measures such as windscreen fencing, increased frequency of daily watering, and additional construction mitigation.

Fugitive dust control measures and other standard and discretionary mitigation measures for fugitive PM₁₀ control are included as part of the IS-MND. This comment pertains to Section 3, *Air Quality*.