# FINAL MITIGATED NEGATIVE DECLARATION Golf Course Water Recycling and Turf Care Facility Project

Prepared for:

#### **City of Coronado**

1825 Strand Way Coronado, California 92118 Contact: Richard Grunow

Prepared by:

**DUDEK** 2280 Historic Decatur Road, Suite 200 San Diego, California 92106 *Contact: Andrew Talbert, AICP* 

## NOVEMBER 2020

Printed on 30% post-consumer recycled material.

# Table of Contents

### **SECTION**

### PAGE NO.

ACRON	YMS AN	ID ABBREVIATIONS	IV
1	INTRO	DUCTION	1
	1.1	Project Overview	
	1.2	California Environmental Quality Act Compliance	1
	1.3	Project Planning Setting	2
	1.4	Public Review Process	2
2	SUMM	ARY OF FINDINGS	
	2.1	Environmental Factors Potentially Affected	3
	2.2	Environmental Determination	3
3	INITIAL	_ STUDY CHECKLIST	7
	3.1	Aesthetics	
	3.2	Agriculture and Forestry Resources	23
	3.3	Air Quality	24
	3.4	Biological Resources	35
	3.5	Cultural Resources	
	3.6	Energy	44
	3.7	Geology and Soils	50
	3.8	Greenhouse Gas Emissions	59
	3.9	Hazards and Hazardous Materials	68
	3.10	Hydrology and Water Quality	73
	3.11	Land Use and Planning	77
	3.12	Mineral Resources	80
	3.13	Noise	81
	3.14	Population and Housing	
	3.15	Public Services	
	3.16	Recreation	91
	3.17	Transportation	92
	3.18	Tribal Cultural Resources	94
	3.19	Utilities and Service Systems	97
	3.20	Wildfire	
	3.21	Mandatory Findings of Significance	
4	REFER	ENCES AND PREPARERS	104
	4.1	References Cited	104
	4.2	List of Preparers	107

#### APPENDICES

А	CalEEMod Calculations
В	Cultural Resources Inventory Report
С	Geotechnical Investigation
D	Noise Report
-	Operative Maine Medaling

- E Construction Noise Modeling
- F1 Responses to Comments
- F2 Public Comment Letters
- G Mitigation, Monitoring, and Reporting Program

#### FIGURES

1	Project Location	.109
2	Project Site Location and Alignments	.111
3	Project Overview	.113
4A	Views from Concept Plan A	.115
4B	Views from Concept Plan B	.117
5A	View from Bike Path/400 Block	.119
5B	View from Bike Path	.121
5C	View from new #2 tee toward #2 Fairway	.123
5D	View from new #1 Green toward Bay	.125
5E	View from new #3 Fairway toward #3 Green	.127
6	Diversion Pipelines	.129
7	Recycled Water Pipelines	.131

#### TABLES

Mitigation Measures	3
Construction Scenario Assumptions	27
Estimated Maximum Daily Construction Criteria Air Pollutant Emissions	
Estimated Maximum Daily Operational Criteria Air Pollutant Emissions	30
Project Operations – Electricity Demand	45
Project Operations – Natural Gas Demand	46
Hours of Operation for Construction Equipment	46
Construction Equipment Fuel Demand	47
Construction Vehicle Fuel Demand	47
Petroleum Consumption – Operation	49
Estimated Annual Construction Greenhouse Gas Emissions	61
Estimated Annual Operational GHG Emissions (2022)	62
San Diego Forward: The 2019 Federal Regional Transportation Plan Consistency Analysis	63
	Mitigation Measures Construction Scenario Assumptions Estimated Maximum Daily Construction Criteria Air Pollutant Emissions Estimated Maximum Daily Operational Criteria Air Pollutant Emissions Project Operations – Electricity Demand Project Operations – Natural Gas Demand Hours of Operation for Construction Equipment Construction Equipment Fuel Demand Construction Vehicle Fuel Demand Petroleum Consumption – Operation Estimated Annual Construction Greenhouse Gas Emissions Estimated Annual Operational GHG Emissions (2022) San Diego Forward: The 2019 Federal Regional Transportation Plan Consistency Analysis

3.8-4	Project Consistency with Scoping Plan GHG Emission Reduction Strategies	66
3.13-1	Measured Existing Outdoor Ambient Sound Levels	82
3.13-2	Estimated Per-Phase Construction Noise Levels	84

# Acronyms and Abbreviations

Acronym/Abbreviation	Definition				
AB	Assembly Bill				
APE	area of potential effects				
BMP	best management practice				
CAAQS	California Ambient Air Quality Standards				
CAL FIRE	California Department of Forestry and Fire Services				
CalEEMod	California Emissions Estimator Model				
CAPCOA	California Air Pollution Control Officers Association				
Caltrans	California Department of Transportation				
CARB	California Department of Transportation California Air Resources Board				
CEQA	California Environmental Quality Act				
CH <sub>4</sub>	methane				
City	City of Coronado				
CMC	Coronado Municipal Code				
CNEL	continuous noise equivalent level				
CO	carbon monoxide				
CO <sub>2</sub>	carbon dioxide				
CO <sub>2</sub> e	carbon dioxide equivalent				
CRHR	California Register of Historical Resources				
dBA	A-weighted decibel				
DPR	Department of Parks and Recreation				
FHSZ	fire hazard severity zone				
GHG	greenhouse gas				
ips	inches per second				
LCP	Local Coastal Program				
LOS	level of service				
MBR	membrane bioreactor				
MM	Mitigation Measure				
MND	Mitigated Negative Declaration				
MS4	Municipal Separate Storm Sewer System				
MT	metric ton				
N <sub>2</sub> O	nitrous oxide				
NAAQS	National Ambient Air Quality Standards				
NAHC	Native American Heritage Commission				
NASNI	Naval Air Station North Island				
NCO	Noise Control Officer				
NO <sub>2</sub>	nitrogen dioxide				
NO <sub>x</sub>	oxides of nitrogen				
NRHP	National Register of Historic Places				
03	ozone				
PPV	peak particle velocity				
project	Coronado Municipal Golf Course Modernization Project				
RAQS	Regional Air Quality Strategy				
RO	reverse osmosis				
ROW	right-of-way				

Acronym/Abbreviation	Definition
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SCIC	South Coast Information Center
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric
SOx	sulfur oxides
SWPPP	Storm Water Pollution Prevention Plan
SWRF	Satellite Water Recycling Facility
TAC	toxic air contaminant
TCF	Turf Care Facility
TPCMP	Traffic and Pedestrian Control and Management Plan
VMT	vehicle miles travelled
VOC	volatile organic compound

# 1.1 Project Overview

The City of Coronado (City) is proposing to implement the proposed Golf Course Water Recycling and Turf Care Facility Project (project), which entails construction and operation of a new recycled water supply facility (the Satellite Water Recycling Facility [SWRF]) and Turf Care Facility (TCF) at the existing Coronado Municipal Golf Course (Golf Course) in the northeastern portion of the City. The proposed SWRF would have capacity to treat up to 1-million gallons per day. The SWRF and TCF would be collocated, and are collectively referred to throughout this document as the "SWRF and TCF Complex." Recycled water produced by the SWRF would be used to irrigate the Golf Course and other public landscape in the City, replacing its current use of potable water. Pump stations and pipelines necessary to connect the SWRF to the existing municipal wastewater collection system and to distribute recycled water would be constructed, including several miles of new recycled water pipeline to be owned and operated by the California American Water Company, which would be located within existing City streets. The TCF would consolidate and replace existing maintenance facilities, including office and employee facilities, a maintenance workshop, and equipment storage. A pond for storing recycled water would be constructed within the Golf Course, and the project would also reconfigure certain Golf Course holes to accommodate the proposed facilities.

The project would also include development of an approximately 500–1,000-square-foot coastal vista located near an existing pocket beach along the coastline of San Diego Bay near the number 2 and/or 18 greens. The coastal vista would provide passive recreational opportunities for the public. Improvements would consist of an approximately 250-foot-long, 10-foot-wide ADA-accessible path between the existing golf course parking lot and the coastal vista; 3–5 park benches, coastal access/wayfinding signs, and low-growing landscaping.

The project's primary purpose is to reduce potable water usage by producing and distributing high-quality recycled water for use as public landscape irrigation. The project would also improve maintenance capabilities at the Golf Course by replacing aging existing facilities with the proposed TCF.

The City intends to utilize the design-build contracting method to develop the project. The selected design-build contractor would be responsible for preparing design documents and plans that will be subject to review and approval by the City of Coronado to ensure the final design substantially conforms to conceptual designs used for the environmental analysis contained in this <del>draft</del>-Mitigated Negative Declaration (MND).

## 1.2 California Environmental Quality Act Compliance

Approval to construct and operate the proposed facilities is a discretionary action of the City subject to compliance with the California Environmental Quality Act (CEQA). The City has prepared this MND as lead agency pursuant to CEQA.

This document is an MND prepared by City pursuant to Title 14 of the California Code of Regulations, Section 15063 of the CEQA Guidelines. Section 15063 of the CEQA Guidelines requires the lead agency to prepare an Initial Study to analyze the potential environmental impacts associated with a project to determine if the project could have a significant effect on the environment. As a result of the Initial Study, this MND has been prepared (per CEQA Guidelines Sections 15070–15075) to identify potential environmental impacts of the proposed project and to

identify mitigation measures to avoid or reduce the significance of those impacts. CEQA requires the lead agency to adopt a mitigation monitoring and reporting program for all required mitigation measures.

## 1.3 Project Planning Setting

In 2011, the City made preliminary investigations into the feasibility of developing a new recycled water supply within the City. Since that time, the City has coordinated two planning level design charrettes with various groups of stakeholders related to the TCF (July 2017) and golf course architecture (August 2017). In 2018, the City prepared an additional feasibility report expanding upon the original study. The 2018 report included three alternative locations for the SWRF and TCF Complex: Roadside, Trailside, and Bayside. The City has since removed the Roadside and Trailside options from further consideration.

### 1.4 Public Review Process

The MND is subject to a 30-day public review period. The public is encouraged to provide written comments during the 30-day review, and/or attend the City Council hearing at which the project and the MND will be considered for approval. In accordance with Section 15074 of the CEQA Guidelines, the City Council must consider the MND along with any comments received during the public review process. Comments may be submitted to City at mbalcobero@coronado.ca.us or by mail at:

ATTN: MaeColleen Balcobero 1825 Strand Way Coronado, California 92118

This MND has been made available for download or viewing at the City's website at https://www.coronado.ca.us/ government/departments\_divisions/community\_development/planning\_and\_zoning ; at the City Community Development Department (located at the same address above); and provided for review to state agencies via the California State Clearinghouse. Notice of the project and MND has been provided in accordance with Section 15072 of the CEQA Guidelines.

The Draft MND was circulated for a 30-day review period from September 16, 2020 to October 16, 2020, pursuant to Section 15105(b) of the CEQA Guidelines. The Draft MND was published on the City website and was available at City Hall and the Coronado Public Library for review. Noticing for the project has been provided in compliance CEQA, including publication of the Notice of Intent to Adoption the Mitigated Negative Declaration in the Coronado Eagle-Journal, on the City's website, and mailers sent to all property owners on Glorietta Boulevard. The City received written comments on the Draft MND, which are included along with responses to each comment in Appendix F to this document. Additionally, a mitigation monitoring, and reporting program has been prepared pursuant to Section 15074(d) of the CEQA Guidelines and is included in Appendix G to this document.

# 2 Summary of Findings

# 2.1 Environmental Factors Potentially Affected

This MND analyzes the environmental impacts of the project consistent with the format and analysis prompts provided in Appendix G of the CEQA Guidelines. The analysis determined that the project would result in potentially significant impacts associated with the following resource categories: Biological Resources, Cultural Resources, Geology and Soils, Noise, and Tribal Cultural Resources. The analysis determined that all impacts identified in this MND would be less than significant with implementation of mitigation measures to avoid or minimize the impacts identified. Detailed analyses of impacts are provided under each resource section evaluated in this MND.

## 2.2 Environmental Determination

The City finds that this MND identifies potentially significant impacts, but that implementing the mitigation measures identified in Table 2-1 would avoid or minimize the impacts such that they would be less than significant. All mitigation measures are identified by analysis topic in Table 2-1, Mitigation Measures.

Mitigation Measure Number	Mitigation Measure					
Biological Resources						
MM-BIO-1	<b>Pre-Construction Nesting Birds Surveys and Reporting.</b> To avoid impacts to breeding and nesting birds in accordance with the Migratory Bird Treaty Act and California Fish and Game Code, construction activities shall take place outside of the nesting season; nesting season is March 1 (January 1 for raptors) through September 15. If construction cannot take place outside the nesting season, a breeding/nesting bird survey shall be conducted by a qualified biologist within 72 hours prior to ground-disturbing or tree removal activities to determine if active nests of bird species, including raptors, protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the impact area or within <del>300</del> - <u>500</u> feet of the impact area. If active nests are found within project's work area, nearby trees, or within pipes stored in construction laydown areas, they will be avoided until the nest is vacated and juveniles have fledged. Additionally, an avoidance buffer shall be established (typically 50 to <u>300-500</u> feet, depending on the species) around the active nest to ensure indirect or incidental take of nesting species does not occur in compliance with the California Fish and Game Code. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. A survey and monitoring report documenting the pre-construction survey results and implemented avoidance measures shall be submitted to the City of Coronado Community Development Department.					
Cultural Resources						
MM-CUL-1	Prior to the start of project construction, an Archaeological and Native American monitor shall be retained by the City of Coronado for the monitoring of all initial project ground disturbance with the exception of the superficial irrigation/sprinkler					

#### Table 2-1. Mitigation Measures

Mitigation Measure	Mitigation Magguro
Number	Mitigation Measureinstallation at Spreckels Park, Tidelands Park, and any construction within the Golf Course. In the event that unanticipated archaeological resources (sites, features, or artifacts) are exposed during initial project ground disturbance for the project, all construction work occurring in the immediate vicinity of the find shall immediately stop until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; California Public Resources Code Section 21082) the archaeologist may record the find to appropriate standards (thereby addressing any data potential) and allow work to continue. If the archaeologist observes the discovery to be potentially significant under CEQA or Section 106 of the National Historic Preservation Act, additional efforts may be warranted as recommended by the qualified archaeologist. If it is determined that specific locations of excavation would not disturb native soils and would have no potential to disturb archaeological/cultural resources, the Archaeological and Native American monitor may discontinue monitoring at these locations. Superficial trenching for sprinkler lines in the municipal parks and the golf course will not require monitoring, as these are shallow and within contemporary disturbance areas. The construction on the Coronado Municipal Golf Course will also not require monitoring, as the entire golf course was built on imported fill in the 1960s.
Geology and Soils	
MM-GEO-1	Due to the possibility of uncovering highly sensitive paleontological resources, project construction that will impact the Bay Point Formation shall require paleontological monitoring. In the event that paleontological resources (fossil remains) are exposed during construction activities for the project, all construction work occurring within 50 feet of the find shall immediately stop until a Qualified Paleontologist, as defined by the Society of Vertebrate Paleontology's 2010 guidelines, can assess the nature and importance of the find. Depending on the significance of the find, the Qualified Paleontologist may record the find and allow work to continue, or may recommend salvage and recovery of the resource. All recommendations will be made in accordance with the Society of Vertebrate Paleontology's 2010 guidelines, and shall be subject to review and approval by the City of Coronado. Work in the area of the find may only resume upon approval of a Qualified Paleontologist. If it is determined that specific locations of excavation would be located in soils that have no potential for paleontological resources to be present, the Qualified Paleontologist may allow for monitoring to be suspended at these locations.

#### Table 2-1. Mitigation Measures

Mitigation Measure					
Number	Mitigation Measure				
Tribal Cultural Resources					
MM-CUL-1	Refer above for mitigation measure.				
Noise					
MM-NOI-1	The City shall ensure that the construction contractor(s) contract and specifications for all project-related activities include the following requirements during construction activities:				
	<ul> <li>Construction hours shall be conducted in compliance with Coronado Municipal Code (CMC) 41.10.040 with respect to allowable timeframes and days of the week (including weekends and holidays). Per CMC 41.10.050, noise from construction activities shall meet the standard of 75 dBA Leq over any one-hour period, unless authorization to exceed this limit has been granted via permit by the City's Noise Control Officer (NCO) in advance.</li> <li>Construction during nighttime hours is prohibited unless authorized by the NCO in advance via permit.</li> <li>All idling (i.e., engines running) equipment shall be kept to a minimum.</li> <li>The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be used for safety warning purposes only.</li> <li>Communication with local residents shall be maintained prior to and during construction. Specifically, the local residents shall be informed of the schedule, duration, and progress of the construction and shall be provided contact information (e.g., a telephone hotline and/or email address) for noise- or vibration-related complaints. The City shall establish a process to investigate these complaints in a timely manner and, if determined to be valid, detail efforts to provide a timely resolution and response to the complainant—with copy of outcome description documented in a log for the duration of the construction activities.</li> <li>Locate Fixed/stationary equipment (e.g., generators, compressors) shall be located as far as possible from residential uses.</li> <li>All noise-producing equipment and vehicles using internal combustion engines shall be equipped with exhaust mufflers (or comparable noise-reducing exhaust flow treatments); air-inlet silencers; and, hoods, shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc-weiders, air compressors, generators) shall be equipped with shrouds and noise control features that a</li></ul>				

#### Table 2-1. Mitigation Measures

INTENTIONALLY LEFT BLANK

#### 1. Project title:

Golf Course Water Recycling and Turf Care Facility Project

#### 2. Lead agency name and address:

City of Coronado 1825 Strand Way Coronado, California 92118

#### 3. Contact person and phone number:

MaeColleen Balcobero, 619.522.7326

#### 4. Project location:

The City of Coronado is situated in the northern portion of San Diego Bay, southwest across the bay from downtown San Diego, and southeast of Naval Air Station North Island (Figure 1, Project Location). Coronado is connected to the mainland by a natural land bridge, called the Silver Strand, that extends southerly a distance of approximately 9 miles to the City of Imperial Beach. This land bridge separates the Pacific Ocean on the west from the Bay located to the east. The City's limits extend from Naval Air Station North Island (NASNI) south along the Silver Strand to the City of Imperial Beach. The City is also connected to downtown San Diego by the two-mile-long San Diego-Coronado Bay Bridge (State Route 75).

The proposed SWRF and TCF Complex would be constructed in the northern portion of the Coronado Municipal Golf Course, a public recreation facility located in the northeastern quadrant of the City, at 2000 Visalia Row, with Glorietta Bay to the South, the San Diego-Coronado Bay Bridge to the north, San Diego Bay to the east, and residential neighborhoods to the west. The majority of the Coronado Municipal Golf Course is located within the jurisdiction of the Unified Port of San Diego. The City has an existing lease with the Port to operate the golf course.

The project's wastewater diversion pump stations would be constructed near the City's Public Services and Engineering Building, located in the northeastern portion of the City at the intersection of 1st Street and B Avenue. Pipeline construction would occur in existing roads and roadway medians throughout the City. Irrigations lines would be located within the golf course, Spreckels Park, Tidelands Park, and the Orange Avenue medians.

Refer to Figure 1 and Figure 2, Project Site Location and Alignments.

#### 5. Project sponsor's name and address:

Same as lead agency

#### 6. General plan designation:

Open Space (OS); right-of-way (ROW); Orange Avenue Specific Plan

#### 7. Zoning:

Open Space (OS); rights-of-ways (ROW); Orange Avenue Specific Plan

#### 8. Description of project.

The project proposes a new water recycling facility to process wastewater generated within the City and produce disinfected tertiary treated water for use as non-potable landscape irrigation water. Under current conditions, the City transfers all its wastewater to the City of San Diego's E.W. Blom Point Loma Wastewater Treatment Plant via the Transbay Pump Station and Pipeline under San Diego Bay. The wastewater processed at the proposed SWRF would be intercepted from the City's wastewater collection system by a diversion pump station and sent to the SWRF through a new pipeline that would be constructed in existing City streets. Processed waste sludge from the SWRF would be returned to the City's wastewater disposal system in a new pipeline parallel to the wastewater diversion pipeline. Wastewater would be treated to meet California Title 22 standards (§§ 60301-60355), meaning it would be suitable for non-potable use in parks, playgrounds, schoolgrounds, and unrestricted golf courses.

The SWRF would have a peak capacity of 1 million gallons per day of recycled water that would serve the Golf Course tees and fairways, Tidelands Park, Spreckels Park, and Orange Avenue medians, with 0.25 million gallons per day available to California American Water Company for use at their discretion. The SWRF design is based upon the peak month irrigation demands of the Golf Course and park areas to be served with recycled water.

The project's primary elements are described below in greater detail: the SWRF and TCF Complex; additional improvements at the Golf Course; and the pump stations and pipelines that would convey and transmit raw wastewater to the SWRF and treated water and waste byproduct from the SWRF. The proposed TCF would replace the existing TCF located along the western boundary of the golf course along Glorietta Boulevard.

#### SWRF and TCF Complex

The SWRF and TCF would be collocated on a single site within the Golf Course, estimated at approximately 1.65 acres in area. <u>This area would be lowered compared to the existing grade and surrounded by a raised landscaped berm.</u> Based on the current stage of project planning, the City has determined a location for the SWRF and TCF Complex, as shown in Figure 3, Project Overview. The proposed location, would site the complex in the northeastern corner of the Golf Course, approximately 200 feet west of San Diego Bay and just south of the Bayshore Bikeway. The new TCF location would be located up to 1,300 feet from the nearest residence as compared to the existing TCF, which is less than 120 feet from the nearest residence.

The SWRF would be a 350 acre-foot per year (AFY) water recycling plant located at the Golf Course. (Note: the 350 AFY accounts for variability of irrigation demand throughout the year. The plant capacity of 1 million gallons per day referred to in other sections of this MND is the design capacity necessary to satisfy the daily maximum demand.) This facility would be composed of a series of screens, tanks, pumps, and pipes supporting the various stages of the treatment cycle, to be housed inside small buildings and open enclosures, estimated to be approximately 20,000 square feet or less. The plant would use solids

screening, the membrane bioreactor (MBR) process, and the reverse osmosis (RO) process to filter, treat, and disinfect a portion of the recycled water prior to irrigation use.

Wastewater would first be sent through the plant's headworks, which would be an enclosed, odor-controlled facility that would screen influent to remove inorganic materials (e.g., plastics, fibers), preventing damage and excessive wear to downstream equipment. A grit-removal system would extract heavy inorganic particles (e.g., sand and grit) in settling tanks and then discharge the byproduct to an enclosed container for off-site solid waste disposal. Screened wastewater would be routed to the MBR tank for biological treatment, where active bacteria and other microscopic organisms would be introduced to consume a major portion of the wastewater's organic content. Excess solids from the MBR process, known as waste activated sludge would be collected and returned to the regional wastewater collection system for disposal at the Point Loma Wastewater Treatment Plant. Treated effluent would then be sent through an ultraviolet disinfection system, and sodium hypochlorite would then be applied to protect against bacterial regrowth. A portion of the ultraviolet disinfected MBR effluent would be treated by the RO process to further reduce the total dissolved solids in the recycled water to acceptable levels for landscape irrigation purposes.

A pond, approximately three acres or less in size, would be constructed on the golf course to store water output from the system prior to irrigation distribution. The total volume of recycled water storage in the new pond could be as much as 6 million gallons. From this pond, recycled water would be pumped through transmission pipelines for distribution to the Golf Course, Tideland Park, Spreckels Park, and Orange Avenue medians.

The TCF portion of the complex is proposed as approximately 49,000 square feet of space dedicated to equipment storage and other facilities associated with maintenance and operation of the Golf Course, replacing existing maintenance facilities located on the west side of the Golf Course, which would be demolished. This would include a Maintenance Building, an Office and Employee Facilities Building, approximately 2,500 to 3,000 square feet, and an approximately 3,000- to 4,000-square-foot Mechanics Workshop and Equipment Storage facility. Final design may have a drive-through design for maximum usable storage and operational efficiency. Floor drains would be installed and include clarifiers to separate solids, grease and oil from water. Ceiling skylights are included in the specifications to minimize supplemental light usage. Two securable chain link equipment storage cages would be constructed for secure small power tools and hand tools. An Irrigation Room would store sprinkler parts, pipe fitting storage, workbench, and vise for turf sprinkler repair. A dedicated air compressor room would be used for safety and noise containment during compressor operations.

Other supporting facilities at the TCF would be detached from buildings in the Complex for safety and/or noise considerations, including an irrigation pump station; fuel island with two-cell 500-gallon aboveground storage tanks for storing diesel and unleaded fuel; covered storage with spill/leak containment for spent fluids prior to hauling off site for recycling; a trash dumpster enclosure; an equipment cleaning area on a concrete pad; and chemical storage. These supporting facilities are replacing existing similar features currently in use at the Golf Course. Figure 4a, Views from Concept Plan A, and Figure 4b, Views from Concept Plan B, show two layout options for the TCF portion of the complex. As shown in Figure 4a, the maintenance building would be located northwest of the proposed SWRF, adjacent to the proposed pond, while the other supporting facilities would be located north of the maintenance building closer to the existing bike path. Alternatively, Figure 4b shows the maintenance facility in the northern portion of the complex area, adjacent to the existing bike path, while the other supporting facilities are located south of the maintenance building, immediately northwest of the SWRF along the proposed pond.

The SWRF and TCF Complex would have a combination of fence, wall, and/or earthen mounding for security and noise-reduction purposes. The enclosed area would include multiple gates for entry into to and from the Complex onto the joining golf cart paths on the Golf Course. The Complex would be fully paved and designed to accommodate a small crane's access for irrigation pump service as well as truck and trailer bulk deliveries of supplies and equipment. The proposed project would entail creating on-site employee parking adjacent to the SWRF and TCF Complex, ending the current need for on-street employee parking on Glorietta Boulevard, where parked cars are currently visible to adjacent residences. A new access lane/maintenance road would be constructed to provide staff access to the facility. Existing and proposed landscaping, along with building setback and intervening topography would screen and otherwise minimize visibility of the Complex from the adjoining Golf Course, bicycle trail, and nearby residential properties.

The SWRF and TCF Complex would feature a chemical storage area to house the variety of chemicals used in the day-to-day operation of the treatment plant and golf course, and in the periodic cleaning of the treatment processes. Chemical storage would be located an adequate distance from equipment facilities and fueling areas for fire safety, see Figure 4a and Figure 4b. It would contain a securable pesticide chemical storage room, an area designated for dry, palletized material storage such as bagged fertilizer and soil amendments, and separate area for vegetation spray equipment storage. Secondary containment would be provided for each chemical storage vessel/area, with containment sized to hold 110% of the largest storage tank.

The facilities of the SWRF and TCF Complex would be structured with aesthetic properties consistent with Coronado's high quality design standards and would exceed the industrial appearance often associated with municipal corporation yards. Refer to Figures 5a through 5e for conceptual visual renderings of the SWRF and TCF complex. Note that Figures 5d through 5e do not show an "existing" view as these are located from proposed reconfigurations of the golf course locations that do not exist today. Lighting would be low intensity and shielded to minimize ambient light in the area and to inhibit glare to adjoining properties. Acoustical treatments at the collocated facility would include constructing enclosures around specific equipment including, exhaust and blower muffling devices, and pumps, blowers and generators. A combination of a wall, fence, and/or earthen mounding would surround the entire complex and would be included in the design of the co-located facility. The combination of wall, fence, and/or earthen mounding would also serve other purposes from security and aesthetic standpoints by shielding views of the interior facilities. The building envelopes of the SWRF, TCF Complex and Chemical Storage facility could be designed to feature adequate interior-to-exterior sound insulation so that the perimeter fence (or other means of security and aesthetics) would not require substantial sound-reducing properties.

#### Additional Golf Course Improvements

To make room for construction of the SWRF and TCF Complex, the project would require reconfiguring golf holes Nos. 1, 2, 3, and 4.

The project also entails replacement of the existing irrigation system<sup>1</sup> within the Golf Course, installing new purple pipe water lines to carry the recycled water, installing replacement sprinkler heads, and abandoning existing pipes

<sup>&</sup>lt;sup>1</sup> Golf Course personnel estimate the existing irrigation system includes approximately 6,600 linear yards (19,800 linear feet, or 3.75 miles) of irrigation mains that follow the alignment of each hole, with additional laterals connecting to those main lines. This MND assumes installation of the replacement irrigation system will entail trench-based installation of an equivalent 19,800 linear feet of recycled water pipelines, with an assumption of an additional 30% for the laterals, or a total of 25,740 linear feet (4.9 miles) of pipeline installation within the golf course.

in place, unless their removal is required to make room for proposed facilities. Replacement pipe would be small in diameter, to be installed in narrow, shallow trenches, approximately 1 foot below the ground surface. A small pump would be located adjacent to the storage pond for the golf course irrigation system.

#### **Pipelines and Pumping Infrastructure**

In addition to the infrastructure proposed at the Golf Course, the project proposes diversion structures, pump stations, and pipelines elsewhere in the City to convey untreated wastewater to the SWRF, carry treated water and processed waste sludge away from the SWRF, and transmit the treated water to its various destinations for irrigation use.

#### Wastewater Interception and Diversion Infrastructure

Proposed wastewater interception and diversion facilities are shown in Figure 6, Diversion Pipelines. Diversion of wastewater flows from the City's collection system is currently planned to occur at one or two new interception points located in the northeastern portion of the City. It may be possible to construct a single diversion point at or near the intersection of First Street and B Avenue that would divert flows from sewer lines in both streets. Another option utilizes two separate interception points: one point would be constructed beneath B Avenue south of First Street, along the existing Glorietta Bay Force Main that runs beneath B Avenue; the second interception point would be constructed beneath First Street between A Avenue and B Avenue (or beneath A Avenue just south of First Street), along an existing wastewater line that runs beneath First Street. New manholes would be constructed at the interception points to allow surface access to the new connections. In either scenario, a diversion pump station would be constructed in the parking lot of the City's Public Service and Engineering Building, located at the intersection of First Street and B Avenue.

A new 36-inch-diameter lateral would extend to a new 6-foot-diameter pre-cast concrete wet well installed within the City of Coronado Public Works Department parking area on B Avenue. The 6-foot-diameter wet well would be constructed to extend below the flowline of the diversion sewer, creating the working volume for the submersible pumps. Flows from the pump station to the SWRF would be pumped about 1 mile to the SWRF through a new 8-inch-diameter force main that would generally run beneath A Avenue, Second Street, and Glorietta Boulevard, and then along the northern edge of the Golf Course. Once the proposed diversion pipeline reaches the northern edge of the golf course, the remaining stretch of pipeline would continue to the SWRF location, as shown in Figure 3.

Processed waste sludge and membrane cleaning wastes from the SWRF would be returned to the Glorietta Bay Force Main by a new pump station constructed at the SWRF and a force main pipeline constructed parallel to an in a common trench with the wastewater diversion pipeline described above.

The wastewater diversion pump station and waste pump system would be partially above ground and partially below ground. Aboveground components would include a small concrete structure, with secure maintenance access and low-level security lighting. The pump station and waste pump system would be located inside the existing Public Services yard, which is a secure area that would not be directly visible from public vantage points.

#### Recycled Water Distribution Infrastructure

A new water pump in the SWRF would convey recycled water into a force main that would be constructed beneath the Golf Course, Sixth Street and Orange Avenue; however, it is possible that other streets may be utilized as well (see Figure 7). The project would entail installing connections between this recycled water distribution system and new or replacement irrigation systems, including water meters, valves, and valve boxes. Connections would be constructed in the Tidelands Park, Spreckels Park, Orange Avenue medians, and the Golf Course. As mentioned previously, Golf course irrigation would require a small recycled water pump station located adjacent to the storage pond. The project includes construction of new recycled water pipelines to be owned and operated by the California American Water Company that are located throughout various City streets, as shown in Figure 7, Recycled Water Pipelines.

In general, the recycled water distribution system for the proposed project would consist of a purple pipeline system constructed within open space areas (for both City and Port of San Diego properties) and existing roadways. The pipelines and appurtenances would be colored purple to distinguish them from the potable water supply pipelines, as required by Title 22. The distribution system would consist of 4- to 12-inch-diameter recycled water transmission mains and 2-inch-diameter lateral pipelines extending from the transmission mains to the distribution areas. All pipelines would be constructed of polyvinyl chloride (PVC), ductile iron pipe, or high-density polyethylene. Site retrofits for all proposed irrigation distribution systems converting from potable to recycled water include: signage, vaults, and above ground fixtures in purple, tags, and purple sprinkler heads if required by the San Diego Regional Water Quality Control Board (RWQCB).

Tertiary treated water is subject to stringent water quality standards (Title 22 Cal. Code Regs. (§§ 60301-60355). In general, the levels of treatment for recycled water use are set by the State Water Board and are based on levels of human exposure and pathways of exposure leading to infection. Recycled water is being used at zoos, aquaria, and wildlife refuges in California and throughout the United States<sup>2</sup>. It has been investigated for its uses and risk of exposure to animals. Regulators encourage its use by heavy water consumers. Title 22 disinfected tertiary treated water meets the needs of aquatic habitats. An example includes the North Valley Regional Recycled Water Project<sup>3</sup> which is delivering recycled urban wastewater from the City of Modesto to farms and wildlife refuges in California's San Joaquin Valley. The share secured for refuges is approximately 13,000 acre-feet when the project reaches full scale and will be the largest water supply dedicated to wildlife in the San Joaquin Valley in more than 25 years. The Title 22 compliant water is delivered to government wetland areas in the San Joaquin Valley which have suffered water shortages for decades due to the diversions caused by the Central Valley Project. In total, more than 24,000 AFY of

Additional information is provided on the SWRCB's website:

<sup>&</sup>lt;sup>2</sup> State Water Resources Control Board 2015 Water Recycling Survey:

https://www.waterboards.ca.gov/water\_issues/programs/grants\_loans/water\_recycling/docs/tbl1.pdf.

https://www.waterboards.ca.gov/water\_issues/programs/grants\_loans/water\_recycling/munirec.shtml (noting 56,000 AFY were used for golf course irrigation in 2015).

<sup>&</sup>lt;sup>3</sup> As discussed on the North Valley Regional Recycled Water Project website: Because recycled water originates from wastewater, its use is strictly regulated and monitored by regulatory agencies. These guidelines are precautionary measures intended to protect the public from any potential risk associated with recycled water. Recycled water receives a disinfection process that destroys any harmful bacteria before it is used for irrigation. Recycled water is treated to a level that is safe to swim in but is not recommended for drinking. In over 75 years of use, there has never been a documented case of anyone becoming ill from contact with recycled water. (http://www.nvr-recycledwater.org/faq\_copy(1).asp) Tertiary treated recycled water is available for a wide variety of uses as outlined here: http://www.nvr-recycledwater.org/docs/recycled\_water\_uses\_allowed\_in\_california\_-\_title\_22.pdf

recycled water was used for wetlands and wildlife habitats in 2015 (and has likely expanded since that time).

#### Coastal Vista

The project would also include development of an approximately 500–1,000-square-foot coastal vista located near an existing pocket beach along the coastline of San Diego Bay near the number 2 and/or 18 greens, as shown on Figure 3. The coastal vista would provide passive recreational opportunities for the public. Improvements would consist of an approximately 250-foot-long, 10-foot-wide ADA-accessible path between the existing golf course parking lot and the coastal vista; 3–5 park benches, coastal access/wayfinding signs, and lowgrowing landscaping. The City would also add new signage to alert the public of coastal access opportunities through the golf course. Free parking spaces would be dedicated for visitors to the coastal vista, and signs would be installed to demarcate coastal access spaces from general spaces for golf patrons.

#### Construction

Project construction would normally occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday, excluding holidays. For the purposes of analysis, construction and final occupancy are estimated to occur within a 15- to 18-month window. Construction of the facilities and recycled water distribution system is planned for completion in 2022.<sup>4</sup> Refer to Section 3.3, Air Quality, for additional details regarding construction assumptions. Rough grading for modifications of surrounding golf holes and excavation of the recycled water storage pond would need to be completed prior to initiating construction of the SWRF and TCF.

The sequencing of the construction of the SWRF and the Turf Care complex has not been determined. For the purposes of this analysis, it is assumed the two facilities would be constructed at the same time to minimize disruption to play on the Golf Course and to minimize the construction impacts. Additional details on construction assumptions as relied upon in this environmental impact analysis are presented in Appendix A.

Construction of the SWRF would involve typical phasing and activities such as site grading, dewatering, and excavation. Construction truck and equipment traffic would occur, both on the site, and to and from the site. Deliveries of construction related materials and equipment would be limited to weekdays between the hours of 8 a.m. and 5 p.m. to minimize the impacts on local residents. Dust and noise-control measures would be used to minimize migration of off-site impacts. Appropriate construction storm water best management practices as required by a Storm Water Pollution Prevention Plan (SWPPP) such as Wind Erosion Control by applying water to control dust and wind erosion would be implemented. Grading would slope the surface toward Glorietta Boulevard. The cut and fill on the Golf Course would be balanced resulting in no hauling of soils and sediment on or off site. Construction equipment would be modified with adequate mufflers to ensure that the City's noise standards are not exceeded. Materials storage, contractor staging areas, temporary office support, and worker parking facilities would be provided on site at the SWRF with visual screening such as temporary fencing to minimize off-site visual and aesthetic impacts. Damage to off-site facilities, including the Golf Course fairways, would be promptly repaired, and damaged facilities would be restored to the original conditions.

<sup>&</sup>lt;sup>4</sup> The analysis assumes a construction start date of June 2021, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

The diversion pipeline would be constructed using either open-cut or trenchless construction methods. The appropriate construction method would be selected based upon site constraints and soil conditions. For CEQA purposes, it is assumed that all pipelines would be constructed using open-cut methods for environmental analysis of a maximum potential impacts. The diversion pipeline and recycled water distribution system would be constructed with typical construction methods and equipment, although trenchless technologies maybe used for pipeline installations through major intersections along the distribution pipeline alignments.

Construction depths are estimated to be approximately 3 feet for mainline pipelines, 18 inches to 24 inches for laterals, and up to 10 feet for the pump station wet well intake flume and the SWRF. The foundation and structural components of the project facilities would be constructed in accordance with recommendations from the site geotechnical engineering investigation report (Appendix C).

The project facilities are proposed in City ROWs and no permanent easement acquisition would be needed. Construction staging is anticipated to occur in City ROWs, except for a temporary easement that may be needed for staging on California Department of Transportation (Caltrans) property under the San Diego-Coronado Bay Bridge. Additionally, Caltrans would likely require an easement for pipelines crossing their ROW at Third Street, Fourth Street, and Orange Avenue. Caltrans would need to provide permission for use of their facilities prior to the initiation of construction. No disruption would be expected to any existing buildings or structures. It should be noted, however, that the City and Caltrans have a tentative agreement to relinquish ownership of State Routes 75 and 282 (Third and Fourth Streets) from the State of California to the City. If a relinquishment agreement is executed prior to project initiation, easements would not be required to cross areas conveyed to the City.

The proposed project would be designed to avoid or minimize the effect on other existing or planned facilities including gas, electric, and communication facilities, as well as storm drains, water, and sewer pipelines. Wherever practical, existing utilities would not be disrupted during construction. Existing utility infrastructure, such as San Diego Gas & Electric (SDG&E) transmission lines would be stabilized during construction to avoid service disruption.

#### Operation

The SWRF facilities would be operated 24 hours per day during the irrigation season, between April and October. Significantly less production would be required during the non-irrigation season (October 15 through April 15) to meet reduced irrigation demands and maintain the biological integrity of the treatment facilities. When the City is not operating the SWRF, the City would not divert wastewater and would send all its sewage to the Point Loma Wastewater Treatment Plant via the Transbay Pump Station, as under current conditions. Operation of the recycled water pipelines and pump stations would be by between one and three new on-site City or contracted Operations and Maintenance team staff. The TCF facility would be populated by between 10 and 12 employees, the same as under current conditions at the Golf Course. The total employees within the SWRF and TCF Complex would be between 11 and 15. The facility would be supplied power from the existing electric utility grid. The SWRF is expected to use approximately 8,000 kilowatt hours per day during the irrigation season. The SWRF would include a 50-kilowatt portable emergency generator as required by Title 22 for the provision of auxiliary power. In the event of a power loss at the SWRF, the diversion structure would be closed; sewage would bypass the SWRF and would be conveyed to the regional wastewater collection system, consistent with existing operations.

The recycled water system would be constructed and operated in such a way as to maximize the control of offensive odors. Most mechanical equipment of the SWRF would be enclosed to eliminate the potential for uncontrolled odor release, and would also minimize noise transmission. Odor control mechanisms would be established in the headworks, diversion pump station, and waste activated sludge discharge manhole.

The SWRF headworks screening equipment would be installed, covered, and scrubbed using a hydrogen sulfide polishing system with an integrated fan. Passive odor control using activated carbon filters would be installed at the waste activated sludge discharge manhole and on the vent pipe of the influent pump station. The remaining processes are either completely enclosed, are anoxic, or are completely aerobic in nature and therefore do not require mechanical odor control.

The diversion pump station would not be a staffed facility. Regular maintenance would be required by the new staff described above and would consist of routine patrolling, emergency repair, maintenance, inspections, and exercising of valves.

The TCF replaces existing uses on the Golf Course and would not entail an expansion or substantial changes to current operational activity associated with the Golf Course.

Recycled water would be applied for irrigation purposes with amounts pursuant to the Water Conservation in Landscaping Act of 2006 (Assembly Bill [AB] 1881). AB 1881 requires that landscape design, installation, maintenance and management be water efficient and that the irrigation system be designed to prevent runoff, low head drainage (water that flows onto the cart paths or curb after the sprinklers turn off), overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures. AB 1881 specifies calculation of a Maximum Allowable Water Allocation so that water is used in its most efficient manner for landscape irrigation. Additionally, the provisions of Title 22 require that no excess recycled water inadvertently run off or percolate to groundwater.

The City owns and is responsible for the irrigation and water use of the Golf Course, no new agreements are required for the proposed Project. It is anticipated that the City and the California American Water Company would review and amend as necessary its water service franchise agreement to facilitate implementation of the proposed Project

#### 9. Surrounding land uses and setting (Briefly describe the project's surroundings):

The various components of the project would be located through the Coronado Village and Shores area of the City. Surrounding land uses include open space, residential (single- and multi-family), commercial, hotel, civic use, military use, and the San Diego Bay.

#### 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

San Diego Unified Port District (appealable coastal development permit, lease amendment or other real estate agreement, concept approval), City of San Diego, California American Water Company, California Coastal Commission, California Department of Transportation, San Diego Regional Water Quality Control Board, California Department of Public Health Division of Drinking Water, San Diego Air Quality Management District, and San Diego County Department of Environmental Health, Toxic Substances Control Certified Unified Program Agency

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? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

In compliance with AB 52, on March 12, 2020, the City sent notification letters to Tribal representatives that have formally requested such notification under AB 52. One tribe, the Jamul Indian Village of California, has responded and asked for formal consultation. No other Native American tribes requested formal consultation. Government to government consultation between the City and the Jamul Indian Village pertained to protocols included in the cultural resources mitigation measures. Formal consultation with the Jamul Indian Village concluded in April 2020.

#### **Environmental Factors Potentially Affected**

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

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

#### Determination (To be completed by the Lead Agency)

On the basis of 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 in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

9/15/20

Date

### 3.1 Aesthetics

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Ι.	AESTHETICS – Except as provided in Public Re	esources Code S	Section 21099, wo	ould the project:	
a)	Have a substantial adverse effect on a scenic vista?			$\boxtimes$	
b)	Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
C)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

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

**Less-Than-Significant Impact.** For the purposes of this analysis, a scenic vista is defined as a long, expansive view of a highly valued landscape from a publicly accessible vantage point. "Highly valued landscapes" can include natural open spaces, topographic formations including mountains or hills, or more generally, areas that contribute to a high level of visual quality. The State of California has identified the Silver Strand (State Highway 75) and San Diego – Coronado Bridge as a Scenic Highway. Additionally, the City has designated Orange Avenue from Third Street to the Bay as a view corridor.

The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception and diversion pump stations and pipelines. The proposed pipelines necessary to connect the SWRF to the existing municipal wastewater transmission system would be located underground within existing City streets and as such, would not change the physical appearance of the project area. Similarly, the proposed pump stations would be located within developed areas, along existing City streets and would have minimal impact to the visuals of the surrounding area. Additionally, the proposed pond for recycled water storage would be located within the Golf Course and would be constructed similar to other existing ponds; therefore, the pond would not create any visual obstruction to a nearby scenic vista. Furthermore, the proposed aboveground structures, associated with the SWRF and TCF Complex, would be located within the Golf Course and would be visible from the Coronado side of the bridge; however, the buildings are proposed to be low-profile (meaning that the structures would be lowered compared to the

existing grade and would be surrounded by a raised landscaped berm), one story structures that would be screened by existing topography, mature trees and landscaping, and are characteristic of small buildings commonly found on golf courses (and currently exist within the Golf Course). As such, views of the structures from the bridge would be very limited, both spatially and temporally. Thus, motorists driving across the bridge may receive a 1-2 second glimpse of the proposed SWRF and TCF Complex at most. Further proposed landscaping that would be added as part of the project would provide additional screening. As such, the proposed facilities would blend in with the surroundings at distance. The development of new aboveground facilities would not alter the overall view of the Golf Course and city from the bridge, a view which dominantly consists of large mature trees, the San Diego Bay, and Point Loma.

Under existing conditions, the Golf Course includes two restaurants, a golf shop, and a driving range - all of which consist of an above-ground structures, some of which are larger in footprint and height than the proposed SWRF and TCF Complex. The height of the structures would not substantially differ as the existing and proposed structures would be one-story. Poles and netting, which surround the driving range, stand taller than the existing structures on site; and thus, would stand taller than the proposed SWRF and TCF Complex. Simulations were performed and a narrative description is included here to provide an estimation of the anticipated visual change resulting from the proposed project (refer to Figures 5a through 5e). These visual simulations performed for the project found that the aboveground structures associated with the SWRF and TCF Complex would not affect visual quality of the area or obstruct scenic views. These visual simulations show the potential views of five different viewpoints with regard to the proposed Concept Plan A (concept A) and the proposed Concept Plan B (concept B) for the SWRF and TCF Complex (Figures 5a through 5e). The location which best represents the views for the public at large is the view in Figure 5D (i.e. from Glorietta Boulevard). While viewpoints and simulations from other locations, such as the bike path were provided for the purposes of disclosure (i.e. Figure 5B), the bike path location is not considered to be a "scenic vista," given the lack of elevation, the limited views of the ocean, and the existing landscaping and fencing. The project would also include development of an approximately 500-1,000-square-foot coastal vista located near an existing pocket beach along the coastline of San Diego Bay near the number 2 and/or 18 greens, thereby improving public access to scenic vistas to the public in comparison to baseline conditions. The project would also provide for the demolition of the existing TCF, thereby improving the visual environment along Glorietta Boulevard in comparison to existing conditions.

The first viewpoint, from the bike path/400 block area of Glorietta Boulevard, observes the #4 green of the golf course, tall ornamental trees, and a slight view of the San Diego Bay (Bay). As shown in Figure 5a, Visual Simulation – View from Bike Path/400 Block, potential views from the viewpoint area under concept A and concept B would be altered as trees blocking views of the Bay would be removed. Aboveground structures from the Complex would not be visible under concept A. Only a corner of the maintenance building would be visible with concept B; however, visibility would be minimal and would not affect the visual quality of the area. As shown on Figure 5b, the view from the second viewpoint, the bike path, includes tall ornamental trees and a chain link fence on both sides of the path. Additionally, the Coronado Bridge is visible to the north. Under concept A and concept B, the Bay would become visible from this viewpoint as well as the view of an aboveground structure within the Complex to the south, due to the removal of existing ornamental vegetation abutting the chain link fence. The visible structure would either be a chemical storage building as shown in concept A or a maintenance building; however, neither structure would obstruct the newly created view of the Bay and would be visually compatible with developed area. While views at this location would be altered from the existing condition, the proposed structures and

associated landscaping/development would be similar to that which already exists within the Gold Course. Additionally, this view would be temporary as bicyclists would be passing along the bike path before turning north under the Coronado Bridge.

Additionally, the visual simulations performed for the reconfigured areas of the Golf Course show that views of the proposed aboveground structures within the Complex would be minimal. With implementation of both concept A and concept B, the view from viewpoint 3, the proposed new #2 tee location toward the #2 fairway, would include the proposed pond, tall ornamental trees, the golf course clubhouse building, an aboveground structure within the Complex, and a distant view of multi-story buildings to the south (see Figure 5c, Visual Simulation - View from new #2 tee toward #2 fairway). The structure, which would be located on the east side of the proposed pond, would be a maintenance building in concept A and a chemical storage building in concept B. However, under both plans, the view of the building would be visually screened as trees and shrubs would provide almost full coverage. Viewpoint 4, the proposed new #1 green toward the Bay, would include a view of the proposed pond, an aboveground structure within the Complex, tall ornamental trees, the Coronado Bridge, and minimal sight of the Bay (see Figure 5d, Visual Simulation - View from new #1 green toward the bay). Under concept A, a majority of the buildings within the Complex would be covered by trees and shrubs and the partial visibility of the maintenance building would be minor. However, with implementation of concept B, the maintenance building would be located on the eastside of the proposed pond and would be fully visible. The building would not obstruct any potential views that visitors or players would experience throughout the Golf Course without the project. Additionally, from Viewpoint 4, the building would blend with the view of the Coronado Bridge located behind the building in the same line of view. Lastly, from Viewpoint 5, the proposed new #3 fairway toward the #3 green, the view would include tall ornamental trees, the Coronado Bridge, the Bay, and a row of multi-story buildings beyond the Bay (see figure 5e, Visual Simulation - View from new #3 fairway toward #3 green). With implementation of concept B, the maintenance building would be visible; however only a small portion of the building would be visible and tall ornamental trees would provide additional visual screening. Although part of the maintenance building would still be visible, the view from Viewpoint 5 would also include the Coronado Bridge and multi-story buildings of downtown San Diego; therefore, the maintenance building would not obstruct views. Further, aboveground structures proposed within the Complex under concept A would not be visible from this viewpoint.

Additionally, the project site does not support any significant scenic resources such as rocks or historic buildings. Trees would be located throughout the project site; however, trees within the Golf Course would be large trees which would tower over the proposed SWRF and TCF Complex. The remaining project components would involve the construction of a pump station and the extension of pipelines which would be located underground and have no visual effect on any potential scenic resources. Development of the project would involve grading, excavation, open-trench construction, and other similar construction activities which would create a visual impact. However, construction impacts would be temporary and as such would not permanently affect views of the project area. Therefore, impacts associated with the adverse effect on a scenic vista would be less than significant.

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

Less-Than-Significant Impact. See response to Section 3.1(a), above.

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

**No Impact.** California Public Resources Code Section 21071 defines an "urbanized area" as "(a) an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." As of January 2019, the population of Coronado is 24,199 persons (DOF 2019). However, the City of San Diego is located east of the City and has a population of 1,420,572 persons (DOF 2019). Therefore, the project is an urbanized area, and the following analysis considers whether the project would conflict with applicable zoning and other regulations governing scenic quality.

Construction activities associated with the project would temporarily be visible to motorists and pedestrians. The above-ground improvements would be limited to new buildings on the Golf Course. As described in response 3.1(a) above, all new structures would be low profile, single-story structures and would be screened from public vantage points by existing, mature trees and landscaping. The proposed buildings would also be characteristic of structures commonly found on a golf course. Additionally, the proposed pond for recycled water storage would be located within the Golf Course and would be located within the ground and would not affect the existing visual character of the project area. The proposed pipelines would be located underground and diversion pump stations would be located within developed areas, along existing City streets. Construction activities associated with the proposed pipelines and pump stations would be temporary and would not result in long-term impacts related to scenic quality.

In addition, the project would not conflict with applicable zoning or any regulations governing scenic quality. Therefore, with regard to degradation of the existing visual character or quality of the site, no impact would occur.

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

**Less-Than-Significant Impact.** The project would include above-ground improvements consisting of new buildings on the Golf Course. Outdoor lighting would be limited to low watt security lighting which would be downward cast to prevent any light trespass or excessive glare to prevent any significant impacts to nighttime views. Furthermore, this lighting would be partially blocked by the surrounding berm and the additional landscaping, and would be similar to the existing TCF which is proposed for demolition and replacement by the proposed project. Therefore, impacts associated with light or glare would be less than significant.

### 3.2 Agriculture and Forestry Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:						
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?					
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				$\boxtimes$	
C)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?					
d)	Result in the loss of forest land or conversion of forest land to non-forest use?					
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?					

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

*No Impact.* The project site is located in a highly urbanized area. According to the California Department of Conservation's California Important Farmland Finder, most of the County—including the City—is not mapped under the Farmland Mapping and Monitoring Program, and, thus, does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (collectively Important Farmland) (DOC 2016). Therefore, no impacts associated with conversion of Important Farmland would occur.

#### b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

*No Impact.* The entire City is highly developed and urbanized and as such does not support agricultural land uses. The various project sites have a variety of zonings including, open space (within the Golf Course), ROWs, and the Orange Avenue Specific Plan (City of Coronado 2005). As such, implementation of the project would not conflict with existing zoning for agricultural use or land under a Williamson Act contract, and no impact would occur.

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

*No Impact.* The project site is located within a highly urbanized area. According to the City's Zoning Map, the project site is not located on or adjacent to forest land, timberland, or timberland zoned Timberland Production (City of Coronado 2005). Therefore, the project would not conflict with existing zoning or cause rezoning of forest land or timberland, and no impacts associated with forestland or timberland would occur.

#### d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

*No Impact.* The project site is located in a highly urbanized area. The project site is not located on or adjacent to forest land. No forest land, private timberlands or public lands with forests are located in the City. Therefore, no impact associated with the loss or conversion of forestland would occur.

# e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

*No Impact.* The project site is not located on or adjacent to any parcels identified as Important Farmland or forestland. In addition, the project would not involve changes to the existing environment that would result in the indirect conversion of Important Farmland or forestland located away from the project site. Therefore, no impacts associated with the conversion of Farmland or forestland would occur.

### 3.3 Air Quality

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact		
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:							
a)	Conflict with or obstruct implementation of the applicable air quality plan?				$\boxtimes$		

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				
C)	Expose sensitive receptors to substantial pollutant concentrations?				
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			$\boxtimes$	

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

No Impact. The San Diego Air Pollution Control District (SDAPCD) and San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the San Diego Air Basin (SDAB). The County Regional Air Quality Strategy (RAQS) was initially adopted in 1991 and is updated on a triennial basis. The RAQS outlines the SDAPCD's plans and control measures designed to attain the state air quality standards for ozone. The RAQS relies on information from California Air Resources Board (CARB) and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the county, to project future emissions and then determine strategies necessary to reduce emissions through regulatory controls. CARB mobile source emission projects and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by San Diego County and cities in the county as part of the development of their general plans. The RAQS relies on SANDAG growth projections based on population, vehicle trends, and land use plans developed by cities and the county as part of development of their general plans. As such, projects that proposed development consistent with the growth anticipated by local plans would also be consistent with RAQS. However, if a project proposed development greater than what was anticipated in the local plan and SANDAG's growth projections, the project could be in conflict with the RAQS and may contribute to a potentially significant cumulative air quality impact.

The project would construct a water recycling facility, a golf maintenance facility, new underground pipelines to convey recycled water, and associated irrigation connections. The project is consistent with the Coronado General Plan, Orange Avenue Corridor Specific Plan, and Zoning Ordinance. The project is not growth inducing and thus would not obstruct implementation of the RAQS. Therefore, no impact would occur.

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

**Less-Than-Significant Impact.** Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SDAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level

thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

#### **Construction Emissions**

Construction of the proposed project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and volatile organic compound [VOC] off-gassing) and off-site sources (worker vehicle trips). Construction emissions can vary substantially day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions.

Criteria air pollutant emissions associated with construction activities were quantified using CalEEMod. Default values provided by the program were used where detailed proposed project information was not available. A detailed depiction of the construction schedule—including information regarding phasing, equipment used during each phase, haul trucks, vendor trucks, and worker vehicles—is included in Section 1.1, Project Overview. The information contained in Appendix A was used as California Emissions Estimator Model (CalEEMod) inputs.

Development of the proposed project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, asphalt pavement application, and architectural coatings. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in coarse and fine particulate matter ( $PM_{10}$  and  $PM_{2.5}$ ) emissions. The proposed project would be subject to SDAPCD Rule 55, Fugitive Dust Control. This rule requires that the proposed project take steps to restrict visible emissions of fugitive dust beyond the property line. Compliance with Rule 55 would limit fugitive dust ( $PM_{10}$  and  $PM_{2.5}$ ) generated during grading and construction activities.

Exhaust from internal combustion engines used by construction equipment and vehicles would result in emissions of VOC, oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), sulfur oxides (SO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub>. The application of asphalt pavement and architectural coatings would also produce VOC emissions.

For purposes of estimating project emissions and based on information provided by the City and CalEEMod default values, it is assumed that construction would commence in June 2021 and would last approximately 18 months. The analysis contained herein is based on the following assumptions (duration of phases is approximate):

- Golf Course Master Planning Construction 6 months
- Access Lane/maintenance road 2 months
- SWRF and Turf Care Buildings 5 months
- Paving 2 weeks
- Architectural Coating 2 weeks
- Recycled Water Storage Ponds 4 months
- Recycled Water Treatment System 11 months
- Wastewater Diversion Pump Station and Pipeline 8 months
- Discharge Pipeline 8 months
- SWRF Startup 2 months

- Recycled Water Distribution System 9 months
- Irrigation System 8 months
- Turf Establishment of New Holes 5 months

The construction equipment mix used for the air emissions modeling of the proposed project is shown in Table 3.3-1, and is based on input from the City. For this analysis, it was generally assumed that heavy construction equipment would operate at the site for approximately up to 12 hours a day, 6 days a week, during project construction, although equipment could operate fewer hours depending on the construction activity and is noted as such.

#### Table 3.3-1. Construction Scenario Assumptions

	One-Way Vehicle Trips			Equipment			
Construction Phase (Duration)	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours	
Golf Course Master	14	2	0	Concrete/Industrial Saws	1	12	
Planning				Crawler Tractors	1	12	
Construction				Tractors/Loaders/Backhoes	2	12	
				Trenchers	1	12	
Access Lane/	6	2	0	Rubber-Tired Dozers	1	12	
maintenance road				Tractors/Loaders/Backhoes	1	12	
SWRF and Turf	12	12	0	Cranes	1	12	
Care Buildings				Tractors/Loaders/Backhoes	2	12	
Paving	14	4	0	Cement and Mortar Mixers	1	12	
				Pavers	1	12	
				Paving Equipment		12	
				Rollers	1	12	
				Tractors/Loaders/Backhoes	1	12	
Architectural Coating	6	0	0	Air Compressors	1	12	
Recycled Water	10	2	4,250	Scrapers	1	12	
Storage Ponds				Tractors/Loaders/Backhoes	2	12	
Recycled Water	20	12	0	Cranes	1	12	
Treatment System				Excavators	1	12	
				Forklifts	1	12	
				Pumps	1	12	
				Tractors/Loaders/Backhoes	1	12	
Wastewater	12	4	0	Pavers	1	12	
Diversion Pump				Tractors/Loaders/Backhoes	1	12	
Station and Pipeline				Trenchers	1	12	
Discharge Pipeline	12	4	0	Pavers	1	12	
				Rubber-Tired Dozers	1	12	
				Tractors/Loaders/Backhoes	1	12	

	One-Way Vehicle Trips			Equipment			
Construction Phase (Duration)	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours	
				Trenchers	1	12	
Recycled Water	16 4		0	Pavers	1	12	
Distribution System				Rubber-Tired Dozers	1	12	
				Tractors/Loaders/Backhoes	1	12	
				Trenchers	1	12	
Irrigation System	on System 32 2 0 Concrete/Industrial Saws		1	12			
				Excavators	1	12	
				Rollers	1	12	
				Trenchers	2	12	
Turf Establishment	16	0	0	Forklifts	1	12	
of New Holes				Other Construction Equipment	1	12	

Table 3.3-1. Construction Scenario Assumptions

Note: See Appendix A for additional details.

Table 3.3-2 shows the estimated maximum daily construction emissions associated with construction of the proposed project without mitigation. Complete details of the emissions calculations are provided in Appendix A.

	VOC	NOx	СО	SOx	PM <sub>10</sub>	PM <sub>2.5</sub>
Year	Pounds per day					
2021	10.23	115.31	80.54	0.18	11.33	7.37
2022	45.56	108.54	99.70	0.17	6.96	5.73
Maximum	45.56	115.31	99.70	0.18	11.33	7.37
SDAPCD Threshold	75	250	550	250	100	55
Threshold Exceeded?	No	No	No	No	No	No

Table 3 3-2 Estimated Maximum Dail	y Construction Criteria Air Pollutant Emissions	
	y construction chiena All Follutant Emissions	

**Notes:** VOC = volatile organic compound;  $NO_x$  = oxides of nitrogen; CO = carbon monoxide;  $SO_x$  = sulfur oxides;  $PM_{10}$  = coarse particulate matter;  $PM_{2.5}$  = fine particulate matter; SDAPCD = San Diego Air Pollution Control District; CalEEMod = California Emissions Estimator Model.

See Appendix A for complete results.

The values shown are the maximum summer or winter daily emissions results from CalEEMod. Although not considered mitigation, these emissions reflect the CalEEMod "mitigated" output, which accounts for the required compliance with SDAPCD Rule 55 (Fugitive Dust) and Rule 67.0.1 (Architectural Coatings).

As shown in Table 3.3-2, daily construction emissions would not exceed the significance thresholds for any criteria air pollutant. Therefore, impacts during construction would be less than significant.

#### **Operational Emissions**

Operation of the proposed project would generate VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from mobile sources (vehicle trips), area sources (consumer products, landscape maintenance equipment), stationary sources (emergency generator), and energy sources. Pollutant emissions associated with long-

term operations were quantified using CalEEMod. Project-generated mobile source emissions were estimated in CalEEMod based on project-specific trip rates. CalEEMod default values were used to estimate emissions from the proposed project area and energy sources.

#### Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2017). Consumer product VOC emissions for the buildings are estimated in CalEEMod based on the floor area of buildings and on the default factor of pounds of VOC per building square foot per day. Consumer products associated with the parking lot and other asphalt surfaces include degreasers, which were estimated based on the square footage of the parking lot and the default factor of pounds of VOC per square foot per day. The CalEEMod default values for consumer products were assumed.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from the application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emissions factor is based on the VOC content of the surface coatings, and SDAPCD's Rule 67.0.1 (Architectural Coatings) governs the VOC content for interior and exterior coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2015). The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating (CAPCOA 2017).

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated with landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days.

#### **Energy Sources**

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gases (GHGs) in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site.

# Mobile Sources

Following the completion of construction activities, the proposed project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of the residents of the proposed project. The project was assumed to include up to 30 one-way trips per day. CalEEMod default data, including trip characteristics and emissions factors, were used for the model inputs. Project-related traffic was assumed to include a mixture of vehicles in accordance with the associated use, as modeled within the CalEEMod. Emission factors representing the vehicle mix and emissions for 2022 were used to estimate emissions associated with vehicular sources.

# Stationary Sources

The SWRF would include a 50-kilowatt portable emergency generator as required by Title 22 for the provision of auxiliary power. It was assumed that the generator would operate in accordance with SDAPCD Rule 69.4.1 for one hour per month and up to 52 hours per year. The CalEEMod default emission factors for emergency generators were used to estimate emissions from this source.

Table 3.3-3 presents the maximum daily area, energy, and mobile source emissions associated with operation (Year 2022) of the proposed project without mitigation. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix A.

	VOC	NOx	СО	SOx	PM <sub>10</sub>	PM2.5
Emission Source	Pounds p	oer day				
Area	0.39	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.03	0.02	0.00	0.00	0.00
Mobile	0.04	0.18	0.52	0.00	0.16	0.04
Stationary	0.14	0.46	0.51	0.00	0.02	0.02
Total	0.57	0.67	1.05	0.00	0.18	0.06
SDAPCD Threshold	75	250	550	250	100	55
Threshold Exceeded?	No	No	No	No	No	No

# Table 3.3-3. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

**Notes:** VOC = volatile organic compound;  $NO_x$  = oxides of nitrogen; CO = carbon monoxide;  $SO_x$  = sulfur oxides;  $PM_{10}$  = coarse particulate matter;  $PM_{2.5}$  = fine particulate matter; SDAPCD = San Diego Air Pollution Control District; CalEEMod = California Emissions Estimator Model.

See Appendix A for complete results.

The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect the CalEEMod "mitigated" output, which accounts for compliance with SDAPCD Rule 67.0.1 (Architectural Coatings).

As shown in Table 3.3-3, the combined daily area, energy, and mobile source emissions would not exceed the SDAPCD's operational thresholds for VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

## Cumulative Analysis

The SDAB has been designated as a federal nonattainment area for ozone  $(O_3)$  and a state nonattainment area for  $O_3$ ,  $PM_{10}$ , and  $PM_{2.5}$ . The poor air quality in the SDAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., VOCs and NO<sub>x</sub> for  $O_3$ ) potentially contribute to

poor air quality. In analyzing cumulative impacts from a project, the analysis must specifically evaluate the project's contribution to the cumulative increase in pollutants for which the SDAB is designated as nonattainment for the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). If the project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, a project would only be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

Regarding short-term construction impacts, the SDAPCD thresholds of significance are used to determine whether the project may have a short-term cumulative impact. As shown in Table 3.3-1, the project would not exceed any criteria air pollutant during construction. Therefore, the project would have a less than significant cumulative impact during construction.

Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions in the basin to ensure the SDAB continues to make progress toward NAAQS- and CAAQS-attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative operational impacts if they represent development and population increases beyond regional projections.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the State Implementation Plan and RAQS serve as the primary air quality planning documents for the state and SDAB, respectively. The State Implementation Plan and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and the County as part of the development of their general plans. Therefore, projects that propose development that is consistent with the growth anticipated by local plans would be consistent with the State Implementation Plan and RAQS and would not be considered to result in cumulatively considerable impacts from operational emissions. As stated previously, the proposed project would not result in significant regional growth that is not accounted for within the RAQS. As a result, the proposed project would not result in a cumulatively considerable contribution to pollutant emissions. Cumulative impacts would be less than significant during construction and operation.

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

**Less-Than-Significant Impact**. Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed "sensitive receptors" are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by CARB (2005), include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. As such, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. The closest sensitive receptors to the proposed project are residences <u>approximately 1,3200</u>

feet to the west of the project site. The proposed project would be in close proximity to residential sensitive receptors during the construction of the pipelines.

# Health Impacts of Toxic Air Contaminants

"Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of toxic air contaminants (TACs) resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have noncarcinogenic effects. TACs that would potentially be emitted during construction activities would be diesel particulate matter emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB airborne toxic control measures to reduce toxic air contaminants emissions. According to the Office of Environmental Health Hazard Assessment, Health Risk Assessments should be based on a 30-year exposure duration based on typical residency period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, the duration of proposed construction activities (approximately 18 months) would only constitute a small percentage of the total long-term exposure period and would not result in exposure of proximate sensitive receptors to substantial TACs. After proposed construction is completed, there would be no long-term source of TAC emissions during operation. Therefore, TAC emissions from construction and operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations and would result in a less-than-significant impact.

# Health Impacts of Carbon Monoxide

Mobile-source impacts occur on two basic scales of motion. Regionally, project-related travel would add to regional trip generation and increase the vehicle miles travelled (VMT) within the local airshed and the SDAB. Locally, project-related traffic would be added to the City's roadway system. If such traffic occurs during periods of poor atmospheric ventilation, consists of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and operates on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO "hotspots" in the area immediately around points of congested traffic. Because of continued improvement in mobile emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing.

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. To verify that the proposed project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted. The potential for CO hotspots was evaluated based on the results of the traffic report. City of San Diego's Significance Determination Thresholds (City of San Diego 2016) CO hotspot screening guidance was followed to determine if the project would require a site-specific hotspot analysis. The City recommends that a quantitative analysis of CO hotspots be performed if a proposed development causes a six-lane or four-lane roadway to deteriorate to a level of service (LOS) E or worse, causes a six-lane roadway to drop to LOS F, or if a proposed development is within 400 feet of a sensitive receptor and the LOS is D or worse. The project's would generate up to four new one-way trips per day and would not exceed any of the City's screening guidance for CO hotspots. Therefore, a CO hotspot analysis is not needed and the proposed project would have a less-than-significant impact.

# Health Impacts of Other Criteria Air Pollutants

Construction and operation of the proposed project would not result in emissions that exceed the SDAPCD's emission thresholds for any criteria air pollutants. Regarding VOCs, some VOCs are associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which would not result in the exceedances of the SDAPCD's thresholds. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, SDAPCD Rule 67.0.1 restricts the VOC content of coatings for both construction and operational applications.

In addition, VOCs and NO<sub>x</sub> are precursors to O<sub>3</sub>, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS (the SDAB is designated by the U.S. Environmental Protection Agency as an attainment area for the 1-hour O<sub>3</sub> NAAQS standard and 1997 8-hour NAAQS standard). The health effects associated with O<sub>3</sub> are generally associated with reduced lung function. The contribution of VOCs and NO<sub>x</sub> to regional ambient O<sub>3</sub> concentrations is the result of complex photochemistry. The increases in O<sub>3</sub> concentrations in the SDAB due to O<sub>3</sub> precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O<sub>3</sub> concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O<sub>3</sub> ambient air quality standards tend to occur between April and October when solar radiation is highest.

The holistic effect of a single project's emissions of  $O_3$  precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC and NO<sub>x</sub> emissions associated with proposed project construction and operations could minimally contribute to regional  $O_3$  concentrations and the associated health impacts. Due to the minimal contribution during construction and operation, health impacts would be less than significant.

Regarding nitrogen dioxide (NO<sub>2</sub>), according to the construction emissions analysis, construction of the proposed project would not contribute to exceedances of the NAAQS and CAAQS for NO<sub>2</sub>. Health impacts from exposure to NO<sub>2</sub> and NO<sub>x</sub> are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, these operations would be relatively short term. Additionally, off-road construction equipment would operate at various portions of the site and would not be concentrated in one portion of the site at any one time. Construction of the proposed project would not require any stationary emission sources that would create substantial, localized NO<sub>x</sub> impacts. Therefore, health impacts would be less than significant.

The VOC and NO<sub>x</sub> emissions, as described previously, would minimally contribute to regional O<sub>3</sub> concentrations and its associated health effects. In addition to O<sub>3</sub>, NO<sub>x</sub> emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO<sub>2</sub>. The existing NO<sub>2</sub> concentrations in the area are well below the NAAQS and CAAQS standards. Thus, it is not expected that the proposed project's operational NO<sub>x</sub> emissions would result in exceedances of the NO<sub>2</sub> standards or contribute to the associated health effects. CO tends to be a localized impact associated with congested intersections. The associated CO "hotspots" were discussed previously as a less-than-significant impact. Thus, the proposed project's CO emissions would not contribute to significant health effects associated with this pollutant. Likewise, PM<sub>10</sub> and PM<sub>2.5</sub> would not contribute to potential exceedances of the NAAQS and CAAQS for particulate matter, would not obstruct the SDAB from coming into attainment for these pollutants, and would not contribute to significant health effects.

Based on the preceding considerations, health impacts associated with criteria air pollutants would be less than significant.

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

**Less-Than-Significant Impact.** Section 41700 of the California Health and Safety Code and SDAPCD Rule 51 (Public Nuisance), prohibit emissions from any source whatsoever in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public health or damage to property. Projects required to obtain permits from SDAPCD are evaluated by SDAPCD staff for potential odor nuisance, and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance.

SDAPCD Rule 51 (Public Nuisance) also prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors. Odor issues are very subjective by the nature of odors themselves and due to the fact that their measurements are difficult to quantify. As a result, this guideline is qualitative and will focus on the existing and potential surrounding uses and location of sensitive receptors.

The occurrence and severity of potential odor impacts depends on numerous factors: the nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress among the public, and generate citizen complaints. <u>The closest sensitive receptors to the project site are residences located approximately 1,300 feet to the west.</u>

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed project. Potential odors produced during proposed construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Odors from the SWRF would be primarily comprised of reduced sulfur compounds formed in the breakdown of raw sewage under reducing anaerobic conditions. These reducing conditions primarily occur within the sewage collection system prior to sewage entering the SWRF, and as such, the proposed SWRF would not result in a significant generation of odors, rather the facility would be merely a location for potential fugitive release. Therefore, the entrance point of raw sewage, anaerobic basin, and solid waste handling would be the primary potential odor sources at the proposed SWRF. The raw sewage at the proposed SWRF is primarily located in enclosed facilities that are not exposed to the air; thus, no odor from raw sewage would be emitted. The MBR process adds oxygen to the wastewater, and does not allow anaerobic conditions to occur; thereby reducing and in most instances eliminating offensive odors. The processing of solids handling at the SWRF would be fully enclosed thereby reducing or eliminating odors.

Most mechanical equipment at the SWRF site would also be enclosed to minimize noise transmission and eliminate the potential for uncontrolled odor release with the exception of the aeration tanks that would be

open. Acoustical treatments would include constructing enclosures around specific equipment including, exhaust and blower muffling devices, and pumps, blowers and generators.

During particular time frames such as the beginning and ending of the work shift and break periods, there would be peak equipment activity entering/exiting as well as circulating within the new co-located TCF. A sound deadening wall surrounding the entire complex would be included in the design of the co-located facility. The wall would also serve other purposes from security and aesthetic standpoints by shielding views of debris, and equipment.

The recycled water system would be required to be designed and constructed so that odors are nondetectable. To meet this objective, odor control would be provided on the headworks, diversion pump station, and waste activated sludge discharge manhole. The headworks screening equipment would be enclosed and have a hydrogen sulfide/odor control. Passive odor control using activated carbon filters would be installed on the vent pipe of the influent pump station. The remaining processes will have provisions for odor control or are completely aerobic, and therefore do not require mechanical odor control. Therefore, proposed project operations would result in an odor impact that would be less than significant.

# 3.4 Biological Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV.	BIOLOGICAL RESOURCES - 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 Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
C)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				

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

# 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 Game or U.S. Fish and Wildlife Service?

**Less-Than-Significant Impact with Mitigation Incorporated.** The Golf Course, public parks, and Orange Avenue medians are characterized by mature ornamental landscaping which is predominantly non-native to San Diego County. The sites do not support any sensitive habitats or listed species as designated by the U.S. Fish and Wildlife Service or the California Department of Fish and Wildlife. Although the project site does not support and candidate, sensitive, or special status species, it is possible that mature trees within the Golf Course or public parks could serve as nesting sites for birds protected by the Migratory Bird Treaty Act, and therefore impacts would be considered potentially significant without incorporate of mitigation measures. Accordingly, construction activities performed during the nesting bird season (February 15 through August 31) must avoid any active nests to comply with the Migratory Bird Treaty Act. Therefore, with implementation of Mitigation Measure (**MM)-BIO-1**, impacts associated with wildlife movement or wildlife corridors would be less than significant.

Pre-Construction Nesting Birds Surveys and Reporting. To avoid impacts to breeding and MM-BIO-1: nesting birds in accordance with the Migratory Bird Treaty Act and California Fish and Game Code, construction activities shall take place outside of the nesting season; nesting season is March 1 (January 1 for raptors) through September 15. If construction cannot take place outside the nesting season, a breeding/nesting bird survey shall be conducted by a qualified biologist within 72 hours prior to ground-disturbing or tree removal activities to determine if active nests of bird species, including raptors, protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the impact area or within 300-500 feet of the impact area. If active nests are found within project's work area, nearby trees, or within pipes stored in construction laydown areas, they will be avoided until the nest is vacated and juveniles have fledged. Additionally, an avoidance buffer shall be established (typically 50 to 300-500 feet, depending on the species) around the active nest to ensure indirect or incidental take of nesting species does not occur in compliance with the California Fish and Game Code. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. A survey and monitoring report documenting the pre-construction survey results and implemented avoidance measures shall be submitted to the City of Coronado Community Development Department.

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

*No Impact.* The project site does not support any riparian habitat or any other sensitive vegetation community identified by a local or regional plan, the California Department of Fish and Wildlife, or the U.S. Department of Fish and Wildlife. Therefore, no impacts associated with riparian or sensitive vegetation communities would occur.

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

**Less-Than-Significant Impact.** No federally defined waters of the United States or state occur within the project site. This includes the absence of federally defined wetlands and other waters (e.g., drainages) and state-defined waters (e.g., streams and riparian extent) (USFWS 2020). However, the project would be sited at least 200-feet away from San Diego Bay. Therefore, the project would be subject to typical restrictions and requirements that address erosion and runoff (e.g., best management practices [BMPs]), including those of the Clean Water Act in order to eliminate runoff or spills into the Bay. In addition, all construction activities would be limited to developed and disturbed land. Thus, impacts associated with jurisdictional waters or wetlands would be less than significant.

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

*Less-Than-Significant Impact with Mitigation Incorporated*. Wildlife corridors are linear, connected areas of natural open space that provide avenues for migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as stepping stones for wildlife dispersal.

The City's General Plan and Local Coastal Program (LCP) Land Use Plan do not identify any wildlife corridors. However, as shown in Figure 7 of the LCP, the LCP designates a Wildlife Preserve Modifying Zone in the area within the City that is encompassed by the City of Imperial Beach, the Pacific Beach; the Southern boundary of the Silver Strand State Beach; Highway 75; the boundary between the Coronado Cays residential development and the salt marsh established by the Coronado Cays Company; the southern shoreline of the Coronado Cays; and the municipal boundary line shared by the cities of Coronado and San Diego in San Diego Bay (City of Coronado 2005). The project site is located approximately 3.6 miles north of the designated Wildlife Preserve Modifying Zone and thus, is not considered a wildlife preserve area. The project site includes a developed municipal golf course, two developed active public parks, and street rights-of-way (ROWs).The project site is a fully developed urban area which is not connected to any natural open spaces which could serve as habitat for sensitive wildlife species. Therefore, impacts would be less than significant.

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

*No Impact.* The project would not result in any significant impacts to biological resources; therefore, there would not be any conflict with local policies or ordinances adopted to protect biological resources. Furthermore, per Chapter 52.32 of the Coronado Municipal Code (CMC), the project would be required to replace any trees removed along ROWs and Golf Course in accordance with the City's street tree policy. Therefore, no impact associated with local policies or ordinances protecting biological resources would occur.

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

*No Impact.* The project site is not located within any habitat conservation plan; natural community conservation plan; or other approved local, regional, or state habitat conservations plan area. Therefore, no impact associated with an adopted conservation plan would occur.

# 3.5 Cultural Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
۷.	CULTURAL RESOURCES – Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?			$\boxtimes$	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
C)	Disturb any human remains, including those interred outside of dedicated cemeteries?			$\boxtimes$	

Dudek completed a Cultural Resources Inventory Report (cultural report) in March 2020. The cultural report is included as Appendix B to this MND. Further detail on the background and methodologies regarding the cultural resources analysis are found in Appendix B.

# Methods

# Archival Methods

A California Historical Resources Information System records search was conducted at the South Coast Information Center (SCIC) on January 22, 2020, for the project and a half-mile radius surrounding the project. This search included their collection of mapped prehistoric, historical, and built-environment resources, Department of Parks and Recreation (DPR) Site Records, technical reports, archival resources, and ethnographic references. Additional consulted sources included the National Register of Historic Places (NRHP), California Inventory of Historical Resources/California Register of Historical Resources (CRHR) and listed Office of Historic Preservation Archaeological Determinations of Eligibility, California Points of Historical Interest, California Historical Landmarks, and Caltrans Bridge Survey information.

# Field Methods

An intensive pedestrian cultural survey of the proposed project area was conducted on February 14, 2020. Areas throughout the Project area were inspected at 10- and 15-meter transects. Archaeological survey exceeded the applicable Secretary of Interior Professional Qualifications Standards for archaeological survey and evaluation. The project APE was subject to a 70% survey with transects spaced no more than 15 meters apart wherever possible and oriented in cardinal directions.

Documentation of cultural resources complied with the Office of Historic Preservation and Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716–44740) and the California Office of Historic Preservation Planning Bulletin Number 4(a). All sites identified during this inventory were recorded on California Department of Parks and Recreation Form DPR 523 (Series 1/95), using the Instructions for Recording Historical Resources (Office of Historic Preservation 1995).

# Tribal Correspondence

The Native American Heritage Commission (NAHC) was contacted to request a review of the Sacred Lands File. Refer to Appendix B for results of the request for the on-site impacts, the results of which are negative. Additionally, tribal outreach letters were sent to those representatives provided on the NAHC Contact List. Furthermore, the project is also subject to compliance with AB 52 (Public Resources Code 21074) which requires consideration of impacts to "tribal cultural resources" as part of the CEQA process. AB 52 requires the City of Coronado, lead agency responsible for CEQA compliance for the project, to notify any groups (who have requested notification) of the project who are traditionally or culturally affiliated with the geographic area of the project. Because AB 52 is a government-to-government process, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the City of Coronado.

## Results

# Archival Review

On January 22, 2020, a records search at the SCIC indicated that 18 reports intersect with the project area, with 32 reports being within the 0.5-mile buffer. Two reports provide directly relevant and recent information for this project (SD-16866 and SD-17232). Report SD-16866 consists of a report of the Golf Course and evaluates the Golf Course for NRHP status, and concludes that the property does not retain any significance conveying features, and therefore is non-significant under the Section 106 guidelines. Report SD-17232 is a cultural resources inventory for a project involving underground utility installation.

The record search indicated that a total of nine cultural resources have been previously identified within the project area of potential effects (APE). Three cultural resources (P-37-009539, P-37013073, and P-37-036797) consist of archaeological sites (two historic and one prehistoric), and the remaining six are historic addresses. Similar to previous searches, the record search included a 0.5-mile buffer. The buffer contains a total of 22 registered resources, consisting of 17 historic structures, three prehistoric sparse shell and lithic scatters, one historic trash scatter and one historic shipwreck site. Additionally a search of the Historic Resources Inventory resulted in 787 historic addresses identified within the 0.5-mile buffer. Refer to Appendix B for full results.

# P-37-009539 (CA-SDI-9539)

This resource is a prehistoric artifact scatter found in the median in front of Hotel Del Coronado. The site is located in the center divider of the roadway, between Strand Way and Pomona Avenue. The site was recorded as consisting of lithic debitage and some simple flake tools. This resources was recorded in 1982 measuring 4 meters by 100 meters long. This site has been largely disturbed (an estimated 80%) and could potentially represent a secondary deposit. This resource was not evaluated for NRHP/CRHP significance.

# P-37-013073 (CA-SDI-13073)

This resource is a segment of the Coronado Railroad, no longer in service, consisting of segments of intact rail with intermittent tracks and is in overall disrepair. The total of Coronado railroad was built in the late 1880s. The route has also been called the Coronado Belt Line, Coronado Railroad, San Diego Southern, San Diego & Southeastern, San Diego & Arizona-Southern Pacific Lines, A.T. &S. F. – San Diego and Arizona Eastern. This resource has not been previously evaluated for NRHP/CRHP significance.

# P-37-036797 Coronado Municipal Golf Course

This resources is the municipal golf course, which was built originally in 1959 with continuous updates and upgrades every decade up to 2004, where the entire course was redesigned. The golf course was recorded as a historic property in 2016. Due to the lack of integrity the resources was recommended as not eligible for the NRHP.

## Tribal Correspondence

The NAHC search of the Sacred Lands File on January 27, 2020, resulted in a positive finding for Traditional Cultural Properties or Sacred Sites that have been identified to be within the project site or surrounding 0.5 miles. Tribal outreach letters were sent to those representatives provided on the NAHC Contact List. Refer to Appendix B for the full responses. In compliance with AB 52, on March 12, 2020, the City sent notification letters to Tribal representatives that have formally requested such notification under AB 52. To date, one tribe, the Jamul Indian Village of California, has responded and asked for formal consultation.

## Aerial Imagery Analysis

A review of historic aerial imagery for Coronado Peninsula extends back to 1953 (NETR 2019) with photos present from 1953, 1964, 1966, 1972, 1980, 1989, 1994, 1996, 2002, 2003, 2005, 2009, 2010, 2012, 2014, and 2016. Historic topographic maps consulted were from 1904, 1908, 1911, 1915, 1920, 1928, 1932, 1941, 1942, 1955, 1960, 1967, 1970, 1978, 1986, 1994, 2001, 2012, 2015, and 2018. The aerial imagery showed that for the vast majority of the project area, the current street alignment and construction was in place by the earliest aerial image in 1953. The earlier historical topographic maps detail the process of expansion of the beach areas on the eastern side of the peninsula starting as early as 1941 and completed by 1967.

## Pedestrian Survey

The intensive pedestrian survey conducted February 14, 2020, identified no new cultural resources within the current APE limits. Visibility was partially obscured by vegetation and landscaping, allowing for less than one-third of the ground surface to be viewed in many areas.

Site relocation efforts for P-37-009359 (CA-SDI-9539) and the P-37-013073 (CA-SDI-13073) were part of the intensive pedestrian survey. Both sites have been completely disturbed from surface impacts. In the case of the

prehistoric site, P-37-009359 (CA-SDI-9539), the area was recorded as being located in a road median, and has since been continually manicured and maintained. The survey found no surface expression of this site and over 90% of the recorded polygon has been paved. A review of the historic topographic maps shows that the site would have been located between the Coronado Railway alignment on its eastern border, and Glorietta Boulevard on its western side at least as early as 1904. Pomona Avenue was added along the railway alignment through the western portion of the site between 1941 and 1942. Buildings on the west end of the site are erected between 1964 and 1966. Between 1966 and1972 the surrounding area has been fully developed into the contemporary arrangement seen today. As part of the development push seen by 1972, a small concrete walking path is placed on the western end of the site, further reducing the remaining eastern exposure. The eastern exposure is seen to be in continual vegetation change from 1972 through 2016.

The Coronado Railway alignment, P-37-013073 (CA-SDI-13073), was not located during the current survey effort. The resources boundary has been completely paved over within the project APE. A review of the aerial imagery shows the railway alignment present on historic topographic maps at least as early as 1904. The railway becomes shortened between the 1942 and 1955 maps, no longer extending from the southeast corner of the peninsula to the northern end, but halting at the intersection of 10th Street and Glorietta Boulevard. Between 1986 and 1994 the alignment is removed entirely from the topographic maps of the Coronado Peninsula.

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

*Less-Than-Significant Impact.* According to CEQA (Section 15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change:

Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

The significance of an historical resource is materially impaired when a project:

- demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
- demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

The Cultural Resources Inventory Report identified nine cultural resources within the project APE. Six of these resources are historic addresses located along the underground water pipe alignment. Though these addresses are within the project APE, they are outside the disturbance limits and will be avoided by project impacts.

The prehistoric site P-37-009539 (CA-SDI-9539) is located in the direct path of one of the proposed recycled water supply pipelines. The project alignment runs under Pomona Avenue with the installation of new water pipes at least 6-ft below the road surface, with a trench width of no more than 6 feet. This alignment will cut through the eastern portion of the mapped site boundary. At the time the site was recorded in 1982, major impacts for both Pomona Ave and Glorietta had already taken place and noted that the majority of the site was likely destroyed to the point of possibly being entirely a secondary deposit. Since that time multiple landscaping shifts and maintenance efforts have reshaped the remaining surface of the site. These impacts reduce the possibility of intact subsurface deposits. The segment of the Coronado Railway P-37-013073 (CA-SDI-13073) which intersects the project recycled water pipeline alignment under Pomona Ave has been destroyed with the construction of Pomona Ave and Silver Strand Rd. The project does not intersect any of the significance carrying elements of this resource, which are located outside of the project area, therefore the project will have no impact on P-37-013073 (CA-SDI-13073). The Coronado Municipal Golf Course (P-37-036797) is located within the project's disturbance limits. This resource was previously evaluated and was given the NRHP status code of 6Z, not eligible for the NRHP/CRHP. Therefore any changes to the golf course would result in a finding of no effect under CEQA.

Based on the current project design, no known significant historical resources would be impacted as a result of the proposed project's ground disturbing activities. This cultural resources inventory identified eight historical/built environment resources within the project APE. The eight historical resources would either be avoided by project impacts, are no longer extant within the project APE, or have been previously determined not eligible. Therefore, impacts associated with historical resources would be less than significant.

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

Less-Than-Significant Impact with Mitigation Incorporated. As previously discussed, SCIC records indicate that 18 reports intersect with the project area, with 32 reports being within the 0.5-mile buffer. Two reports provide directly relevant and recent information for this project (SD-16866 and SD-17232). Report SD-16866 consists of a report of the Golf Course and evaluates the Golf Course for NRHP status, and concludes that the property does not retain any significance conveying features, and therefore is non-significant under the Section 106 guidelines. Report SD-17232 is a cultural resources inventory for a project involving underground utility installation. This report consisted of a record search and pedestrian survey of the proposed project areas. The scope of this report is most similar to the current project, with sections of currently developed streets as the proposed APE.

The record search indicated that nine cultural resources have been previously identified within the project APE. Three cultural resources consist of archaeological sites (two historic and one prehistoric), and the remaining six are historic addresses. Similar to previous searches, the record search included a 0.5-mile buffer. The buffer contains a total of 22 registered resources, consisting of 17 historic structures, three prehistoric sparse shell and lithic scatters, one historic trash scatter and one historic shipwreck site. A search of the Historic Resources Inventory resulted in 787 historic addresses identified within the 0.5-mile buffer (Appendix B).

Based on the current project design, no known significant cultural resources will be impacted as a result of the proposed project's ground disturbing activities. This cultural resources inventory identified eight

historical/built environment resources and one prehistoric archaeological resource within the project APE. The eight historical resources will either be avoided by project impacts, are no longer extant within the project APE, or have been previously determined not eligible. The Prehistoric resource, P-37-009539 (CA-SDI-9539), was found to be completely developed and was previously postulated to be a secondary deposit. Therefore, it is unlikely that intact archaeological deposits are present.

The potential for unknown significant prehistoric and historic archaeological resources to exist within the project site is low. The Golf Course is built upon made land/artificial fill. As such, project components located within the Golf Course are expected to have no archaeological resources due to the low probability of resources and lack of cultural context. However, there is an increased possibility of encountering secondary archaeological deposits within or adjacent to P-37-009539 (CA-SDI-9539) during the proposed project's ground disturbing activities. A significant portion of the work will be conducted under Orange Avenue, a historically significant route for the trolley system which supported commerce on the peninsula. The positive finding by the NAHC Sacred Lands File increases the potential for archaeological resources. Therefore, to mitigate potential impacts to unidentified archaeological resources, **MM-CUL-1** is required.

MM-CUL-1 Prior to the start of project construction, an Archaeological and Native American monitor shall be retained by the City of Coronado for the monitoring of all initial project ground disturbance with the exception of the superficial irrigation/sprinkler installation at Spreckels Park, Tidelands Park, and any construction within the Golf Course. In the event that unanticipated archaeological resources (sites, features, or artifacts) are exposed during initial project ground disturbance for the project, all construction work occurring in the immediate vicinity of the find shall immediately stop until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; California Public Resources Code Section 21082) the archaeologist may record the find to appropriate standards (thereby addressing any data potential) and allow work to continue. If the archaeologist observes the discovery to be potentially significant under CEQA or Section 106 of the National Historic Preservation Act, additional efforts may be warranted as recommended by the qualified archaeologist. If it is determined that specific locations of excavation would not disturb native soils and would have no potential to disturb archaeological/cultural resources, the Archaeological and Native American monitor may discontinue monitoring at these locations. Superficial trenching for sprinkler lines in the municipal parks and the golf course will not require monitoring, as these are shallow and within contemporary disturbance areas. The construction on the Coronado Municipal Golf Course will also not require monitoring, as the entire golf course was built on imported fill in the 1960s.

Therefore, with incorporation of **MM-CUL-1**, impacts associated with archaeological resources would be less than significant.

# c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

**Less-Than-Significant Impact.** In the highly unlikely event that human remains are uncovered during ground-disturbing activities, there are regulatory provisions to address the handling of human remains in California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5(e). Pursuant to these codes, in the event that human remains are discovered,

disturbance of the site shall remain halted until the County coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The County coroner is required to make a determination within 2 working days of notification of the discovery of the human remains. If the County coroner determines that the remains are not subject to his or her authority, and if he or she recognizes or has reason to believe the human remains to be those of a Native American, he or she shall consult with the Native American Heritage Commission by telephone within 24 hours, to designate a Most Likely Descendant who shall recommend appropriate measures to the landowner regarding the treatment of the remains. If the owner does not accept the Most Likely Descendant's recommendations, the owner or the Most Likely Descendant may request mediation by the Native American Heritage Commission. Therefore, with compliance with this existing state law, impacts associated with human remains would be less than significant.

# 3.6 Energy

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Er	nergy – Would the project:				
e ir e	Result in potentially significant environmental impact due to wasteful, nefficient, or unnecessary consumption of energy resources, during project construction or operation?				
	Conflict with or obstruct a state or local plan or renewable energy or energy efficiency?				$\boxtimes$

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

*Less-Than-Significant Impact*. The analysis presented below is based on information obtained through CalEEMod, as detailed in Section 3.3, Air Quality, Section 3.8, Greenhouse Gas Emissions, and Appendix A.

# **Energy Consumption**

## Electricity

# Construction Use

Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers, and heating, ventilation, and air conditioning) would be provided by SDG&E. The amount of electricity used during construction would be minimal; typical demand would stem from the use of electrically powered hand tools and several construction trailers by managerial staff during the hours

of construction activities. The majority of the energy used during construction would be from petroleum. The electricity used for construction activities would be temporary and minimal; therefore, impacts would be **less than significant**.

# **Operational Use**

The operational phase would require electricity for operating the SWRF, TCF, and pump station. CalEEMod Version 2016.3.2 and the default value for electricity consumption for the proposed uses were applied for the project in addition to City provided data (CAPCOA 2017). Table 3.6-1 presents the electricity demand for the project.

# Table 3.6-1. Project Operations – Electricity Demand

Project Facility	kWh/Year
Building and Lighting Electricity Demand	
General Heavy Industry	2,920,000
General Light Industry	33,240
General Office Building	40,320
Unrefrigerated Warehouse-No Rail	1,560
Total	2,995,120

**Source:** CalEEMod, Appendix A. **Notes:** kWh = kilowatt-hour.

The proposed project is estimated to have a total electrical demand of 2,995,120 kilowatt-hours per year. In comparison, the total countywide electricity demand in 2018 was 19,749 million kilowatt-hours (CEC 2018a). The project would offset up to 200 million gallons of potable water use currently irrigating the golf course and thus would avoid the electricity associated with the treatment and conveyance of that water. Therefore, the electricity use presented herein is conservative. The proposed project's buildings would be built in accordance with the current Title 24 standards at the time of construction and California Green Building Standards (CALGreen) Code. Therefore, due to the limited amount of electricity use compared to the County, and the inherent increase in efficiency of building code regulations, the proposed project would not result in a wasteful use of energy. Impacts related to operational electricity use would be less than significant.

## Natural Gas

## Construction Use

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline. Any minor amounts of natural gas that may be consumed as a result of proposed project construction would be temporary and negligible and would not have an adverse effect; therefore, impacts would be less than significant.

## **Operational Use**

The operational phase would require natural gas for operating the Turf Care Building and office. CalEEMod Version 2016.3.2 and the default value for natural gas consumption for the proposed uses were applied for the project (CAPCOA 2017). Table 3.6-2 presents the natural gas demand for the project.

# Table 3.6-2. Project Operations - Natural Gas Demand

Project Facility	kBtu/Year	
Building and Lighting Electricity Demand		
General Light Industry	46,240	
General Office Building	60,570	
Total	106,810	

Source: CalEEMod, Appendix A.

**Notes:** kBtu = thousand British thermal units.

The proposed project is estimated to have a total natural gas demand of 106,810 kilo British thermal units (kBtu) per year. In comparison, the total countywide natural gas demand in 2018 was 48,252 million kBtu (CEC 2018a). The proposed project's buildings would be built in accordance with the current Title 24 standards at the time of construction and CALGreen Code. Therefore, due to the limited amount of electricity use compared to the County, and the inherent increase in efficiency of building code regulations, the proposed project would not result in a wasteful use of energy. Impacts related to operational natural gas use would be less than significant.

## Petroleum

# **Construction Use**

Petroleum would be consumed throughout construction of the proposed project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities, vendor trucks, and haul trucks would rely on diesel fuel. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed that construction workers would travel to and from the project site in gasoline-powered vehicles.

Heavy-duty construction equipment of various types would be used during construction. CalEEMod was used to estimate construction equipment usage. Based on that analysis, diesel-fueled construction equipment would operate for an estimated 69,840 hours, as summarized in Table 3.6-3.

# Table 3.6-3. Hours of Operation for Construction Equipment

Phase	Hours of Equipment Use
Golf Course Master Planning Construction	8,100
Access Lane/maintenance road	1,080
SWRF and TCF Buildings	4,320
Paving	600
Architectural Coating	120
Recycled Water Storage Ponds	3,240
Recycled Water Treatment System	14,400
Wastewater Diversion Pump Station and Pipeline	6,300
Discharge Pipeline	8,400
SWRF Startup	0
Recycled Water Distribution System	9,600

Phase	Hours of Equipment Use
Irrigation System	10,800
Turf Establishment of New Holes	2,880
Total	69.840

# Table 3.6-3. Hours of Operation for Construction Equipment

Source: Appendix A.

Fuel consumption from construction equipment was estimated by converting the total carbon dioxide ( $CO_2$ ) emissions from each construction phase to gallons using conversion factors for  $CO_2$  to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton (MT)  $CO_2$  per gallon, and the conversion factor for diesel is 10.21 kilograms per MT  $CO_2$  per gallon (The Climate Registry 2019). The estimated diesel fuel use from construction equipment is shown in Table 3.6-4. Fuel consumption from worker, vendor, and haul truck trips was estimated by converting the total  $CO_2$  emissions from the construction phase to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline fueled, whereas vendor and haul trucks are assumed to be diesel fueled. The estimated fuel use for worker vehicles, vendor trucks, and haul trucks are presented in Table 3.6-5.

# Table 3.6-4. Construction Equipment Fuel Demand

Phase	Pieces of Equipment	Equipment CO <sub>2</sub> (MT)	kg CO <sub>2</sub> / Gallon	Gallons
Golf Course Master Planning Construction	5	209.58	10.21	20,527.36
Access Lane/maintenance road	2	34.54	10.21	3,383.38
SWRF and Turf Care Buildings	3	94.75	10.21	9,280.52
Paving	5	9.90	10.21	969.99
Architectural Coating	1	2.55	10.21	250.08
Recycled Water Storage Ponds	3	126.74	10.21	12,413.19
Recycled Water Treatment System	5	347.98	10.21	34,082.62
Wastewater Diversion Pump Station and Pipeline	3	129.00	10.21	12,635.04
Discharge Pipeline	4	227.48	10.21	22,279.84
SWRF Startup	0	0.00	10.21	0.00
Recycled Water Distribution System	4	259.97	10.21	25,462.68
Irrigation System	5	245.02	10.21	23,998.38
Turf Establishment of New Holes	2	60.94	10.21	5,968.46
			Total	171,251.55

Sources: Appendix A.

**Notes:**  $CO_2$  = carbon dioxide; kg = kilogram; MT = metric ton.

# Table 3.6-5. Construction Vehicle Fuel Demand

Phase	Trips	Vehicle CO <sub>2</sub> (MT)	kg CO <sub>2</sub> / Gallon	Gallons		
Construction Worker Vehicle Gasoline Demand						
Golf Course Master Planning Construction	1,890	6.62	8.78	753.97		
Access Lane/maintenance road	270	0.95	8.78	107.71		

# Table 3.6-5. Construction Vehicle Fuel Demand

Phase	Trips	Vehicle CO <sub>2</sub> (MT)	kg CO <sub>2</sub> / Gallon	Gallons
SWRF and Turf Care Buildings	1,440	5.04	8.78	574.46
Paving	140	0.47	8.78	53.80
Architectural Coating	60	0.20	8.78	23.06
Recycled Water Storage Ponds	900	3.15	8.78	359.04
Recycled Water Treatment System	4,800	16.48	8.78	1,876.86
Wastewater Diversion Pump Station and Pipeline	2,100	7.09	8.78	807.05
Discharge Pipeline	2,100	7.09	8.78	807.05
SWRF Startup	360	1.21	8.78	138.35
Recycled Water Distribution System	3,200	10.80	8.78	1,229.78
Irrigation System	5,760	19.44	8.78	2,213.61
Turf Establishment of New Holes	1,920	6.48	8.78	737.87
	1	I	Subtotal	9,682.63
Construction Vendor Truck Diesel Demand	d			
Golf Course Master Planning Construction	270	3.53	10.21	345.68
Access Lane/maintenance road	90	1.18	10.21	115.23
SWRF and Turf Care Buildings	1,440	18.82	10.21	1,843.65
Paving	40	0.52	10.21	50.72
Architectural Coating	0	0.00	10.21	0.00
Recycled Water Storage Ponds	180	2.35	10.21	230.46
Recycled Water Treatment System	2,880	37.45	10.21	3,668.38
Wastewater Diversion Pump Station and Pipeline	700	9.06	10.21	887.74
Discharge Pipeline	700	9.06	10.21	887.74
SWRF Startup	540	6.99	10.21	684.82
Recycled Water Distribution System	800	10.36	10.21	1,014.55
Irrigation System	360	4.66	10.21	456.55
Turf Establishment of New Holes	0	0.00	10.21	0.00
			Subtotal	10,185.53
Construction Haul Truck Diesel Demand	1			
Golf Course Master Planning Construction	0	0.00	10.21	0.00
Access Lane/maintenance road	0	0.00	10.21	0.00
SWRF and Turf Care Buildings	0	0.00	10.21	0.00
Paving	0	0.00	10.21	0.00
Architectural Coating	0	0.00	10.21	0.00
Recycled Water Storage Ponds	4,250	161.84	10.21	15,851.57
Recycled Water Treatment System	0	0.00	10.21	0.00
Wastewater Diversion Pump Station and Pipeline	0	0.00	10.21	0.00
Discharge Pipeline	0	0.00	10.21	0.00
SWRF Startup	0	0.00	10.21	0.00
Recycled Water Distribution System	0	0.00	10.21	0.00
Irrigation System	0	0.00	10.21	0.00

Phase	Trips	Vehicle CO <sub>2</sub> (MT)	kg CO <sub>2</sub> / Gallon	Gallons
Turf Establishment of New Holes	0	0.00	10.21	0.00
			Subtotal	15,851.57
			Petroleum Total	35,719.73

Sources: Appendix A.

Notes:  $CO_2$  = carbon dioxide; kg = kilogram; MT = metric ton.

As shown in Table 3.6-4 and Table 3.6-5, the proposed project is estimated to consume approximately 206, 971 gallons of petroleum during the construction phase. By comparison, approximately 31.1 billion gallons of petroleum would be consumed in California over the course of the project's construction phase based on the California daily petroleum consumption estimate of approximately 78.6 million gallons per day (EIA 2019). The proposed project would be required to comply with the CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. Overall, because petroleum use during construction would be temporary and relatively minimal, and would not be wasteful or inefficient, impacts would be less than significant.

# **Operational Use**

The majority of fuel consumption resulting from the proposed project's operational phase would be attributable to the use of motor vehicles traveling to and from the project area for periodic maintenance. Petroleum fuel consumption associated with motor vehicles traveling to and from the project area is a function of VMT as a result of proposed project operation. The annual VMT attributable to the proposed project is expected to be 75,907 VMT per year based on CalEEMod default trip lengths. Similar to construction trips, fuel consumption was estimated by converting the total CO<sub>2</sub> emissions from each land use type to gallons using the conversion factors for CO<sub>2</sub> to gallons of gasoline or diesel. Based on the Countywide proportion of gasoline and diesel on-road vehicle generated CO<sub>2</sub> in EMFAC2017, the vehicles associated with project operations were assumed to be approximately 84% gasoline powered and 16% diesel powered. The estimated fuel use from project operational mobile sources is shown in Table 3.6-6.

# Table 3.6-6. Petroleum Consumption – Operation

Fuel	Vehicle MT CO <sub>2</sub>	kg CO <sub>2</sub> /Gallon	Gallons
Gasoline	27.51	8.78	3,133.63
Diesel	2.24	10.21	219.08
		Total	3,352.71

Sources: Appendix A.

**Notes:**  $CO_2$  = carbon dioxide; kg = kilogram; MT = metric ton.

Mobile sources from the proposed project would result in approximately 3,134 gallons of gasoline per year and 219 gallons of diesel consumed per year beginning in 2022. By comparison, California as a whole consumes approximately 28.7 billion gallons of petroleum per year (EIA 2019).

Over the lifetime of the proposed project, the fuel efficiency of the vehicles being used is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project area during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emissions vehicles in California (CARB 2013). Additionally, in response to Senate Bill 375, CARB adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by the year 2020 and 13% by the year 2035 for light-duty passenger vehicles in the planning area for the SANDAG. This reduction would occur by reducing VMT through the integration of land use and transportation planning (SANDAG 2015).

In summary, although the proposed project would increase petroleum use during operation, the use would be a small fraction of the statewide use and, due to efficiency increases, diminish over time. Given these considerations, petroleum consumption associated with the proposed project would not be considered inefficient or wasteful and would result in a less-than-significant impact.

# b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. Title 24 of the California Code of Regulations contains energy efficiency standards for residential and nonresidential buildings based on a state mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating, and air conditioning, including the energy impact of the building envelope such as windows, doors, wall/floor/ceiling assemblies, and roofs. Part 6 of Title 24 specifically establishes energy efficiency standards for residential and nonresidential buildings constructed in the State of California in order to reduce energy demand and consumption. Part 11 of Title 24 also includes the CALGreen standards, which established mandatory minimum environmental performance standards for new construction projects. The project would comply with Title 24, Part 6 and Part 11, per state regulations. Based on the foregoing, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The proposed project would continue the existing use of the project site and would reconstruct the existing reservoir and add a pump station. The proposed project would continue to use the existing connections with applicable utility providers. All buildings materials proposed for the project's building modifications would be compliant with all City and state policies, codes, and regulations. As previously discussed, the project would offset the use of approximately 1 billion gallons of potable water over a 30-year operational period and thus avoid the energy use associated with that potable water use. Therefore, the proposed project would not conflict with or obstruct renewable energy or energy efficiency plans and no impact would occur.

# 3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS - Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
	<ul> <li>Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</li> </ul>				
	ii) Strong seismic ground shaking?			$\square$	
	iii) Seismic-related ground failure, including liquefaction?			$\square$	
	iv) Landslides?				$\square$
b)	Result in substantial soil erosion or the loss of topsoil?			$\boxtimes$	
C)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		$\boxtimes$		

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

**Less-Than-Significant Impact**. The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception and diversion pump stations and pipelines. The proposed SWRF and TCF Complex would be located within the Golf Course, while the proposed pipelines would be located in various developed areas of the City including roadways, parks, and the Golf Course. Additionally, the proposed diversion pump station would similarly be located in a developed area adjacent

to existing development. The project area is located within seismically active Southern California, an area where several faults and fault zones are considered active by the California Division of Mines and Geology. Portions of the project site is located within an Alguist-Priolo Earthquake Study Zone (DOC 2019). According to the Fault Activity Map of California and Adjacent Areas, the Silver Strand fault, which is mapped 400 feet east of the proposed SWRF and TCF Complex site, is classified as active (DOC 2015). Additionally, the proposed pipelines and diversion pump station traverse traces of the Coronado Fault. However, for the purpose of the project, the Rose Canyon fault zone is considered the most significant seismic hazard. The Rose Canyon fault zone has been classified as an active fault, and is included in Alguist-Priolo Special Studies Zones. In San Diego Bay, this fault zone is believed to splay into multiple, subparallel strands; the most pronounced of which are the Silver Strand, Spanish Bight and Coronado Bank faults. However, the results of the geotechnical investigation provided in Appendix C, do not indicate that fault surface rupture is a significant geologic hazard at the project site. Although the project site is located within a seismically active area and is subject to ground shaking, construction of the project would not be expected to rupture any identified earthquake fault. Furthermore, the proposed project would not exacerbate the risk of loss, injury, or death involving rupture of a known earthquake fault. Therefore, impacts associated with the rupture of a known earthquake fault would be less than significant.

# ii) Strong seismic ground shaking?

**Less-Than-Significant Impact.** As previously mentioned in Section 3.7(a)(ii), the project site is located within seismically active Southern California, an area where several faults and fault zones are considered active by the California Division of Mines and Geology. According to the Fault Activity Map of California and Adjacent Areas, the Silver Strand fault, which is mapped 400 feet east of the proposed SWRF and TCF Complex site, is classified as active (DOC 2015). Additionally, the proposed pipelines and diversion pump station traverse traces of the Coronado Fault. However, for the purpose of the project, the Rose Canyon fault zone is considered a potential seismic hazard. Thus, the project's future visitors could be exposed to strong seismic ground shaking in the event of an earthquake.

Seismic exposure in the project area is dominated by the Rose Canyon fault zone and to a lesser extent by distant faults such as the offshore Coronado Bank and the onshore Elsinore fault zones. During the life of the project, the project area would likely be subject to moderate to severe ground shaking in the event of a local or distant large magnitude earthquake. Appropriate measures to minimize the effects of earthquakes and other geotechnical hazards are included in the California Building Code, with specific provisions pertaining to seismic load and design. The California Building Code has been adopted by the City as the Building Code of the City of Coronado, pursuant of CMC Section 70.20.010 (City of Coronado 2019).

The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. In addition, the CBC contains necessary California amendments, which are based on the American Society of Civil Engineers (ASCE) Minimum Design Standards 7-05. ASCE 7-05 provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (flood, wind, etc.) for inclusion into building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The earthquake design requirements of the CBC take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, which are used to determine a Seismic Design Category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site and ranges from SDC A (very small seismic vulnerability) to SDC E/F (very high seismic vulnerability and near a major fault). Design specifications are then determined according to the SDC. The proposed project would be required to comply with the CBC, including Part 2, Volume 2, Chapter 18, Soils and Foundations, which outlines the minimum standards for structural design and construction.

Design and construction of the project in accordance with the California Building Code would minimize the adverse effects of strong ground shaking to the greatest degree feasible. Furthermore, the proposed project would not exacerbate the risk of loss, injury, or death from strong seismic ground shaking. Therefore, based on compliance with applicable local and state requirements related to seismic hazards, impacts associated with strong seismic ground shaking would be less than significant.

# iii) Seismic-related ground failure, including liquefaction?

**Less-Than-Significant Impact.** Seismically induced soil liquefaction is a phenomenon in which loose to medium dense, saturated granular materials undergo matrix rearrangement, develop high pore water pressure, and lose shear strength due to cyclic ground vibrations induced by earthquakes. Manifestations of soil liquefaction can include loss of bearing capacity below foundations, surface settlements and tilting in level ground, and instabilities in sloping ground. Soil liquefaction can also result in an increase in lateral and uplift pressures on buried structures.

As determined by the geotechnical investigation, results of the liquefaction analyses indicate that the undifferentiated fill materials and the majority of the undivided marine deposit at the proposed SWRF and TCF Complex site have a moderate to high potential for liquefaction to a depth of 35 feet below ground surface (Appendix C). However, the investigation found that old paralic deposits below a depth of 35 feet below ground surface have a low to very low potential for liquefaction at the proposed SWRF and TCF Complex site. Liquefaction would most likely manifest itself as local ground subsidence and settlement. The investigation finds that ground surface settlement on the order of 8 to 10 inches may be reasonably assumed in the event of a seismic-induced soil liquefaction. Additionally, proposed subterranean structures and pipelines may also be subject to uplift pressures during a seismic event. Furthermore, liquefaction-induced settlement could cause extensive damage and potentially catastrophic failure of structures supported on foundations located above and in the liquefiable layers. The design and construction of proposed structures at the SWRF and TCF Complex would require standard code compliance to address the potential for differential movement due to liquefaction-induced settlement and/or related effects such as dynamic settlement and lateral spreading. More specifically, Chapter 18, Soils and Foundations, of the CBC requires, a record of the soil profile, evaluation of active faults in the area, and recommendations for foundation type and design criteria that address issues as applicable such as (but not limited to) bearing capacity of soils, provision to address expansive soils and liquefaction, settlement and varying soil strength. These design features implemented through code compliance are anticipated to include ground modifications and/or the use of deep foundations. The Design-Build Contractor shall perform a site-specific geotechnical investigation for the selection and design of the appropriate features based on the actual design of the project.

As specified in the project's geotechnical report, the following would be incorporated into the project's final design and construction documents, as part of standard building code requirements to address liquefaction potential:

- Foundations for proposed structures at the SWRF and TCF Complex would be designed with respect to reasonably assumed seismic-induced liquefaction settlement on the order of 6 to 9 inches. Design of foundation for structures that have fundamental periods of vibration in excess of 0.5 seconds at a minimum would be require the performance of a site-specific seismic response analysis.
- Concrete slabs-on-grade for proposed structures at the SWRF and TCF Complex, at a minimum, would be designed with respect to reasonably assumed seismic-induced liquefaction settlement on the order of 6 to 9 inches. To reduce the potential for seismicinduced liquefaction settlement, vibrating, rotating, reciprocating and impacting equipment which create machine-induced vibration and/or shock may require the use of base isolation system to reduce the amount of vibration transmitted to the support slabs.
- At minimum, positive drainage would be provided around the perimeter of all proposed buildings. Positive drainage is generally defined as a minimum 2% slope over a horizontal distance of at least 5 feet away from the perimeter foundations of a structure. No surface water would be allowed to collect or pond anywhere in the building areas, especially adjacent to or near foundations and slabs. Roof runoff would be controlled by using eave gutters and downdrains, and the discharge from the downdrains would be collected in a system of subdrain pipes which carry the water directly into a suitable on-site drainage facility.

Based on the subsurface conditions encountered in the borings, the fill materials within the SWRF and TCF Complex Study Area are expected to provide a stable trench bottom under static conditions. In the event that loose or disturbed soils are encountered at the trench bottom, they would be over-excavated and replaced with pipe bedding or other approved materials. The actual limits/extent of over-excavation of loose or soft materials at the bottom of the trench excavations would be evaluated by the Design-Build Contractor. <u>Furthermore, the proposed project would not exacerbate the risk of loss, injury, or death from Seismic-related ground failure, including liquefaction.</u> Therefore, impacts associated with liquefaction would be less than significant.

## iv) Landslides?

*No Impact.* The proposed SWRF and TCF Complex would be located within the Golf Course, while the proposed pipelines would be located in various developed areas of the City including roadways, parks, and the Golf Course. Additionally, the proposed diversion pump station would similarly be located in a developed area adjacent to existing development. A review of published geologic maps indicates that the proposed SWRF and TCF Complex site and proposed diversion pump station are not located on or near any known (mapped) landslide zones (Appendix C). Additionally, a review of the State of California Seismic Hazard Zones indicates that the aforementioned project sites are not located in an area that is susceptible to landslide hazards (DOC 2019). Furthermore, the proposed pipelines would be located underground and would not have potential to be affected by landslides. Based on review of the aforementioned information and the relatively level topography of the project area, the likelihood for landslides at the project site is presumably low. Therefore, no impact associated with landslides would occur.

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

**Less-Than-Significant Impact.** The project would involve earthwork and other construction activities that would disturb surface soils and temporarily leave exposed soil on the ground's surface. Common causes of soil erosion from construction sites include stormwater, wind, and soil being tracked off site by vehicles. To help curb erosion, project construction activities would comply with all applicable federal, state, and local regulations for erosion control. The project would be required to comply with standard regulations, including South Coast Air Quality Management District Rules 402 and 403, which would reduce construction erosion impacts. Rule 402 requires that dust suppression techniques be implemented to prevent dust and soil erosion from creating a nuisance off site (SCAQMD 1976). Rule 403 requires that fugitive dust be controlled with best available control measures so that it does not remain visible in the atmosphere beyond the property line of the emissions source (SCAQMD 2005).

As will be discussed in Section 3.10(a), Hydrology and Water Quality, the project would be required to prepare and implement a SWPPP in accordance with the Statewide Construction General Permit. <u>More specifically, SWRCB Construction General Permit (Order 2009-0009-DWQ, as amended by Order 2010-0014-DWQ and Order 2012-006-DWQ).</u><sup>5</sup> This requires implementation of water quality BMPs to ensure that water quality standards are met, and that stormwater runoff from the construction work areas do not cause degradation of water quality in receiving water bodies. Some of these BMPs include use of silt screening or fiber filtration rolls, appropriate handling and disposal of contaminants, fertilizer and pesticide application restrictions, litter control and pick up, and vehicle and equipment repair and maintenance in designated areas. <u>The following types of BMPs, as applicable, would be implemented during construction activities include:</u>

## **Erosion Control**

- Physical stabilization through hydraulic mulch, soil binders, straw mulch, bonded fiber matrices, and/or erosion control blankets (i.e., rolled erosion control products).
- Soil roughening of graded areas (through track walking, scarifying, sheepsfoot rolling, or imprinting) to slow runoff, enhance infiltration, and reduce erosion.
- Wind erosion (dust) control through the application of water or other dust palliatives as necessary to prevent and alleviate dust nuisance.

## Sediment Control

- Perimeter protection through silt fences, fiber rolls, gravel bag berms, sandbag barriers, and straw bale barriers.
- Storm drain inlet protection.
- Sediment capture through sediment traps, storm drain inlet protection, and sediment basins.

<sup>&</sup>lt;sup>5</sup> The 2009-0009-DWQ, and associated amendments to General Permit for Construction Activities are available online at: http://www.swrcb.ca.gov/water\_issues/programs/stormwater/constpermits.shtml

- Velocity reduction through check dams, sediment basins, and/or outlet protection/velocity dissipation devices.
- Reduction in off-site sediment tracking through stabilized construction entrance/exit, construction road stabilization, and/or entrance/exit tire wash.
- The General Permit for Construction Activities contains receiving water limitations that contain receiving water limitations that require stormwater discharges to not cause or contribute to a violation of any applicable water quality standard. Inspections of all BMPs are required throughout construction.

Upon completion of construction, the land disturbed by construction would return to conditions similar to existing conditions; revegetation and paved areas would stabilize soils to minimize erosion. Therefore, impacts related to soil erosion or loss of topsoil would be less than significant.

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

*Less-Than-Significant Impact*. As determined by the geotechnical investigation, the soil types encountered in the soil borings can be categorized into three geologic units which include fill materials, undivided marine deposits, and old paralic deposits.

# Fill Materials

A majority of the fill material found consisted of hydraulically placed fine to medium grained silty sand and poorly graded sand with silt. Locally abundant shell fragments were also encountered in the hydraulic fill materials. Based on blow counts required to drive the soil sampler during the drilling operations, the hydraulic fill materials are in a loose to medium dense condition.

# **Undivided Marine Deposits**

Marine deposits encountered in the geotechnical investigation generally consist of fine-grained silty sand, poorly graded sand with silt and sandy silt. Scattered to locally abundant seashell fragments were encountered in the marine deposits. The soil materials were generally unconsolidated, wet, and in a very soft to medium dense/dense condition.

## Old Paralic Deposits

Old paralic deposits encountered in the geotechnical investigation consist of fine-grained silty sand and poorly graded sand with silt, with scattered to locally abundant seashell fragments present. The soil materials are indicative of a beach depositional environment. The soil deposits were generally uncemented, wet, and in a dense to very dense condition.

Additionally, the U.S. Department of Agriculture's Web Soil Survey classifies the project site as Marina loamy coarse sand, which is described as medium grain soil with low shrink/swell potential (USDA 2020). As such, the soil found on the project site is dense, fine-grained silty sand with a low shrink-swell and does not exhibit characteristics of soil that is unstable.

# Landslide

As previously mentioned in Section 3.7(a)(iv), the proposed SWRF and TCF Complex and diversion pump station would not be located on or near any known (mapped) landslide zones (Appendix C). Additionally, the proposed pipelines would be located underground and would not have potential to be affected by landslides. Further a review of the State of California Seismic Hazard Zones indicates that the overall project site is not located in an area that is susceptible to landslide hazards (DOC 2019). Therefore, no impact associated with landslides would occur.

# Lateral Spreading

Lateral spreading occurs when underlying soil layer liquefies, and blocks of overlying surficial soil displace downslope or towards a sloping surface or unsupported "free face" such as riverbank. The lateral displacement typically ranges from a few inches to several feet and can cause significant damage to structures.

The edge of San Diego Bay is located approximately 625 feet east of the proposed SWRF and TCF Complex site and 617 feet north of the proposed diversion pump station. The proposed pipelines would be located underground within developed areas and would not have potential to be significantly affected by lateral spreading. The slope at the edge of the bay consists of riprap cover with an approximate height of 10 feet above the water line and total height of 22 feet to 25 feet including the submerged portion. Considering the level topography between the project site and the bay, and the distance from the underwater toe of slope, the risk of lateral spreading impacting the project site containing aboveground structures would have very low potential (Appendix C). As such, impacts associated with lateral spreading would be less than significant.

# Liquefaction or Collapse

As previously discussed in Section 3.7(a)(iii), results of the liquefaction analyses indicate that the undifferentiated fill materials and the majority of the undivided marine deposit at the proposed SWRF and TCF Complex study area have a moderate to high potential for liquefaction to a depth of 35 feet below ground surface. However, the investigation found that old paralic deposits below a depth of 35 feet below ground surface have a low to very low potential for liquefaction at the proposed SWRF and TCF Complex study area. Liquefaction would most likely manifest itself as local ground subsidence and settlement. The investigation finds that ground surface settlement on the order of 8 to 10 inches may be reasonably assumed in the event of a seismic-induced soil liquefaction. Additionally, proposed subterranean structures and pipelines may also be subject to uplift pressures during a seismic event. Furthermore, liquefaction-induced settlement could cause extensive damage and potentially catastrophic failure of structures supported on foundations located above and in the liquefiable layers. The design and construction of proposed structures at the SWRF Study Area would require design features per standard code compliance to address the potential for differential movement due to liquefaction-induced settlement and/or related effects such as dynamic settlement and lateral spreading. As such, impacts associated with liquefaction to less than significant.

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

*Less-Than-Significant Impact.* Expansive soils are characterized by their potential shrink/swell behavior. Shrink/swell is the change in volume (expansion and contraction) that occurs in certain fine-grained clay

sediments from the cycle of wetting and drying. Clay minerals are known to expand with changes in moisture content. The higher the percentage of expansive minerals present in near-surface soils, the higher the potential for substantial expansion.

As determined by the geotechnical investigation, the soils on the project site were tested and exhibit a low expansive index (Appendix C). Additionally, as previously mentioned in Section 3.7(c), the U.S. Department of Agriculture's Web Soil Survey does not identify the project site or surrounding area as containing clay soils, which are typically expansive. The entire project site is classified as Marina loamy coarse sand, which is described as medium grain soil with low shrink/swell potential (USDA 2020). Therefore, impacts associated with expansive soils would be less than significant.

# e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

*No Impact.* The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception and diversion pump stations and pipelines. The proposed pipelines necessary to connect the SWRF to the existing municipal wastewater transmission system would be located underground within existing City streets. Under existing conditions, the existing TCF employs 10 to 11 personnel. During operation, SWRF and TCF capacity and operational staffing would increase by 1 to 3 personnel as a result of the project. As such, the project site currently connects to the existing sewer system and would not require the development of additional septic tanks or wastewater disposal system. Additionally, the minor increase in personnel would not affect the current capacity of the existing sewer system. Therefore, no impact would occur.

## f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less-Than-Significant Impact with Mitigation Incorporated. According to the City of San Diego General Plan Final Program Environmental Impact Report, the Bay Point Formation is a near shore marine sedimentary deposit that is about 220,000 years old (City of San Diego 2007). This formation has produced a large and diverse amount of well-preserved marine invertebrate and vertebrate fossils. The Bay Point Formation is exposed along the northerm shore of Mission Bay (i.e., Crown Point), along the San Diego waterfront, and throughout the city of Coronado. It is assigned high resource sensitivity. As such, construction of project components located within the Bay Point Formation has the potential to uncover potentially sensitive paleontological resources. However, project components located within the Golf Course would not contain sensitive paleontological resources as the Golf Course is built over manufactured fill. Under the City's LCP, Policy J.2 requires that new development permitted within the City is designed to maintain public access to the coast. In support of this policy, sub policies have been implemented to strengthen policy goals. Sub-policy b requires reasonably mitigating adverse archaeological or paleontological impacts resources resulting from construction activities within the Bay Point Formation to a less than significant level.

**MM-GEO-1** Due to the possibility of uncovering highly sensitive paleontological resources, project construction that will impact the Bay Point Formation shall require paleontological monitoring. In the event that paleontological resources (fossil remains) are exposed during construction activities for the project, all construction work occurring within 50 feet of the find shall immediately stop until a Qualified Paleontologist, as defined by the Society of Vertebrate Paleontology's 2010 guidelines, can assess the nature and importance of the find. Depending

on the significance of the find, the Qualified Paleontologist may record the find and allow work to continue, or may recommend salvage and recovery of the resource. All recommendations will be made in accordance with the Society of Vertebrate Paleontology's 2010 guidelines, and shall be subject to review and approval by the City of Coronado. Work in the area of the find may only resume upon approval of a Qualified Paleontologist. If it is determined that specific locations of excavation would be located in soils that have no potential for paleontological resources to be present, the Qualified Paleontologist may allow for monitoring to be suspended at these locations.

# 3.8 Greenhouse Gas Emissions

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII	VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature, and it creates a livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>) (see also 14 CCR 15364.5). The three GHGs evaluated herein are CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O.

Gases in the atmosphere can contribute to climate change both directly and indirectly.<sup>6</sup> The Intergovernmental Panel on Climate Change developed the global warming potential concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO<sub>2</sub>; therefore, global warming potential-weighted emissions are measured in metric tons of CO<sub>2</sub> equivalent (MT CO<sub>2</sub>e). Consistent with CalEEMod Version 2016.3.2, this GHG emissions analysis assumed the global warming potential for CH<sub>4</sub> is 25 (emissions of 1 MT of CH<sub>4</sub> are equivalent to emissions of 25 MT of CO<sub>2</sub>), and the global warming potential for N<sub>2</sub>O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

The analysis for compliance with regulatory programs only applies to the individual area addressed by the regulatory program. If the proposed project is determined to have GHG emissions less than 900 MT CO<sub>2</sub>e per year, then the project's cumulative contribution of GHG emissions would be considered less than significant. Conversely, if the proposed project is determined to exceed the 900 MT CO<sub>2</sub>e per year threshold, then the project's cumulative contribution of GHG emissions would be significant, and feasible mitigation measures would be required.

A numerical bright-line value for City projects does not yet exist. Moreover, no bright-line threshold has been formally adopted by an air district or other lead agencies for use in the San Diego region. The California Air Pollution Control Officers Association (CAPCOA) recommended an interim 900 MT CO<sub>2</sub>e screening level as a theoretical approach to identify projects that require further analysis and potential mitigation (CAPCOA 2008). The 900 MT CO<sub>2</sub>e per year screening threshold was developed by CAPCOA based on data collection on various development applications submitted among four diverse cities, including the Cities of Los Angeles, Pleasanton, Dublin, and Livermore. Following the review of numerous pending applications within these four cities, an analysis was conducted to determine the threshold that would capture 90% or more of applications that would be required to conduct a full GHG analysis and implement GHG emission reduction measures as part of final project design. Following CAPCOA's analysis of development applications in various cities, it was determined that the threshold of 900 MT CO<sub>2</sub>e per year would achieve the objective of 90% capture and ensure that new development projects would keep the State of California on track to meet the goals of AB 32. This 900 MT CO<sub>2</sub>e screening level threshold is considered appropriate for small maritime projects or other land use types, but was not devised to include emissions associated with the larger goods movement (e.g., oceangoing vessels, freight rail) projects or larger industrial processes that are typically associated with marine terminals. Consequently, the interim screening level recommended by CAPCOA would be appropriate for the proposed project. The 900 MT CO<sub>2</sub>e threshold is applied to evaluate whether the project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

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

*Less-Than-Significant Impact.* GHG emissions related to construction and operation of the proposed project are outlined below.

<sup>&</sup>lt;sup>6</sup> Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2017).

# **Construction Emissions**

Emissions from construction of the project were estimated using the CalEEMod as discussed in Section 3.3, Air Quality. The combustion of fuels from construction equipment, worker vehicle trips, vendor trips, and hauling trips all generate GHG emissions. Table 3.8-1 shows the estimated annual GHG construction emissions associated with the proposed project, as well as the annualized construction emissions over a 30-year proposed project life. Complete details of the emissions calculations are provided as part of Appendix A.

Table 3.8-1. Estimated Annual Construction Greenhouse Gas Emissions

	CO <sub>2</sub>	CH4	N <sub>2</sub> O	CO <sub>2</sub> e
Year	Metric Tons per Year			
2021	853.55	0.19	0.00	858.39
2022	1,245.78	0.33	0.00	1,254.13
			Total	2,112.52
Annualized Emissions Over 30 Years			70.42	

Source: CalEEMod Version 2016.3.2. See Appendix A for complete results.

**Notes:**  $CO_2$  = carbon dioxide;  $CH_4$  = methane;  $N_2O$  = nitrous oxide;  $CO_2e$  = carbon dioxide equivalent.

As shown in Table 3.8-1, the estimated total GHG emissions during construction would be approximately 2,113 MT CO<sub>2</sub>e over the construction period. Estimated project-generated construction emissions annualized over 30 years would be approximately 70 MT CO<sub>2</sub>e per year. As with project-generated construction air pollutant emissions, GHG emissions generated during construction of the proposed project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. As there is no construction GHG threshold, the amortized construction emissions will be added to the operational emissions and evaluated therein.

# **Operational Emissions**

CalEEMod Version 2016.3.2 was used to estimate potential project-generated operational GHG emissions from area sources (landscape maintenance), energy sources (natural gas and electricity), mobile sources, stationary (emergency generator), solid waste, and water supply and wastewater treatment. Emissions from each category are discussed in the following text with respect to the project. For additional details, see Section 3.3, Air Quality under "Operational Emissions," for a discussion of operational emission calculation methodology and assumptions, specifically for area, energy (natural gas), and mobile sources. Operational year 2022 was assumed consistent with project buildout.

## **Energy Sources**

As represented in CalEEMod, energy sources include GHG emissions associated with building electricity and natural gas usage (non-hearth). Electricity use would contribute indirectly to GHGs, since GHG emissions occur at the site of the power plant, which is typically off site. Emissions were calculated by multiplying the energy use by the utility's carbon intensity (pounds of GHGs per megawatt-hour for electricity or 1,000 British thermal units for natural gas) for CO<sub>2</sub> and other GHGs. Annual natural gas (non-hearth) and electricity emissions were estimated in CalEEMod using the emissions factors for SDG&E, which would be the energy source provider for the proposed project. CalEEMod default values for energy consumption for each land use were applied for analysis of the proposed project. The City provided the estimated energy use for the SWRF. The energy use from non-residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the heating, ventilation, and air conditioning system; water heating system; and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

The proposed project would be subject to the 2019 Title 24 standards, which went into effect on January 1, 2020. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018b). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018b).

# Solid Waste

The proposed project would generate solid waste and would, therefore, result in CO<sub>2</sub> and CH<sub>4</sub> emissions associated with landfill off-gassing. Solid waste generation was derived from the CalEEMod default rates for each residential land use type. Emission estimates associated with solid waste were estimated using CalEEMod.

# Water Supply and Wastewater

Water supplied to the proposed project would require the use of electricity. Accordingly, the supply, conveyance, treatment, and distribution of water would indirectly result in GHG emissions through use of electricity. Annual water use for the proposed project and GHG emissions associated with the electricity used for water supply were calculated based upon default water use estimates for each land use type, as estimated by CalEEMod and SDG&E factors. As the project is a recycled water project, it would offset the use of potable water currently supplied to the golf course and thus avoid any of the indirect emissions associated with that potable water. Therefore, the analysis herein is conservative as the project would avoid the emissions associated with the water currently used to irrigate the golf course.

Operational year 2022 was selected as it is the first full year of operation after construction is completed. Estimated annual operation emissions of the proposed project are shown in Table 3.8-2.

	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	CO <sub>2</sub> e
Emissions Source	Metric Tons per Yea	nr		
Area	0.00	0.00	0.00	0.00
Energy	614.74	0.02	0.00	617.01
Mobile	29.75	0.00	0.00	29.79
Stationary	1.70	0.00	0.00	1.71
Solid Waste	35.68	2.11	0.00	88.41
Water and Wastewater	2.32	0.02	0.00	2.88

# Table 3.8-2. Estimated Annual Operational GHG Emissions (2022)

# Table 3.8-2. Estimated Annual Operational GHG Emissions (2022)

	CO <sub>2</sub>	CH4	N <sub>2</sub> O	CO <sub>2</sub> e
Emissions Source	Metric Tons per Yea	r		
Total 739.80				739.80
	Amortized Construction Emissions 70.42			
		Total with Cor	nstruction Emissions	810.22

**Notes:**  $CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.$ 

Numbers may not add exactly due to rounding.

See Appendix A for complete results.

As shown in Table 3.8-2, the project would generate 740 MT CO<sub>2</sub>e per year. With amortized construction emissions, the project would generate 810 MT CO<sub>2</sub>e per year. As previously discussed, these emissions are conservative as the project would offset the use of potable water currently used by the golf course for irrigation. Since the project would not exceed the operational threshold of 900 MT CO<sub>2</sub>e per year as recommended by CAPCOA, it therefore would have a less-than-significant impact.

# b) Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

# Less-Than-Significant Impact.

# Consistency with SANDAG's San Diego Forward: The 2019 Federal Regional Transportation Plan

Regarding consistency with SANDAG's 2019 Federal Regional Transportation Plan, the project would include site design elements and project design features developed to support the policy objectives of the Regional Transportation Plan and Senate Bill 375. The project would reduce the use of potable water at the golf course, city parks, and street medians through the use of recycled water. The project would also reduce GHG emissions associated with conveying potable water currently used for irrigation and by reducing the volume of wastewater currently transmitted across the bay and treated at the Point Loma Wastewater Treatment Plant.

The 2019 Federal Regional Transportation Plan builds on the previous 2015 Regional Plan, with updated project costs, revenues, and growth forecasts. Table 3.8-3 illustrates the project's consistency with all applicable goals and policies of San Diego Forward: The 2019 Federal Regional Transportation Plan (SANDAG 2019).

Category	Policy Objective or Strategy	Consistency Analysis
The2019 Federal Reg	ional Transportation Plan – Policy Objectives	
Mobility Choices	Provide safe, secure, healthy, affordable, and convenient travel choices between the places where people live, work, and play.	Not Applicable. The project would not impair the ability of SANDAG to provide safe, secure, healthy, affordable, and convenient travel choices between the places where people live, work, and play.

# Table 3.8-3. San Diego Forward: The 2019 Federal Regional Transportation Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
Mobility Choices	Take advantage of new technologies to make the transportation system more efficient and environmentally friendly.	Not Applicable. The project would not impair the ability of SANDAG to take advantage of new technologies to make the transportation system more efficient and environmentally friendly.
Habitat and Open Space Preservation	Focus growth in areas that are already urbanized, allowing the region to set aside and restore more open space in our less developed areas.	<i>Consistent</i> . The project would be located on an existing golf course and along developed roadways.
Habitat and Open Space Preservation	Protect and restore our region's urban canyons, coastlines, beaches, and water resources.	Not Applicable. The project would not impair the ability of SANDAG to protect and restore urban canyons, coastlines, beaches, and water resources.
Regional Economic Prosperity	Invest in transportation projects that provide access for all communities to a variety of jobs with competitive wages.	Not Applicable. The project would not impair the ability of SANDAG to invest in transportation projects available to all members of the Community.
Regional Economic Prosperity	Build infrastructure that makes the movement of freight in our community more efficient and environmentally friendly.	Not Applicable. The project does not propose regional freight movement, nor would it impair SANDAG's ability to preserve and expand options for regional freight movement.
Partnerships/ Collaboration	Collaborate with Native American tribes, Mexico, military bases, neighboring counties, infrastructure providers, the private sector, and local communities to design a transportation system that connects to the mega-region and national network, works for everyone, and fosters a high quality of life for all.	Not Applicable. The project would not impair the ability of SANDAG to provide transportation choices to better connect the San Diego region with Mexico, neighboring counties, and tribal nations.
Partnerships/ Collaboration	As we plan for our region, recognize the vital economic, environmental, cultural, and community linkages between the San Diego region and Baja California.	Not Applicable. The project would not impair the ability of SANDAG to provide transportation choices to better connect the San Diego region with Mexico.
Healthy and Complete Communities	Create great places for everyone to live, work, and play.	Not Applicable. The project would not impair the ability of SANDAG to create great places for everyone to live, work, and play.
Healthy and Complete Communities	Connect communities through a variety of transportation choices that promote healthy lifestyles, including walking and biking.	Not Applicable. The project would not impair the ability of SANDAG to connect communities with a variety of transportation choices.
Healthy and Complete Communities	Increase the supply and variety of housing types – affordable for people of all ages and income levels in areas with frequent transit service and with access to a variety of services.	Not Applicable. The project would not impair the ability of SANDAG to increase the supply and variety of housing types.
Environmental Stewardship	Make transportation investments that result in cleaner air, environmental protection,	Not Applicable. The project would not impair the ability of SANDAG to make transportation investments that result in

Table 3.8-3. San Diego Forward: The 2019 Fe	ederal Regional Transportation	Plan Consistency Analysis
---	--------------------------------	---------------------------

Category	Policy Objective or Strategy	Consistency Analysis
	conservation, efficiency, and sustainable living.	cleaner air, environmental protection, conservation, efficiency, and sustainable living.
Environmental Stewardship	Support energy programs that promote sustainability.	Not Applicable. The project would not impair the ability of SANDAG to support energy programs that promote sustainability.
Sustainable Comm	nunities Strategy – Strategies	
Strategy #1	Focus housing and job growth in urbanized areas where there is existing and planned transportation infrastructure, including transit.	Consistent. The project would be located close to major urban and employment centers.
Strategy #2	Protect the environment by preserving sensitive habitat, open space, and farmland.	<i>Consistent.</i> The project would be located close to major urban and employment centers.
Strategy #3	Invest in a transportation network that gives people transportation options and reduces greenhouse gas emissions.	Not Applicable. The project would not impair the ability of SANDAG to invest in a transportation network that gives people transportation choices and reduces greenhouse gas emissions.
Strategy #4	Address the housing needs of all economic segments of the population.	Not Applicable. The project would not impair the ability of SANDAG to address the housing needs of all economic segments of the population.
Strategy #5	Implement the 2019 Federal Regional Transportation Plan through incentives and collaboration.	Not Applicable. The project would not impair the ability of SANDAG to implement the Regional Transportation Plan through incentives and collaborations.

Source: SANDAG 2019

City = City of San Diego; Project = Coronado Golf Course WRF Project; SANDAG = San Diego Association of Governments.

As shown in Table 3.8-3, the project is consistent with all applicable 2019 Federal Regional Transportation Plan Policy Objectives or Strategies. SANDAG worked with the local jurisdictions to identify Regional Housing Needs Assessment allocation options that meet the four goals of housing element law (Government Code Section 65484(d)(1)-(4)) within the 2019 Federal Regional Transportation Plan. The second of the four objectives of the SANDAG Regional Housing Needs Assessment is to promote infill development and socioeconomic equity, the protection of environmental and agricultural resources, and the encouragement of efficient development patterns. Impacts would be less than significant.

# Consistency with CARB's Scoping Plan

The Scoping Plan, approved by CARB on December 12, 2008, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Relatedly, in the Final Statement of Reasons for the Amendments to the CEQA Guidelines, the California Natural Resources Agency observed that "[t]he [Scoping Plan] may not be appropriate for use in determining the significance of

individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-global warming potential GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., low-carbon fuel standard), among others. The project would comply with all applicable regulations adopted in furtherance of the Scoping Plan to the extent required by law.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. Table 3.8-4 highlights measures that have been developed under the Scoping Plan and the project's consistency with applicable Scoping Plan measures. The table also includes applicable measures in the 2017 Scoping Plan Update. To the extent that these regulations are applicable to the project, its inhabitants, or uses, the project would comply with all applicable regulations adopted in furtherance of the Scoping Plan. For those measures not applicable to the project, the project would not inhibit CARB from implementing those measures.

Scoping Plan Measure	Measure Number	Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	The project's employees and customers would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low Carbon Fuel Standard	T-2	Motor vehicles driven by the project's employees and customers would use compliant fuels.
Low Carbon Fuel Standard (18% reduction in carbon intensity by 2030)	N/A	Motor vehicles driven by the project's employees and customers would use compliant fuels.
Reduction in Vehicle Miles Traveled	N/A	The project is located on an infill site, which is indicative of less VMT compared to a green-field site.
Electricity and Natural Gas Sector		
Energy Efficiency Measures (Electricity)	E-1	The project will comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for electrical appliances and other devices at the time of building construction.
Energy Efficiency (Natural Gas)	CR-1	The project will comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for electrical appliances and other devices at the time of building construction.
Renewable Portfolios Standard (33% by 2020)	E-3	The project would use energy supplied by San Diego Gas and Electric, which is in compliance with the Renewable Portfolio Standard.
Renewable Portfolios Standard (50% by 2050)	N/A	The project would use energy supplied by San Diego Gas and Electric, which is in compliance with the Renewable Portfolio Standard.

#### Table 3.8-4. Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Senate Bill 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	This is applicable to residential developments only.
Water Sector		
Water Use Efficiency	W-1	The project would reduce the use of potable water by approximately 1 billion gallons over a 30-year operational period. The project would also utilize water saving features including low-flow fixtures.
Green Buildings		
State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	The project would be designed in accordance with the State Green Building Initiative.
Recycling and Waste Management Sect	or	
Mandatory Commercial Recycling	RW-3	During both construction and operation, the project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act, as amended. During construction, all wastes would be recycled to the maximum extent possible.
High Global Warming Potential Gases Se	ector	
Limit High Global Warming Potential Use in Consumer Products	H-4	The project's employees would use consumer products that would comply with the regulations that are in effect at the time of manufacture.

Source: CARB 2008, 2017.

CARB = California Air Resources Board; GHG = greenhouse gas; Project = DMV Normal Street Replacement Project.

Based on the analysis in Table 3.8-4, the project would be consistent with the applicable strategies and measures in the Scoping Plan.

In addition to the measures outlined in Table 3.8-4, the Scoping Plan also highlights, in several areas, the goals and importance of infill projects. Specifically, the Scoping Plan calls out an ongoing and proposed measure to streamline CEQA compliance and other barriers to infill development. The plan encourages infill projects and sees them as crucial to achieving the state's long-term climate goals. The plan encourages accelerating equitable and affordable infill development through enhanced financing and policy incentives and mechanisms.

The state completed an Integrated Natural and Working Lands Climate Change Action Plan in 2018, which considered aggregation of eco-regional plans and efforts to achieve net sequestration goals. The Action Plan includes goals and plans to promote and provides incentives for infill development through community revitalization and urban greening and promote the adoption of regional transportation and development plans, such as Senate Bill 375 Sustainable Communities Strategies and Climate Action Plans, that prioritize infill and compact development and also consider the climate change impacts of land use and management.

The following strategies were outlined to expand infill development within the scoping plan:

- Encouraging regional Transfer of Development Rights programs to allow owners of natural and working lands to sell their development rights to developers who can use those rights to add additional density to development projects in preferred infill areas.
- Promoting regional Transit-Oriented Development funds that leverage public resources with privatesector investment capital to provide flexible capital for Transit-Oriented Development projects.
- Rebates for low-VMT/location-efficient housing, similar to programs that use rebates to encourage adoption of energy-efficient appliances, zero-emissions vehicles, water-efficient yards, or renewable energy installation. For example, the rebate could reimburse residents for a portion of the down payment for purchasing or renting a qualified home in exchange for a minimum term of residence.
- Promotion of cross-subsidizing multi-station financing districts along transit corridors to leverage revenues from development in strong-market station areas in order to seed needed infrastructure and development in weaker-market station areas.
- Abatement of residential property tax increases in exchange for property-based improvements in distressed infill areas.
- Ways to promote reduced parking in areas where viable transportation alternatives are present.
- Additional creative financing mechanisms to enhance the viability of priority infill projects.
- Ways to promote and strengthen Urban Growth Boundaries to promote infill development and conservation of natural and working lands by defining and limiting developable land within a metropolitan area according to projected growth needs.

In summary, the project would be consistent with the measures and policy goals as shown in Table 3.8-4. The Project would also be consistent with the various efforts the Scoping Plan established to encourage infill development projects. Therefore, the project would be consistent with CARB's Scoping Plan.

Finally, the SDAPCD has not adopted GHG reduction measures that would apply to the GHG emissions associated with the project. Therefore, this impact would be less than significant.

### 3.9 Hazards and Hazardous Materials

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	HAZARDS AND HAZARDOUS MATERIALS - Wo	ould the project:			
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
C)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

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

#### Short-Term Construction

**Less-Than-Significant Impact.** During construction of the project, potentially hazardous materials would likely be handled on the project site. These materials would include gasoline, diesel fuel, lubricants, and other petroleum-based products required to operate and maintain construction equipment as well as specific materials for building construction, such as asphalt and concrete. Handling of these potentially hazardous materials would be temporary and would coincide with the short-term construction phase of the project. Hazardous materials would be stored in designated areas away from environmentally sensitive areas in quantities that would not pose significant hazard to the public in the event of a release.

Although these materials would likely be stored on the project site, storage would be required to comply with the guidelines set forth by each product's manufacturer and with all applicable federal, state, and local regulations pertaining to the storage of hazardous materials. Consistent with federal, state, and local requirements, the transport of hazardous materials to and from the project site would be conducted by a licensed contractor. Any handling, transport, use, or disposal of hazardous materials would comply with all relevant federal, state, and local agencies and regulations, including the U.S. Environmental Protection Agency, the California Department

of Toxic Substances Control, the California Occupational Safety and Health Administration, Caltrans, the Resource Conservation and Recovery Act, the SDAPCD. Therefore, short-term construction impacts related to the transport, use, or disposal of hazardous materials would be less than significant.

#### Long-Term Operational

#### Less-Than-Significant Impact.

Project operation would require use of limited amounts of hazardous materials associated with the water recycling process and Golf Course maintenance. The SWRF would implement a UV disinfection system for water treatment, which eliminates the need for permanent chemical storage on site. In addition, the filters that are currently proposed for treatment do not use chemicals as part of their backwash process. It is expected that chemicals may be used as part of the regular quarterly or annual cleaning of the filters, but no chemicals would be stored on site as part of the cleaning process. Backwash water would be carefully managed and taken off site for disposal. The transportation of these chemicals would occur infrequently and would not pose a significant risk of release.

Solid wastes produced by the SWRF consist of grit, sand, and other inorganic filterable materials. The screens and grit removal systems will be auto-rinsed, dewatered, and auto-bagged for off-site disposal. Bagged wastes will be temporarily stored on site in a trash bin until picked by local waste management company, two to three times per week. A new separate waste disposal pipeline will be constructed to convey wastes from the treatment/recycling process. Known as Waste Active Solids (WAS), this waste will be pumped into the new pipeline and discharged into the City sewer at an appropriate location. Accordingly, no liquid waste would be transported off site, and no potential for spills would occur.

The California Department of Toxic Substances Control has primary regulatory authority for enforcing hazardous materials regulations. Additionally, State hazardous waste regulations are contained primarily in Title 22 of the California Code of Regulations. Furthermore, the California Occupational Safety and Health Administration has developed rules and regulations regarding worker safety around hazardous and toxic substances. If used, transported, and stored or disposed of properly, these materials do not pose a substantial risk or hazard to the public or the environment. Any potential impacts associated with the routine transport, use, or disposal of hazardous materials, although minimal, would be further minimized with adherence to applicable regulations. As such, long-term operational impacts associated with the use, transport, and disposal of hazardous materials would be less than significant.

### b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**Less-Than-Significant Impact.** As discussed in Section 3.9(a), during construction of the project, potentially hazardous materials would likely be handled on the project site. These materials would include gasoline, diesel fuel, lubricants, and other petroleum-based products required to operate and maintain construction equipment as well as specific materials for building construction, such as asphalt and concrete. Handling of these potentially hazardous materials would be temporary and would coincide with the short-term construction phase of the project. As previously noted, project operation would require minimal use of hazardous materials associated with the water recycling process and Golf Course maintenance. Although these materials would likely be stored on the project site, storage would be required to comply with the guidelines set forth by each product's manufacturer and with all applicable federal, state, and local

regulations pertaining to the storage of hazardous materials. Furthermore, the project would be required to prepare a SWPPP to identify best management practices which would minimize the potential for releases of hazardous materials during construction and long-term storage of chemicals will be conducted in accordance with Title 22 regulations. Additionally, all residual wastewater from the water recycling process will be returned to the sanitary sewer system. Only solid waste (i.e., sludge) would be transported off site to a licensed disposal facility. Therefore, impacts related to the accidental release of hazardous materials would be less than significant.

# c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

*Less-Than-Significant Impact.* Land uses and activities typically associated with hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste include heavy commercial, manufacturing, research, and industrial uses.

The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception and diversion pump stations and pipelines. The proposed aboveground structures associated with the SWRF and TCF complex and pond for recycled water storage would be located within the Golf Course. The nearest school within distance of the Golf Course is Coronado High School (650 D Avenue) and is located approximately 0.7 miles southeast of the project site. However, the proposed pipelines would be located within existing City streets. As such, the proposed pipelines would pass the boundary of Coronado High School. The pipelines would be located underground and would not expose schools to hazardous material or substances. As discussed in Section 3.9(a), during construction of the project, potentially hazardous materials would likely be handled on the project site. These materials would include gasoline, diesel fuel, lubricants, and other petroleum-based products required to operate and maintain construction equipment as well as specific materials for building construction, such as asphalt and concrete. Handling of these potentially hazardous materials would be done in compliance with applicable regulations and would be temporary, coinciding with the short-term construction phase of the project. Therefore, impacts associated with the emitting or handling of hazardous materials within 0.25 miles of a school would be less than significant.

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

**Less-Than-Significant Impact.** The Hazardous Waste and Substances Sites (Cortese List) is a planning document providing information about the location of hazardous materials release sites. California Government Code Section 6596.2 requires the California Environmental Protection Agency to develop, at least annually, an updated Cortese List. The Department of Toxic Substances Control is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous materials release information for the Cortese List (CalEPA 2020).

Based on a review of Cortese List online data resources, the current golf maintenance facility was identified as a closed case cleanup site (case #: H21243-002) (DTSC 2020; SWRCB 2020). The site references a potential release of gasoline discovered during leaking underground storage tank cleanup in 2003; however, the case was successfully closed in 2007 (SWRCB 2020). The Golf Course maintenance facility will be demolished as part of the project. During the demolition, considerations of the previous site contamination would be regarded and addressed. The remainder of the project site has not been subject

to a release of hazardous substances. Additionally, the project does not propose structures for human occupancy or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill, is not located on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash), and is not on or within 1,000 feet of a Formerly Used Defense Site. Therefore, impacts associated with a hazardous materials site would be less than significant.

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?

*No Impact.* The project is not located within an Airport Land Use Compatibility Plan and is not located within 2 miles of a public airport (ALUCP 2020). The project site is located approximately 2 miles east of a U.S. Navy air base; however, the project would not introduce any new residential uses or employment centers which could expose people to excessive aircraft noise. Therefore, no impacts associated with public airport hazards would occur.

# f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**Less-Than-Significant Impact.** State Routes 75 and 282 are the primary transportation routes for regional emergency response and evacuation within the City of Coronado. During construction of the project, temporary construction and staging areas would be located within the state route ROWs. However, these routes would remain fully accessible and would not interfere with emergency response or evacuation plans. Furthermore, the contractor would be required to prepare a Traffic and Pedestrian Control and Management Plan (TPCMP) and submit it to the City Public Services and Engineering Department for review and approval. The TPCMP would be implemented during project construction and would require notification of shoulder access restrictions to Caltrans and emergency response agencies. The TPCMP would be implemented as part of the project that would identify traffic control measures which could include temporary bikeway, signage, temporary concreate barriers, and use of flaggers. Safety measures would be implemented as part of the management plan during construction and the configuration and safety of the local transportation network would not be permanently affected. Therefore, impacts associated with an emergency response plan or emergency evacuation plan would be less than significant.

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

*No Impact.* A review of the California Department of Forestry and Fire Services' (CAL FIRE) fire hazard severity zone (FHSZ) maps and data revealed that the project site is not located within a State Responsibility Area or a very high FHSZ (CAL FIRE 2007). Furthermore, the project site is surrounded by existing development in an urbanized portion of the City away from any urban/wildland interface. Therefore, no impacts associated with wildland fire hazards would occur.

### 3.10 Hydrology and Water Quality

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Χ.	HYDROLOGY AND WATER QUALITY - Would the	ne project:			-
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
C)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	<ul> <li>result in substantial erosion or siltation on or off site;</li> </ul>				
	<ul> <li>substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;</li> </ul>				
	<ul> <li>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</li> </ul>				
	iv) impede or redirect flood flows?			$\square$	
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

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

Less-Than-Significant Impact. The project is located within the San Diego RWQCB jurisdiction that oversees water quality in the San Diego region. The RWQCB has adopted the Water Quality Control Plan for the San

Diego Basin (Basin Plan) that designates beneficial uses of the region's surface water and groundwater, identifies water quality objectives for the reasonable protection of those uses, and establishes an implementation plan to achieve the objectives. The RWQCB also regulates discharges from municipal separate storm sewer systems in the San Diego region under a National Pollutant Discharge Elimination System Municipal Storm Water Permit (Regional MS4 Permit), which expired on June 27, 2018, but remains in effect under an administrative extension until it is reissued by the San Diego Water Board. The permit requires the development and implementation of BMPs in planning and construction of private and public development projects. Development projects are also required to include BMPs to reduce pollutant discharges from the project site in the permanent design.

Construction of the project would involve ground-disturbing activities for grading and excavation that could result in sediment discharge in stormwater runoff. Additionally, construction would involve the use of oil, lubricants, and other chemicals that could be discharged from leaks or accidental spills. These potential sediment and chemical discharges during construction would have the potential to impact water quality in receiving water bodies. However, construction of the project would likely result in more than one acre of land disturbance and therefore, the project would be required to prepare and implement a SWPPP in accordance with the Statewide Construction General Permit. <u>More specifically, SWRCB Construction General Permit (Order 2009-0009-DWQ, as amended by Order 2010-0014-DWQ and Order 2012-006-DWQ).</u><sup>7</sup> This requires implementation of water quality BMPs to ensure that water quality standards are met, and that stormwater runoff from the construction work areas do not cause degradation of water quality in receiving water bodies. Some of these BMPs include use of silt screening or fiber filtration rolls, appropriate handling and disposal of contaminants, fertilizer and pesticide application restrictions, litter control and pick up, and vehicle and equipment repair and maintenance in designated areas. <u>The following types of BMPs, as applicable, would be implemented during construction activities include:</u>

#### Erosion Control

- Physical stabilization through hydraulic mulch, soil binders, straw mulch, bonded fiber matrices, and/or erosion control blankets (i.e., rolled erosion control products).
- Soil roughening of graded areas (through track walking, scarifying, sheepsfoot rolling, or imprinting) to slow runoff, enhance infiltration, and reduce erosion.
- Wind erosion (dust) control through the application of water or other dust palliatives as necessary to prevent and alleviate dust nuisance.

#### Sediment Control

- Perimeter protection through silt fences, fiber rolls, gravel bag berms, sandbag barriers, and straw bale barriers.
- Storm drain inlet protection.
- Sediment capture through sediment traps, storm drain inlet protection, and sediment basins.

<sup>&</sup>lt;sup>7</sup> The 2009-0009-DWQ, and associated amendments to General Permit for Construction Activities are available online at: http://www.swrcb.ca.gov/water\_issues/programs/stormwater/constpermits.shtml

- Velocity reduction through check dams, sediment basins, and/or outlet protection/velocity dissipation devices.
- Reduction in off-site sediment tracking through stabilized construction entrance/exit, construction road stabilization, and/or entrance/exit tire wash.
- <u>The General Permit for Construction Activities contains receiving water limitations that contain receiving</u> water limitations that require stormwater discharges to not cause or contribute to a violation of any <u>applicable water quality standard</u>. Inspections of all BMPs are required throughout construction.

The project will be graded such that the recycled water storage pond is contained by topography and prevents discharges to the bay under typical design storm runoff quantities. Operational protocols will be incorporated into the facility so that if there is significant rain in the forecast, recycled water production rates would be decreased, and the surface level of the pond would be lowered in advance to account for runoff into the pond to minimize the risk of overtopping.

Chemical storage and fuel tank spill prevention relief will continue as currently conducted for existing facilities in accordance with permit requirements from County of San Diego, Department of Environmental Health, Hazardous Materials Division and the City's Hazardous Materials Business Plan. Through incorporation of design features, BMPs, preparation and compliance with SWPPP requirements, and adherence to the Hazardous Materials Business Plan, impacts associated with water quality standards would be less than significant.

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

**Less-Than-Significant Impact.** The Coronado water system is served entirely by treated surface water purchased from the City of San Diego. The project would convert areas of the project site from being a pervious land cover to an impervious land cover. The additional land cover would result in less stormwater infiltration in these specific locations; however, the reduction in groundwater recharge due to the increase in impervious surfaces would not be substantial. Additionally, the project would not require the use of groundwater for any construction or operational water needs.

Based on the results of the Geotechnical Investigation, shallow groundwater (which is incompatible with the irrigation demands of the Golf Course) and highly permeable soil materials are present beneath the SWRF and TCF Complex. Given these site conditions, groundwater inflows can be expected in deep excavations. Variations in the elevation of the groundwater table should be expected in response to seasonal and tidal fluctuations in San Diego Bay.

Construction and operation of the project would not substantially impede groundwater levels in the area. As such, the project would not significantly change groundwater quantities or result in substantial losses to groundwater recharge capability, and impacts would be less than significant.

- c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - i) result in substantial erosion or siltation on or off site;
  - ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;
  - iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
  - iv) impede or redirect flood flows?

**Less-Than-Significant Impact.** The project would not alter any natural waterways or drainages. The minor additional impervious surfaces associated with the implementation of the project would be negligible and would not cause a substantial change in the volume of surface runoff or cause an increase in flooding. Furthermore, the project would be required to prepare a SWPPP and implement stormwater BMPs that would maintain the existing level of runoff from the project site and would reduce sediment and pollutant runoff. During the operational phase of the project, daily inspection of irrigation lines would continue consistent with current practice. Any leaks would be repaired as necessary to prevent discharges. Therefore, impacts associated with substantial erosion or siltation on or off site would be less than significant.

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

**Less-Than-Significant Impact.** The project is not located within a high risk or special flood hazard area; however, flood hazards associated with a 100- or 200-year flood event, tsunami and/or a seiche are possible (FEMA 2019). The majority of the project would be installed underground; however, new structures to house the water recycling and turf care facilities would be constructed. In the unlikely event of inundation during a tsunami, a release of SWRF and golf maintenance chemicals, could potentially occur; however, these materials would be stored in accordance with applicable state law and the potential for release as a result of a flood, tsunami, or seiche are considered negligible. Moreover, the facility would be shut down in advance of a forecasted rain event, which could produce a significant flood. Therefore, impacts would be less than significant.

# e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less-Than-Significant Impact. No sustainable groundwater management plan has been prepared or is currently planned. The Coronado Hydrologic Area does not contain beneficial groundwater; consequently, preparation of a groundwater management plan has not occurred and is not planned. The project would not require long-term water use or a dedicated water supply. Additionally, the project would be required to comply with applicable regulations and permit requirements intended to support the goals and objectives of the Basin Plan, including various WDRs (issued by the State Water Resources Control Board or San Diego RWQCB) and City stormwater and dewatering permits. Projects that are consistent with the goals and objectives of the Basin Plan would not conflict with the Basin Plan.

Furthermore, on May 8, 2013, the San Diego RWQCB adopted a new Municipal Permit to regulate discharges from Municipal Separate Storm Sewer Systems (MS4s) (Regional Board 2013). The Municipal Permit established a new, watershed-based approach by which the Copermittees plan and implement storm water programs. The new approach requires that jurisdictions' storm water programs address the priority receiving water conditions, focusing efforts toward measureable improvements in receiving water quality. The Municipal Permit requires that a Water Quality Improvement Plan be developed for the San Diego Bay Watershed Management Area. The Copermittees in the San Diego Bay Watershed Management Area include the County of San Diego, the Port of San Diego, the San Diego County Regional Airport Authority, and the Cities of Chula Vista, Coronado, Imperial Beach, La Mesa, Lemon Grove, National City, and San Diego. Caltrans is also participating voluntarily in the development of the San Diego Bay Watershed Management Area Water Quality Improvement Plan as a named party in the Chollas Creek Total Maximum Daily Loads. Although Caltrans is under a separate storm water permit (Order No. 2012-0011-DWQ) (State Board 2013), the agency is participating voluntarily in multiple Water Quality Improvement Plan development efforts throughout the San Diego region. The Water Quality Improvement Plan will help guide future updates to the Copermittees' jurisdictional programs and to the Caltrans Storm Water Management Program to achieve improved water quality in MS4 discharges and receiving waters by concentrating efforts on the Highest Priority Conditions and Focused Priority Conditions in the Watershed Management Area. The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan and impacts would be less than significant.

### 3.11 Land Use and Planning

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	
XI.	<ol> <li>LAND USE AND PLANNING – Would the project:</li> </ol>					
a)	Physically divide an established community?				$\boxtimes$	
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?					

#### a) Would the project physically divide an established community?

*No Impact*. The physical division of an established community typically refers to the construction of a linear feature (such as a major highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and outlying area. Under the existing condition, the project site is not used as a connection between established communities. Instead, connectivity within the area surrounding the project site is facilitated via local roadways and pedestrian sidewalks. During construction of the project, temporary construction and staging areas would be located within the state route ROWs. However, these routes would remain fully accessible and would not interfere with emergency response or evacuation plans. Furthermore, a TPCMP would be implemented during project

construction that would require notification of shoulder access restrictions to Caltrans and emergency response agencies. The TPCMP would be implemented as part of the project that would identify traffic control measures which could include temporary bikeway, signage, temporary concreate barriers, and use of flaggers. Safety measures would be implemented as part of the management plan during construction and the configuration and safety of the local transportation network would not be permanently affected. Therefore, no impacts associated with physical division of an established community would occur.

# b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

*No Impact.* The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception, a diversion pump station, and pipelines. The proposed SWRF and TCF Complex and recycled water storage would be located within the Coronado Municipal Golf Course. However, the proposed pump stations and pipelines necessary to connect the SWRF to the existing municipal wastewater transmission system would be located within existing City streets. The project would adhere to policies and goals set forth in the City's General Plan and Local Coastal Program Land Use Plan to avoid and/or mitigate potential environmental impacts.

#### City of Coronado General Plan

The City's General Plan serves to preserve and improve the City of Coronado as a beautiful, pleasant residential community in which to live, work, shop, and pursue leisure activities. Additionally, the plan provides the means for guiding and influencing the many public and private decisions that create the future city (City of Coronado 2003a).

#### **Goals and Policies**

<u>Public Facility Goal 3</u>: Assure that public services are provided in a manner to minimize negative environmental impacts when possible.

**Consistency:** Relevant to the project, the General Plan addresses public facility goals related to the appropriate design, location, size, phase, construction, and maintenance of the City's infrastructure and public buildings. As such, the project's proposed improvements to the Golf Course facilities and proposed recycled water pipelines throughout the City would align with the goals set forth in the Public Facility Element. The potential environmental impacts of the project has been analyzed throughout this MND and mitigation measures have been incorporated as necessary such that impacts to the environment would be less than significant. The project would be consistent with these goals.

#### City of Coronado, Zoning Code Designation

The zoning designations for the project are as follows:

- Open Space (OS) The proposed SWRF and TCF complex are located within the Golf Course which has the OS zoning designation.
- Rights-Of-Ways (ROW) Proposed pipelines and pump stations would be located within City streets.

#### Orange Avenue Specific Plan -

Proposed pipelines would be located underground Orange Avenue as well as small segments connecting 10th, 6th, 5th, 3rd, and 1st Streets within the Orange Avenue Specific Plan.

#### Local Coastal Program Land Use Plan

The City's Local Coastal Program is a planning document that identifies the location, type, densities, and other ground rules for future development in the coastal zone. The LCP includes a Land Use Plan (LUP) and its implementing measures. The LUP represents the City's good faith effort to devise a program that will allow the City to assume the responsibility of implementing and enforcing the requirements and intent of the California Coastal Act of 1976 (as amended), while maintaining the community's ambiance (City of Coronado 2005).

**Consistency:** The proposed project would provide a reliable and drought-proof source of irrigation to maintain the functionality of the Coronado Golf Course. The Coronado Golf Course is a popular visitor-serving amenity, which is consistent with the goals and policies of the California Coastal Act and the City of Coronado's certified LCP. The Golf Course is open to the public and provides free public parking and relatively low-cost play when compared to other public coastal golf courses in the region.

Additionally, the project would increase coastal access through development of an approximately 500– 1,000-square-foot coastal vista located near an existing pocket beach along the coastline of San Diego Bay near the number 2 and/or 18 greens. The coastal vista would provide passive recreational opportunities for the public. Improvements would consist of an approximately 250-foot-long, 10-foot-wide ADA-accessible path between the existing golf course parking lot and the coastal vista; 3–5 park benches, coastal access/wayfinding signs, and low-growing landscaping. The City would also add new signage to alert the public of coastal access opportunities through the Golf Course. Free parking spaces would be dedicated for visitors to the coastal vista, and signs would be installed to demarcate coastal access spaces from general spaces for golf patrons.

As further described in Section 3.1, Aesthetics, the project would not adversely impact any existing coastal views. The proposed SWRF and TCF buildings would be low profile and would be largely concealed from public view by intervening topography and landscaping.

The project would be consistent with the California Coastal Act and the City's certified LCP because it would enhance existing visitor-serving amenities, provide new opportunities for coastal access to the general public, and avoid any adverse impacts to existing coastal views.

#### Orange Avenue Corridor Specific Plan

The Orange Avenue Corridor Specific Plan (Specific Plan) area is primarily composed of the Orange Avenue corridor that stretches from First Street in the north and continues to Adella Avenue in the south. The Specific Plan provides a policy and regulatory bridge between the City of Coronado General Plan and individual, project-level development (City of Coronado 2003b). Projects subject to the Specific Plan would be limited to the proposed pipelines located along Orange Avenue as well as small segments connecting 10th, 6th, 5th, 3rd, and 1st Streets. The pipelines would be located underground; therefore, the project would not propose any aboveground structures that would conflict with policy or zoning regulations.

#### Port Master Plan

The Golf Course is an allowed use under the Port Master Plan and occupies approximately 98 acres, or 60% of the total Port District land area in Planning District 6, and constitutes the most significant open space in Coronado.

#### Conclusion

The project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, including policies of the General Plan or Local Coastal Program Land Use Plan. Therefore, no impacts associated with land use plans, policies, and regulations would occur.

### 3.12 Mineral Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII.	MINERAL RESOURCES – 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?				
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?				

# 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?

*No Impact.* The State Mining and Reclamation Act of 1975 (California Public Resources Code Section 2710 et seq.) requires that the California State Geologist implement a mineral land classification system to identify and protect mineral resources of regional or statewide significance. According to maps obtained through the California Department of Conservation and California Geological Survey, the project site is within a Mineral Resource Zone 1 (MRZ-1), which is defined as an area where adequate information indicates that no significant mineral deposits are present (DOC 2017). Therefore, no impacts associated with loss of availability of a known mineral resource would occur.

# b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

*No Impact.* As previously mentioned, according to maps obtained through the California Department of Conservation and California Geological Survey, the project site is within a Mineral Resource Zone 1 (MRZ-1), which is defined as an area where adequate information indicates that no significant mineral deposits are present (DOC 2017). No mineral extraction activities occur on or adjacent to the project site, and no

known mineral resources are present on site. Therefore, no impacts associated with the loss of availability of a locally important mineral resource recovery site would occur.

### 3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
<ul> <li>a) Generation of a substantial temporary or permanent increase in ambient noise leve in the vicinity of the project in excess of standards established in the local genera plan or noise ordinance, or applicable standards of other agencies?</li> </ul>				
b) Generation of excessive groundborne vibration or groundborne noise levels?				
<ul> <li>c) For a project located within the vicinity of private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airpor or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</li> </ul>				

#### **Existing Setting**

The proposed SWRF would be constructed at the site of the Coronado Municipal Golf Course located at 2000 Visalia Row. The site has been disturbed and continually used as part of the Golf Course for the past sixty years. The Golf Course is on the east end of the Coronado Island with Glorietta Bay to the south, the San Diego-Coronado Bay Bridge to the north, San Diego Bay to the east, and residential neighborhoods to the west.

Represented by locations ST-1/LT-1, ST-2/LT-2, and ST-3 in Table 3.13-1, the existing outdoor ambient sound environment of the Golf Course and Public Services Building was measured during a field survey conducted from February 4–5, 2020. Collected sample sound pressure level measurements at these locations, along with documented investigator observations regarding perceived or witnessed acoustical contributors to this baseline or pre-Project noise environment, appear in Table 3.13-1. Photographs, tagged survey positions, and instrument details can be found in Appendix D.

Survey Position	Description/Address	Time (hh:mm)	L <sub>eq</sub> (dBA)	L <sub>max</sub> (dBA)	L <sub>min</sub> (dBA)	Notes (observed sound sources)
ST-1	On the Golf Course, at an approximate distance of 925 feet to the nearest existing residence on Glorietta Boulevard	Feb. 4 <sup>th</sup> , 04:09 p.m. – 04:14 p.m.	58.3	76.3	53.8	distant traffic, birds, leaves rustling, golfer speech, golf club strike on ball
ST-1	(same as daytime ST-1 position above)	Feb. 4 <sup>th</sup> , 10:12 p.m. – 10:17 p.m.	54.9	63.6	50.9	no wind, some bridge traffic, port operation (across bay), sprinklers, birds
LT-1	(same as daytime ST-1 position above)	Feb. 4 <sup>th</sup> 04:00 p.m. – Feb. 5 <sup>th</sup> 03:59 p.m.	57.8 (24-hr) 63.5 (CNEL)	95.8	39.7	helicopter overflights, nearby and distant traffic, golf course activities, birds, leaves rustling, sprinklers, port operations (across bay)
ST-2	Near the proposed SWRF location on the Golf Course	Feb. 4 <sup>th</sup> , 03:53 p.m. – 03:59 p.m.	51.3	62.8	47.5	helicopter overflight, distant traffic, birds, leaves rustling, golf club strike on ball (~ 25 feet away)
ST-2	(same as daytime ST-2 position above)	Feb. 4 <sup>th</sup> , 10:27 p.m. – 10:32 p.m.	51.8	57.9	49.1	no wind, some bridge traffic, port operation (across bay), sprinklers, birds
LT-2	(same as daytime ST-2 position above)	Feb. 4 <sup>th</sup> 04:00 p.m. – Feb. 5 <sup>th</sup> 03:59 p.m.	58.1 (24-hr) 65.3 (CNEL)	101.4	38.9	helicopter overflights, nearby and distant traffic, golf course activities, birds, leaves rustling, sprinklers, port operations (across bay)
ST-3	On A Avenue, across from Broadstone Apartments	Feb. 4 <sup>th</sup> , 04:36 p.m. – 04:42 p.m.	50.4	60.8	43.3	distant traffic, car leaving parking lot, car parking, car passenger speech, mechanical noise from Public Services Building
ST-3	(same as daytime ST-3 position above)	Feb. 4 <sup>th</sup> , 10:51 p.m. – 10:57 p.m.	47.4	58.9	43.4	no wind, no local traffic, mechanical noise from Public Services Building, port operations (across bay), helicopter overflight

#### Table 3.13-1. Measured Existing Outdoor Ambient Sound Levels

Source: Appendix D

**Notes:**  $L_{eq}$  = equivalent continuous sound level (time-averaged sound level);  $L_{max}$  = maximum sound level during the measurement interval;  $L_{90}$  = sound pressure level exceeded 90% of the measured time period; dBA = A-weighted decibels; CNEL = continuous noise equivalent level.

The measured continuous noise equivalent level (CNEL) values of 63.5 A-weighted decibels (dBA) and 65.3 dBA at monitoring locations LT-1 and LT-2 are consistent with the "Noise Critical Areas" shown in Figure 7

(page II-L12) of the City of Coronado General Plan Noise Element (City of Coronado 1999), which are defined as having outdoor ambient noise levels that exceed 60 dBA CNEL.

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB, and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because the dB scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. For example, if two noise sources produce identical noise levels of 50 dBA, their combined sound level would be 53 dBA, not 100 dBA. However, where ambient noise levels are high in comparison to a new noise source, there will be a small change in noise levels. For example, when an ambient noise level of 70 dBA is combined with a noise source generating 60 dBA, the resulting noise level equals 70.4 dBA. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is just noticeable, while 1-2 dBA changes generally are not perceived.

Noise levels typically attenuate (drop off) at a rate of 6 dB per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dB per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dB per doubling of distance. In addition to attenuation due to distance, an excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites (e.g. soft dirt, grass, or scattered bushes). A barrier will typically provide at least a 5 dB noise reduction when it just breaks the line of sight between a noise source and a receiver, and additional noise reduction is achieved with increased height of the barrier and/or with the use of sound absorbing material (i.e., sound blankets on the noise source side of the barrier).

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Less than Significant with Mitigation Incorporated

#### Construction

#### On-site Construction Activities

Unless allowed by permit approved by the City's Noise Control Officer (NCO), CMC Section 41.10.040 prohibits construction activities between 7:00 p.m. and 7:00 a.m. on Mondays through Saturdays, and all day and night on Sundays and legal holidays. On allowable days from 7:00 a.m. to 7:00 p.m., CMC 41.10.050 sets a limit of 75 dBA hourly  $L_{eq}$  at or within residentially zoned property (City of Coronado 2019).

While noise attributed to construction of the proposed Complex (i.e., SWRF, Turf Care Facility, and Chemical Storage buildings) would be distant from the nearest receiving residentially zoned land use <u>(approximately 1.300 feet)</u>, anticipated construction of the proposed pipelines would likely be just 30 feet from the nearest residential property<u>albeit for short periods of time for any individual home (i.e. intermittent work over approximately one week</u>). Consequently, Table 3.13-2 presents the estimated construction noise level (hourly  $L_{eq}$ ) at the indicated distance for each anticipated phase of activity. These distance values represent the average separation between the construction activity and the nearest noise-sensitive receptor (e.g., an existing residence, such as among those on Glorietta Boulevard). Details of these predictions in Appendix

E show the expected acoustical contribution from each type of operating construction equipment for each phase.

	Predicted Noise Level at Indicated Distance Construction Phase	
Construction Phase	Distance (feet)	Hourly L <sub>eq</sub> (dBA)
Golf Course Master Planning	600	63.3
Access Lane/maintenance road	100	74.2
Recycled Water Storage Ponds	1,200	53.9
SWRF and Turf Care Buildings	1,300	56.1
Recycled Water Treatment System	1,300	53.3
Wastewater Diversion Pump Station and Pipeline	30	87.2
Discharge Pipeline	30	87.2
Recycled Water Distribution System (off golf course)	30	87.2
Irrigation System (golf course)	100	74.6
Turf Establishment of New Holes	500	48.1

L<sub>eq</sub> = energy-equivalent sound level; dBA = A-weighted decibel

The aggregate noise levels for the three construction phases (Wastewater Diversion Pump Station and Pipeline, Discharge Pipeline, and Recycled Water Distribution System [off golf course]) that involve pipeline installation in proximity to residentially zoned property would exceed the City's 75 dBA hourly Leq threshold during allowable construction hours and would thus create the potential for a significant impact requiring mitigation.

However, CMC 41.16.010 allows variances from CMC 41.14 and thus allows the City's NCO to permit the temporary construction activities associated with project-attributed pipeline construction. Therefore, mitigation measure **MM-NOI-1** includes common best practices requirements to reduce noise emission from construction activities and defines the conditions upon which such permits would need to be submitted to and approved by the NCO in order for these pipeline construction activities to be considered legal temporary exceedances of the City's noise ordinance. As a result, noise impact associated with construction of the SWRF complex and the associated pipelines would be less than significant with the following mitigation.

- **MM-NOI-1** The City shall ensure that the construction contractor(s) contract and specifications for all project-related activities include the following requirements during construction activities:
  - Construction hours shall be conducted in compliance with Coronado Municipal Code (CMC) 41.10.040 with respect to allowable timeframes and days of the week (including weekends and holidays). Per CMC 41.10.050, noise from construction activities shall meet the standard of 75 dBA L<sub>eq</sub> over any one-hour period, unless authorization to exceed this limit has been granted via permit by the City's Noise Control Officer (NCO) in advance.
  - Construction during nighttime hours is prohibited unless authorized by the NCO in advance via permit.
  - All idling (i.e., engines running) equipment shall be kept to a minimum.

- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be used for safety warning purposes only.
- Communication with local residents shall be maintained prior to and during construction. Specifically, the local residents shall be informed of the schedule, duration, and progress of the construction and shall be provided contact information (e.g., a telephone hotline and/or email address) for noise- or vibration-related complaints. The City shall establish a process to investigate these complaints in a timely manner and, if determined to be valid, detail efforts to provide a timely resolution and response to the complainant—with copy of outcome description documented in a log for the duration of the construction activities.
- Locate Fixed/stationary equipment (e.g., generators, compressors) shall be located as far as possible from residential uses.
- All noise-producing equipment and vehicles using internal combustion engines shall be equipped with exhaust mufflers (or comparable noise-reducing exhaust flow treatments); air-inlet silencers; and, hoods, shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors, generators) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.

#### Operation

Upon completion of construction, the proposed pipelines would be located underground and as such would not produce noise. However, noise would be produced from the proposed SWRF and diversion pump station during operational activities. Therefore, the following analysis focuses on the noise produced during operation from the aforementioned project components.

#### SWRF

CMC 41.10.010A sets the following noise limits for residentially zoned property boundaries and commercial land uses (City of Coronado 2019):

- Residential (R-1A, R-1B)
  - 50 dBA hourly Leq (7:00 a.m. to 7:00 p.m.)
  - $\circ$  45 dBA hourly L<sub>eq</sub> (7:00 p.m. to 10:00 p.m.)
  - 40 dBA hourly L<sub>eq</sub> (10:00 p.m. to 7:00 a.m.)
- Residential (R-3, R-4, R-PCD, R-5)
  - $\circ$  55 dBA hourly L<sub>eq</sub> (7:00 a.m. to 7:00 p.m.)
  - 50 dBA hourly L<sub>eq</sub> (7:00 p.m. to 10:00 p.m.)
  - 45 dBA hourly L<sub>eq</sub> (10:00 p.m. to 7:00 a.m.)
- Commercial (C, C-R, H-M, OS, P-1)
  - 60 dBA hourly L<sub>eq</sub> (7:00 a.m. to 7:00 p.m.)
  - $\circ$  60 dBA hourly L<sub>eq</sub> (7:00 p.m. to 10:00 p.m.)
  - $\circ$  50 dBA hourly L<sub>eq</sub> (10:00 p.m. to 7:00 a.m.)

The nearest residential properties to the Complex are west of Glorietta Boulevard and zoned R-1A, which means the 40 dBA hourly  $L_{eq}$  standard represents the acoustical threshold to meet—on the presumption that the pumps and other equipment within the SWRF would be operating normally 24 hours per day. But because the Complex would be at least 1,300 feet from these nearest residences, and based on sound propagation modeling parameters and facility design assumptions detailed in Appendix D, operation noise reaching the R-1A is predicted to be less than 40 dBA hourly  $L_{eq}$  and thus represents a less than significant impact. Additionally, the predicted sound level would be less than 35 dBA and hence quieter than the existing outdoor ambient minimum sound level ( $L_{min}$ ) measured during the baseline survey as presented in Table 3.13-1.

Very few individuals on the golf course would be in proximity to the project site at any one time (i.e. several minutes), as small groups of golfers would move from hole to hole throughout the day. Given the short duration of exposure and the limited number of individuals, golfers are not considered a sensitive receptor. Baseline noise levels in proximity to the project site are approximately 58.1 dBA (Location LT-2). On the Golf Course, predicted sound levels due to normal operation of anticipated equipment within the Complex would be no greater than 58 dBA hourly L<sub>eq</sub> immediately beyond the facility's planned perimeter sound/security wall at about 35 feet. These noise levels would drop further at the closest fairway. Noise levels typically attenuate (drop off) at a rate of 6 dB per doubling of distance from point sources. As such, at 70 and 105 feet from the facility's perimeter, the highest expected sound level would be 52 and 49 dBA, respectively, due north, east, or west. At this predicted level, even if continuous throughout the day and night, the calculated CNEL value would be less than 65 dBA and thus considered compatible with the "normally acceptable" range associated with Golf Course land uses per the City's General Plan Noise Element (City of Coronado 1999).

<u>As explained at the beginning of Section 3.13, for an increase in noise to be just noticeable, i.e. a change in noise (i.e. 3 dBA), sound energy would need to double (i.e. traffic volumes would need to double).</u> An estimated two truck trips per week would remove accumulated screened solids from the SWRF, which would represent an insignificant addition to existing forecasted (for 2020, per Series 12) traffic volumes on Glorietta Boulevard of 3,400 average daily traffic (SANDAG 2020). Thus, localized increase in traffic noise level would be less than significant.

#### **Diversion Pump Station**

The diversion pump station site is within the Public Services Buildings campus on the northern side of the City block bordered by 1st Street, 2nd Street, A Avenue, and B Avenue. Commercial (C), open space (OS), and Commercial-Recreation (C-R) land uses surround the block to the north, west, and south; and, Residential-Planned Community Development (R-PCD) land use is to the east of the block (City of Coronado 2004). Per CMC 41.10.010A, the nighttime noise limit of 50 dBA hourly  $L_{eq}$  applies to the commercially zoned properties, and 45 dBA hourly  $L_{eq}$  applies to the R-PCD land use (City of Coronado 2019).

Based on sound propagation modeling parameters and facility design assumptions detailed in Appendix D, the following results are predicted:

- Operation noise reaching the R-PCD land use (i.e., the existing Broadstone Apartments) is predicted to be less than 40 dBA hourly  $L_{eq}$  and thus represents a less than significant impact. Additionally, the predicted sound level would be less than the 43.4 dBA  $L_{min}$  measured during the baseline survey as presented in Table 3.13-1.
- Operation noise reaching the commercial land uses (i.e., the existing shops north of 1st Street) is predicted to be less than 50 dBA hourly  $L_{eq}$  and thus represents a less than significant impact.

Additionally, the Complex would be located near the Coronado Bay Bridge, which would obscure much of the noise created by the Complex. As such, impacts associated with increase in ambient noise due to operational activities would be less than significant.

#### b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

**Less-Than-Significant Impact**. Vibration is oscillatory movement of mass (typically a solid) over time. It is described in terms of frequency and amplitude and, unlike sound, can be expressed as displacement, velocity, or acceleration. Vibration is also studied as a velocity that, akin to the discussion of sound pressure levels, can also be expressed in decibels (dB) as a way to cast a large range of quantities into a more convenient scale. Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities where sudden releases of subterranean energy of powerful impacts of tools on hard materials occur. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site also have the potential to cause high vibration amplitudes.

Construction noise and vibration are temporary phenomena. Construction noise and vibration levels vary from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor. Equipment that would be in use during construction would include, in part, backhoes, rubber-tires dozers, cranes, forklifts, cement mixers, and rollers. Usually, construction equipment operated in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound of level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Although the CMC does not have a vibration threshold against which project construction-related groundborne vibration impacts to the community might be assessed, for purposes of this impact assessment, a vibration velocity level of 0.2 inches per second (ips) peak particle velocity (PPV) will be adopted as the standard for evaluating human annoyance (to perceived groundborne vibration within an occupied residence) and the potential risk for residential building damage due to "continuous" or frequently occurring groundborne vibration events (Caltrans 2013).

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in Federal Transit Administration and Caltrans guidance. By way of example, for a bulldozer or excavator operating as close as 30 feet to the nearest receiving residential land use, the estimated vibration velocity level would be 0.067 ips per the equation as follows (FTA 2006):

$$PPV_{rcvr} = PPV_{ref} * (25/D)^{1.5} = 0.067$$
 ips  $PPV = 0.089 * (25/30)^{1.5}$ 

In the above equation, PPV<sub>rcvr</sub> is the predicted vibration velocity at the receiver position, PPV<sub>ref</sub> is the reference value at 25 feet from the vibration source (the bulldozer), and D is the actual horizontal distance to the receiver. As such, construction activities have the potential to generate groundborne vibration up to levels around 0.089 PPV at residences located within 25 feet of construction activities. Therefore, at this predicted PPV for a typical piece of heavy construction equipment expected to be used for project pipeline construction, the impact of potential risk of vibration-induced damage to nearby residential structures would be well below the 0.2 ips PPV threshold and thus be considered less than significant. Similarly, the

predicted PPV would be less than the 0.2 ips PPV threshold for human annoyance and, on that basis, also be a less-than-significant impact. Therefore, the overall impacts associated with groundborne vibration and noise would be less than significant.

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?

*No Impact.* According to Exhibits 3-3 and 3-7 of the NASNI Airport Land Use Compatibility Plan Draft Environmental Impact Report, the project site is not located within the 65 dBA CNEL contour of NASNI aviation traffic (SDCRAA 2019); thus, workers involved in construction of the project features would not be temporarily exposed to NASNI aviation noise exceeding 65 dBA CNEL. Additionally, City of Coronado workers at the project sites would not be exposed to NASNI aviation noise levels exceeding 65 dBA CNEL. Further, the project would not create new residential exposures to NASNI aviation traffic noise. Therefore, no impact due to NASNI aviation traffic noise exposure would occur.

Furthermore, Figure 4 from the San Diego International Airport Part 150 Update Noise Exposure Map shows that the project site is well over 1 mile from the nearest 65 dBA CNEL aviation noise contour (SDCRAA 2009). Per Figure 8 from the same Noise Exposure Map, the project site is over 2,000 feet from San Diego International Airport helicopter arrival and departure tracks. Therefore, workers involved in construction of the project features would not be temporarily exposed to San Diego International Airport aviation noise exceeding 65 dBA CNEL. Additionally, City of Coronado workers at the project sites would also not be exposed to San Diego International Airport aviation aviation noise levels exceeding 65 dBA CNEL. As such, no impacts resulting from San Diego International Airport aviation traffic noise exposure would occur.

### 3.14 Population and Housing

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
	POPULATION AND HOUSING – Would the proj	ect:	1	I	
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

# a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

**Less-Than-Significant Impact.** The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception, a diversion pump station, and pipelines. The recycled water produced by the project would serve parks, open space, and other landscaping. The project would result in a decrease in potable water consumption by eliminating the use of potable water for irrigation at the golf course and city parks; however, the reduction in water use would not create any new capacity for growth because there are no current or reasonably foreseeable development restrictions based on domestic water availability. Furthermore, the City of Coronado is a built-out city, which has very limited capacity for new, high-density growth that would require significant increases in domestic water. As such, no residential use or other land uses typically associated with directly inducing population growth are included as part of the project. Furthermore, the number of employees hired to construct the project would be minimal. It is anticipated that construction workers would come from the surrounding region and would not induce population growth or require permanent housing. Therefore, impacts associated with direct or indirect growth would be less than significant.

# b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

*No Impact.* The project would not require the demolition or alteration of existing housing. As such, the project would not displace people or require replacement housing. Therefore, people and housing would not be displaced, and no impact would occur.

### 3.15 Public Services

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	
XV.	PUBLIC SERVICES					
a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:					
	Fire protection?				$\square$	
	Police protection?				$\square$	
	Schools?				$\square$	
	Parks?				$\square$	
	Other public facilities?				$\square$	

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

#### Fire protection?

*No Impact.* The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception, a diversion pump station, and pipelines. The project would not induce population growth nor result in the addition of housing, schools, or other community facilities that might require fire protection (see Section 3.14(a), Population and Housing). During construction of the project, temporary construction and staging areas would be located within the state route ROWs. However, these routes would remain fully accessible and would not interfere with emergency response or evacuation plans. Furthermore, a TPCMP would be implemented during project construction that would require notification of shoulder access restrictions to Caltrans and emergency response agencies. The TPCMP would be implemented as part of the project that would identify traffic control measures which could include temporary bikeway, signage, temporary concreate barriers, and use of flaggers. Safety measures would be implemented as part of the management plan during construction and the configuration and safety of the local transportation network would not be permanently affected. As such, construction of the project would not change local fire protection response times or affect demand for fire protection services in the project area. Therefore, impacts associated with fire protection services would not occur.

#### Police protection?

*No Impact.* The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception, a diversion pump station, and pipelines. The project would not induce population growth nor result in the addition of housing, schools, or other community facilities that might require police protection (see Section 3.14(a)). During construction of the project, temporary construction and staging areas would be located within the state route ROWs. However, these routes would remain fully accessible and would not interfere with emergency response or evacuation plans. Furthermore, a TPCMP would be implemented during project construction that would require notification of shoulder access restrictions to Caltrans and emergency response agencies. The TPCMP would be implemented as part of the project that would identify traffic control measures which could include temporary bikeway, signage, temporary concreate barriers, and use of flaggers. Safety measures would be implemented as part of the management plan during construction and the configuration and safety of the local transportation network would not be permanently affected. As such, construction of the project would not change local police protection or emergency vehicle response times or affect demand for police protection services in the project area. Therefore, impacts associated with police protection services would not occur.

#### Schools?

*No Impact.* The project would not involve a housing component that would result in population growth and increased demands on existing schools within the area. Therefore, no impact to schools would occur.

#### Parks?

*No Impact.* The project would not involve a housing component or increase employment that would result in population growth necessitating the need for additional parks or increase the use of nearby parks. However, parks and recreational facilities within and surrounding the project site would be temporarily affected during the construction phase. The proposed SWRF and TCF complex and pond for recycled water storage would be located within the Golf Course and as such, construction is expected to alter or suspend golf play temporarily. Additionally, some of the proposed pipelines and irrigation lines would be located near and within Spreckels Park and Tidelands Park; therefore, construction would temporarily affect public access. However, temporary modifications or closures of portions of the Golf Course and nearby parks would not create the need to construct or expand facilities which could have an effect on the environment. Therefore, additional demands on existing public parks would not occur as a result of project implementation, and no impact would occur.

#### Other public facilities?

*No Impact.* The project would not involve a housing component or increase employment opportunities that would result in population growth within the City. Therefore, additional demands on other public facilities, such as library or health care services would not occur as a result of project implementation, and no impact would occur.

### 3.16 Recreation

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV	I. RECREATION				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
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?				

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

*No Impact.* The project would not involve a housing component or substantially increase employment opportunities within the City because the construction would be short term and temporary, and construction workers are anticipated to come from the surrounding area; therefore, the project would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities. Thus, no impacts would occur.

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

*No Impact.* The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception, a diversion pump station, and pipelines. The proposed SWRF and TCF Complex and recycled water storage would be located within the Golf Course, which is considered a recreational facility. The Golf Course and city parks would be affected by construction and it is expected that these facilities may be temporarily impacted during construction. However, temporary modifications or closures would not create the need to construct or expand facilities which could have an effect on the environment. Therefore, no impacts associated with the construction or expansion of recreational facilities would occur.

### 3.17 Transportation

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

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

*Less-Than-Significant Impact.* The project would generate temporary construction traffic, which would cease upon completion of construction. The project would result in a minimal increase in permanent traffic as a result of one to three new employees (refer to the discussion below). Accordingly, the project would not conflict with any plans or ordinances pertaining to the City's circulation system. As such, impacts would be less than significant.

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

**Less-Than-Significant Impact**. The TCF facility would be populated by between 10 and 12 employees, the same as under current conditions at the Golf Course. The total employees within the SWRF and TCF Complex would be 11 to 15. Therefore, the project would employ an additional one to three employees working one to two daily shifts. The additional personnel would result in approximately five to 13 new daily

trips (ITE 2017); however, this minor amount of new traffic would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). As such, impacts would be less than significant.

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

*No Impact.* The project would <del>potentially</del> require construction of a new maintenance road on the Golf Course with access to Glorietta Boulevard; however, any new access road that intersects with Glorietta Boulevard would be required to comply with City standards for design and sight distance and the maintenance road would not be open to public use. Therefore, impacts associated with hazards due to geometric design features would not occur.

#### d) Would the project result in inadequate emergency access?

**Less-Than-Significant Impact.** State Routes 75 and 282 are the primary transportation routes for regional emergency response and evacuation within the City of Coronado. During construction of the project, temporary construction and staging areas would be located within the state route ROWs. However, these routes would remain fully accessible and would not interfere with emergency response or evacuation plans. Furthermore, a TPCMP would be implemented in consultation with the Coronado Police Department and Coronado Fire Department during project construction. The TPCMP would be implemented as part of the project that would identify traffic control measures which could include temporary bikeway, signage, temporary concreate barriers, and use of flaggers. Safety measures would be implemented as part of the management plan during construction and the configuration and safety of the local transportation network would not be permanently affected. Therefore, impacts associated with emergency access would be less than significant.

### 3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
<ul> <li>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</li> </ul>				
<ul> <li>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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?</li> </ul>				

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

CEQA was amended in 2014 through AB 52, which created a new category of "tribal culture resources" that must be considered under CEQA, and applies to all projects that file a notice of preparation or notice of Negative Declaration or MND on or after July 1, 2015. AB 52 requires lead agencies to provide notice to and begin consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a project if that tribe has requested, in writing, to be kept informed of projects by the lead agency prior to the determination whether a negative declaration, mitigated negative declaration, or environmental impact report will be prepared. If a tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe. AB 52 also specifies mitigation measures that may be considered to avoid or minimize impacts on tribal cultural resources. Specifically, California Public Resources Code Section 21074 provides the following guidance:

- (a) Tribal Cultural Resources are either of the following:
  - (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- (A) Included or determined to be eligible for inclusion in the California Register of Cultural Resources.
- (B) Included in a local register of cultural resources as defined in subdivision (k) of §5020.1.
- (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 §5024.1. In applying the criteria set forth in subdivision (c) of §5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- (b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- (c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

#### Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Less-Than-Significant Impact with Mitigation Incorporated. On January 22, 2020, a search was conducted of the California Historical Resources Information System at the SCIC for the project and a half-mile radius surrounding the project. This search included their collection of mapped prehistoric, historical, and built-environment resources, DPR Site Records, technical reports, archival resources, and ethnographic references. Additional consulted sources included the NRHP, California Inventory of Historical Resources/CRHR and listed Office of Historic Preservation Archaeological Determinations of Eligibility, California Points of Historical Interest, California Historical Landmarks, and Caltrans Bridge Survey information.

The SCIC records indicate that a total of nine cultural resources have been previously identified within the project APE. Three cultural resources (P-37-009539, P-37013073, and P-37-036797) consist of archaeological sites (two historic and one prehistoric), and the remaining six are historic addresses. Similar to previous searches, the record search included a 0.5-mile buffer. The buffer contains a total of 22 registered resources, consisting of 17 historic structures, three prehistoric sparse shell and lithic scatters, one historic trash scatter and one historic shipwreck site. A search of the Historic Resources Inventory resulted in 787 historic addresses identified within the 0.5-mile buffer (Appendix B). Though these addresses are within the project APE, they are outside the disturbance limits and will be avoided by project impacts.

As previously discussed in Section 3.5, Cultural Resources, the prehistoric site P-37-009539 (CA-SDI-9539) is located in the direct path of one of the proposed recycled water supply pipelines. The project alignment runs under Pomona Avenue with the installation of new water pipes at least 6 feet below the road surface, with a trench width of no more than 6 feet. This alignment will cut through the eastern portion of the mapped site boundary. At the time the site was recorded in

1982, major impacts for both Pomona Ave and Glorietta had already taken place and noted that the majority of the site was likely destroyed to the point of possibly being entirely a secondary deposit. Since that time multiple landscaping shifts and maintenance efforts have reshaped the remaining surface of the site. These impacts reduce the possibility of intact subsurface deposits. The segment of the Coronado Railway P-37-013073 (CA-SDI-13073) which intersects the project recycled water pipeline alignment under Pomona Ave has been destroyed with the construction of Pomona Ave and Silver Strand Rd. The project does not intersect any of the significance carrying elements of this resource, which are located outside of the project area, therefore the project will have no impact on P-37-013073 (CA-SDI-13073). The Coronado Municipal Golf Course (P-37-036797) is located within the project's disturbance limits. This resource was previously evaluated and was given the NRHP status code of 6Z, not eligible for the NRHP/CRHP. Therefore any changes to the golf course would result in a finding of no effect under CEQA.

Based on the current project design, no known significant cultural resources will be impacted as a result of the proposed project's ground-disturbing activities. This cultural resources inventory identified eight historical/built environment resources and one prehistoric archaeological resource within the project APE. The eight historical resources will either be avoided by project impacts, are no longer extant within the project APE, or have been previously determined not eligible. The Prehistoric resource, P-37-009539 (CA-SDI-9539), was found to be completely developed and was previously postulated to be a secondary deposit. Therefore, it is unlikely that intact archaeological deposits are present.

The potential for unknown significant prehistoric and historic archaeological resources to exist within the project site is low. However, there is an increased possibility of encountering secondary archaeological deposits within or adjacent to P-37-009539 (CA-SDI-9539) during the proposed project's ground disturbing activities. A significant portion of the work will be conducted under Orange Avenue, a historically significant route for the trolley system, which supported commerce on the peninsula. Additionally, on January 27, 2020, the NAHC was contacted to request a review of the Sacred Lands File. The NAHC search of the Sacred Lands File resulted in a positive finding for Traditional Cultural Properties or Sacred Sites that have been identified within the project site or a surrounding 0.5 miles. The positive finding by the NAHC Sacred Lands File increases the potential for archaeological resources. Therefore, to mitigate potential impacts to unidentified archaeological resources would be less than significant.

ii) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

**Less-Than-Significant Impact with Mitigation Incorporated.** The project is subject to compliance with AB 52 (Public Resources Code Section 21074) which requires consideration of impacts to "tribal cultural resources" as part of the CEQA process. AB 52 requires the City of Coronado, lead agency responsible for CEQA compliance for the project, to notify any groups (who have requested notification) of the project who are traditionally or culturally affiliated with the geographic area of the project. Because AB 52 is a government-to-government process, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the City of Coronado.

In accordance with AB 52, on March 12, 2020, the city sent notification letters to the tribal representatives that have formally requested such notice under AB 52. To date, one tribe, the Jamul Indian Village of California, has responded and asked for formal consultation. No other Native American tribes requested formal consultation. Government to government consultation between the City and the Jamul Indian Village pertained to protocols included in the cultural resources mitigation measures. Formal consultation with the Jamul Indian Village concluded in April 2020.

As discussed in Section 3.18(a)(i), three cultural resources (P-37-009539, P-37-013073, and P-37-036797) consist of archaeological sites (two historic and one prehistoric). However, resource one (P-37-009539) has been largely disturbed (an estimated 80%) and could potentially represent a secondary deposit. Additionally, resource two (P-37-013073) is a segment of the Coronado Railroad, no longer in service, consisting of segments of intact rail with intermittent tracks and is in overall disrepair. As such, both resource one and two have not been evaluated for NRHP/CRHP significance. Furthermore, resource three (P-37-036797), is the municipal golf course which was built originally in 1959 with continuous updates and upgrades every decade up to 2004, where the entire course was redesigned. Due to the lack of integrity the resources was recommended as not eligible for the NRHP. Therefore, it is likely that prior disturbances within the project site have heavily impacted and/or destroyed any surficial archaeological deposits that may have been present. As such, there is a low potential for discovering significant archaeological resources during construction due to past landform modifications.

However, the positive finding by the NAHC SFL increases the potential for archaeological resources. Therefore, to mitigate potential impacts to unidentified archaeological resources, **MM-CUL-1** would be required. With the incorporation of mitigation, impacts associated with tribal cultural resources would be less than significant.

### 3.19 Utilities and Service Systems

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX	<b> UTILITIES AND SERVICE SYSTEMS</b> - Would th	e 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?				
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
C)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			$\boxtimes$	

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

**Less-Than-Significant Impact.** The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception and diversion pump stations and pipelines. The project would not result in a development that would substantially increase the demand for water or wastewater services such as new commercial or residential land uses. During construction, water usage would be temporary and minimal for watering the site and other needs. During operation, SWRF and TCF capacity and operational staffing would increase by one to three personnel as a result of the project. Therefore, normal SWRF and TCF operations would not be expected to require substantial water, electric, or gas supplies such that new or altered wastewater treatment, electric power, natural gas, or telecommunication facilities would be required. The project itself is considered construction of a new recycled water supply and maintenance facility, which would significantly reduce the use of potable water from existing conditions. Therefore, impacts associated with the relocation or construction of new wastewater treatment, electric power, natural gas, or telecommunication facilities would be less than significant.

# b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

**Less-Than-Significant Impact.** During construction, water usage would be temporary and minimal for watering the site and other needs. Once operational, the project would significantly decrease the use of potable water and provide a drought-proof source of irrigation for City facilities. As such, the facilities would not require new or additional sources of water and impacts associated with water supplies would be less than significant.

# c) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

*No Impact*. The project consists of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception, a diversion pump station, and pipelines. Recycled water produced by the SWRF would be used to irrigate the Golf Course and other public landscape in the City, replacing its current use of potable water. As such, the project would reduce the amount of wastewater being conveyed into the City of San Diego sanitary sewer system for treatment. Therefore, no impacts would occur.

# 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?

**Less-Than-Significant Impact.** Waste generated during construction of the project would be properly disposed of in accordance with the waste disposal requirements of Republic Services Otay Landfill. These requirements include sufficient sampling of appropriate contaminants of potential concern and approval of acceptance from the landfill. Currently, Otay Landfill has a remaining capacity of 21,194,008 cubic yards and is anticipated to remain open until 2030 (CalRecycle 2019). Additionally, under AB 939, the Integrated Waste Management Act of 1989, local jurisdictions are required to develop source reduction, reuse, recycling, and composting programs to reduce the amount of solid waste entering landfills. Local jurisdictions are mandated to divert at least 50% of their solid waste generation into recycling.

Once operational, the project would generate an additional one to three employees to operate the proposed SWRF and TCF. Although the increase in personnel would result in more waste being generated at the project site, the number of personnel is minimal and would not produce a significant amount of waste. Therefore, impacts associated with generating 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 would be less than significant.

# e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

**Less-Than-Significant Impact.** As previously mentioned in Section 3.19(d), waste generated during construction of the project would be properly disposed of in accordance with the waste disposal requirements of Republic Services Otay Landfill. These requirements include sufficient sampling of appropriate contaminants of potential concern and approval of acceptance from the landfill. All collection, transportation, and disposal of solid waste generated by the project would comply with all applicable federal, state, and local statutes and regulations. Under AB 939, the Integrated Waste Management Act of 1989, local jurisdictions are required to develop source reduction, reuse, recycling, and composting programs to reduce the amount of solid waste entering landfills. Local jurisdictions are mandated to divert at least 50% of their solid waste generation into recycling.

Once operational, the project would generate an additional one to three employees to operate the proposed SWRF and TCF. Although the increase in personnel would result in more waste being generated at the project site, the number of personnel is minimal and would not produce a significant amount of waste. Therefore, impacts associated with federal, state, and local management and reduction statuses and regulations related to solid waste would be less than significant.

### 3.20 Wildfire

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX.	<b>WILDFIRE</b> – If located in or near state response severity zones, would the project:	sibility areas or I	ands classified as	s very high fire h	azard
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?			$\boxtimes$	
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

CAL FIRE is responsible for designating FHSZs within the State Responsibility Area throughout California. FHSZs are geographical areas with an elevated risk for wildfire hazard. The State Responsibility Area is the area for which the state assumes financial responsibility for fire suppression and protection. CAL FIRE also creates recommended maps for very high FHSZs within the Local Responsibility Areas, which are then adopted, or modified and adopted, by local jurisdictions. Development within a State Responsibility Area is required to abide by specific development and design standards. A review of CAL FIRE's FHSZ maps and data revealed that the project site is not located within a State Responsibility Area or a very high FHSZ (CAL FIRE 2007).

#### a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

**Less-Than-Significant Impact.** State Routes 75 and 282 are the primary transportation routes for regional emergency response and evacuation within the City of Coronado. During construction of the project, temporary construction and staging areas would be located within the state route ROWs. However, these routes would remain fully accessible and would not interfere with emergency response or evacuation plans. Furthermore, a TPCMP would be implemented during project construction that would require notification of shoulder access restrictions to Caltrans and emergency response agencies. The TPCMP would be implemented as part of the project that would identify traffic control measures which could include temporary bikeway, signage, temporary concreate barriers, and use of flaggers. Safety measures would be

implemented as part of the management plan during construction and the configuration and safety of the local transportation network would not be permanently affected. Therefore, impacts associated with an emergency response plan or emergency evacuation plan would be less than significant.

# b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

*No Impact*. As previously mentioned, he project site is not located within a State Responsibility Area or a very high FHSZ (CAL FIRE 2007). Furthermore, the project site is surrounded by existing development in an urbanized portion of the City away from any urban-wildland interface. Therefore, no impacts associated with wildland fire hazards would occur.

#### c) 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?

**Less-Than-Significant Impact.** As previously mentioned in Section 3.19(a), the project would consist of developing a new SWRF and TCF Complex, a pond for recycled water storage, wastewater interception, a diversion pump station, and pipelines. The project itself is considered construction of a new recycled water supply and maintenance facility. Additionally, the project does not propose the installation of associated infrastructure such as roads, fuels breaks, emergency water sources, or power lines. Therefore, impacts associated with the installation or maintenance of infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment would be less than significant.

# d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

**Less-Than-Significant Impact.** The project would not alter any natural waterways or drainages. The minor additional impervious surfaces associated with the implementation of the project would be negligible and would not cause a substantial change in the volume of surface runoff or cause an increase in flooding or landslides. Furthermore, the project is not located within a designated high risk or special flood hazard area. Therefore, impacts would be less than significant.

#### 3.21 Mandatory Findings of Significance

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact		
XXI. MANDATORY FINDINGS OF SIGNIFICANCE							
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?						
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?						
C)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		$\boxtimes$				

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 selfsustaining 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?

**Less-Than-Significant Impact with Mitigation Incorporated.** As discussed in Section 3.4, Biological Resources, construction of the project would potentially result in significant impacts to biological resources. However, with incorporation of mitigation measure **MM-BIO-1**, all potentially significant impacts would be reduced to a level below significance. The project would not substantially degrade the quality of the environment, impact fish or wildlife species, or plant communities. As discussed in Section 3.5, Cultural Resources, and Section 3.18, Tribal Cultural Resources, potential impacts regarding inadvertent discovery of cultural resources and tribal cultural resources could occur during excavation. However, implementation of mitigation measure **MM-CUL-1** would ensure that impacts would be less than significant. Overall, impacts would be less than significant with the incorporation of mitigation.

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

Less-Than-Significant Impact with Mitigation Incorporated. As provided in the analysis presented in this MND, the project would not result in significant impacts to aesthetics, agriculture and forestry resources, air quality, energy, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. Mitigation measures recommended for biological resources, cultural resources, geology and soils, noise, and tribal cultural resources would reduce impacts to below a level of significance.

The project would incrementally contribute to cumulative impacts for projects occurring within the vicinity of the project site. With mitigation, however, implementation of the project would not result in any residually significant impacts that could contribute to a cumulative impact. In the absence of residually significant impacts, the incremental accumulation of effects would not be cumulatively considerable and would be less than significant.

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

Less-Than-Significant Impact with Mitigation Incorporated. The potential for adverse direct or indirect impacts to human beings was considered throughout this MND. Based on this evaluation, there is no substantial evidence that construction or operation of the project with the proposed mitigation measures incorporated would result in a substantial adverse effect on human beings. Impacts would be less than significant with incorporation of mitigation measures.

### 4 References and Preparers

#### 4.1 References Cited

- ALUCP (Airport Land Use Compatibility Plan). 2020. Interactive Map Viewer. Accessed January 2020. https://sanmap.san.org/Html5Viewer/Index.html?viewer=sanmap.
- CalEPA (California Environmental Protection Agency). 2020. Cortese List: Section 65962.5(a). Accessed January 2020. https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/.
- CAL FIRE (California Department of Forestry and Fire Services). 2007. Fire Hazard Severity Zone Maps. Accessed January, 2020. https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/.
- CalRecycle (California Department of Resources Recycling and Recovery). 2019. SWIS Facility Detail. Accessed February 10, 2020. https://www2.calrecycle.ca.gov.
- Caltrans (California Department of Transportation). 2013. *Transportation and Construction Vibration Guidance Manual*. Report No. CTHWANP-RT-13-069.25.3. September. Available at http://www.dot.ca.gov/ hq/env/noise/pub/TCVGM\_Sep13\_FINAL.pdf.
- CAPCOA (California Air Pollution Control Officers Association). 2008. CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. January 2008. http://www.capcoa.org/wp-content/uploads/downloads/2010/05/ CAPCOA-White-Paper.pdf.
- CAPCOA. 2017. California Emissions Estimator Model (CalEEMod), User's Guide, version 2016.3.2. November 2017. http://www.capcoa.org/caleemod/.
- CARB (California Air Resources Board). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April 2005. Accessed February 9, 2010. http://www.arb.ca.gov/ch/landuse.htm.
- CARB. 2008. *Climate Change Scoping Plan: A Framework for Change*. December 2008. Accessed December 9, 2009. http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm.
- CARB. 2013. "Clean Car Standards Pavley, Assembly Bill 1493." May 6, 2013. Accessed December 2018. http://arb.ca.gov/cc/ccms/ccms.htm.
- CARB. 2017. The 2017 Climate Change Scoping Plan Update. January 20. Accessed January 2017. https://www.arb.ca.gov/cc/scopingplan/2030sp\_pp\_final.pdf.
- CEC (California Energy Commission). 2018a. California Energy Consumption Data Management System. Accessed February 2020. http://ecdms.energy.ca.gov/Default.aspx.
- CEC. 2018b. 2019 Building Energy Efficiency Standards Fact Sheet. March 2018. https://www.energy.ca.gov/ title24/2019standards/documents/2018\_Title\_24\_2019\_Building\_Standards\_FAQ.pdf.

- City of Coronado. 1999. General Plan Chapter L (Noise Element). https://www.coronado.ca.us/ UserFiles/Servers/Server\_746006/File/government/departments/comm%20dev/General%20Plan%20C ombined%20Files.pdf/.
- City of Coronado. 2003a. Coronado General Plan. Revised November 4, 2003. https://www.coronado.ca.us/ UserFiles/Servers/Server\_746006/File/government/departments/comm%20dev/General%20Plan%20C ombined%20Files.pdf.
- City of Coronado. 2003b. Orange Avenue Corridor Specific Plan. Adopted November 4, 2003. https://www.coronado.ca.us/UserFiles/Servers/Server\_746006/File/government/departments/comm% 20dev/zoning/1403048323\_90477.pdf.
- City of Coronado. 2004. Zoning Map. https://www.coronado.ca.us/UserFiles/Servers/Server\_746006/File/ government/departments/comm%20dev/zoning/1204738902\_154876.pdf.
- City of Coronado. 2005. City of Coronado Local Coastal Program Land Use Plan. Amended 2005. https://www.coronado.ca.us/UserFiles/Servers/Server\_746006/File/government/departments/comm% 20dev/building/1373656741\_71747.pdf.
- City of Coronado. 2019. Title 41. Noise Abatement and Control Regulations. https://www.codepublishing.com/CA/Coronado/#!/Coronado41/Coronado41.html.
- City of San Diego. 2007. *Draft General Plan Final PEIR*. Accessed February 2020. https://www.sandiego.gov/ sites/default/files/legacy/planning/genplan/pdf/peir/paleontological.pdf.
- City of San Diego. 2016. California Environmental Quality Act Significance Determination Thresholds. July. Accessed February 2020. https://www.sandiego.gov/sites/default/files/ july\_2016\_ceqa\_thresholds\_final\_0.pdf.
- CNRA (California Natural Resources Agency). 2009. Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97. December 2009.
- DOC (California Department of Conservation). 2015. Fault Activity Map of California (2010). Accessed February 2020. https://maps.conservation.ca.gov/cgs/fam/.
- DOC. 2016. California Important Farmland Finder. Accessed January 2020. https://maps.conservation.ca.gov/ DLRP/CIFF/.
- DOC. 2017. "Mineral Land Classification Map for Portland Cement-Grade Aggregate in the Western San Diego County Production-Consumption Region, California." 2017. Accessed January, 2020. https://www.conservation.ca.gov/cgs/Documents/SR\_240\_WSD\_2017\_Plate1.pdf.
- DOC. 2019. Earthquake Zones of Required Investigation Map. Accessed February 2020. https://maps.conservation.ca.gov/cgs/EQZApp/app/.
- DOF (California Department of Finance). 2019. E-1 Population Estimates for Cities, Counties, and the State January 2018 and 2019, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/.

- DTSC (Department of Toxic Substances Control). 2020. "EnviroStor: 2000 Visalia Row, Coronado, CA." Accessed January 2020, 2020. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Search.
- EIA (U.S. Energy Information Administration). 2019. "California, State Profile and Energy Estimates. Total Petroleum Consumption Estimates, 2017." Accessed May 17, 2019. https://www.eia.gov/state/ seds/data.php?incfile=/state/seds/sep\_fuel/html/fuel\_use\_pa.html&sid=US&sid=CA.
- EPA (U.S. Environmental Protection Agency). 2017. "Climate Change." Last updated January 19, 2017. Accessed January 2017. https://www.epa.gov/climatechange.
- FEMA (Federal Emergency Management Agency). 2019. "FEMA Flood Map Service Center." Accessed February 10, 2020. https://msc.fema.gov/portal/search?AddressQuery=sun%20valley%20#searchresultsanchor.
- FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment*. Final Report. FTA-VA-90-1003-06. May 2006.
- IPCC (Intergovernmental Panel on Climate Change). 2007. IPCC Fourth Assessment Synthesis of Scientific-Technical Information Relevant to Interpreting Article 2 of the U.N. Framework Convention on Climate Change.
- ITE (Institute of Transportation Engineers). 2017. *Trip Generation Manual*. https://www.ite.org/ technical-resources/topics/trip-and-parking-generation/trip-generation-10th-edition-formats/.
- NETR (National Environmental Title Research, LLC). 2019. Historic aerial photographs: 1953, 1964, 1966, 1972, 1980, 1981, 1989, 1990, 1994, 1996, 1997, 2002, 2003, 2005, 2009, 2010, 2012, and 2014. Accessed March 15, 2019. https://www.historicaerials.com/viewer#.
- OEHHA (Office of Environmental Health Hazard Assessment). 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines: The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. California Environmental Protection Agency, OEHHA. February 2015. Accessed April 3, 2018. http://oehha.ca.gov/air/hot\_spots/2015/2015GuidanceManual.pdf.
- Office of Historic Preservation. 1995. Instructions for Recording Historical Resources. March 1995. http://scic.org/docs/OHP/manual95.pdf.
- Regional Board (California Regional Water Quality Control Board, San Diego Region). 2013. Order Number R9-2013-0001, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer System (MS4) Draining the Watersheds Within the San Diego Region.
- SANDAG (San Diego County Association of Governments). 2019. San Diego Forward: The 2019 Federal Regional Transportation Plan. October 2019. https://sdforward.com/2019-federal-rtp.
- SANDAG. 2020. Transportation Forecast Information Center. http://tfic.sandag.org/.
- SCAQMD (South Coast Air Quality Management District). 1976. Rule 402, Nuisance. Adopted May 7, 1976. http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf.
- SCAQMD. 2005. Rule 403, Fugitive Dust. Adopted May 7, 1976; last amended June 3, 2005. http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf.

- SDAPCD. 2015. SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: Architectural Coatings. June 24. Accessed May 2017. http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules\_and\_Regulations/ Prohibitions/APCD\_R67-0-1.pdf.
- SDCRAA (San Diego County Regional Airport Authority). 2009. San Diego International Airport Part 150 Update Noise Exposure Maps. August. https://www.san.org/DesktopModules/Bring2mind/ DMX/API/Entries/Download?EntryId=7739&Command=Core\_Download&language=en-US&PortalId=0&TabId=657.
- SDCRAA. 2019. Draft Environmental Impact Report for the Naval Air Station North Island Airport Land Use Compatibility Plan. December 2019. http://www.san.org/Portals/0/Documents/Environmental/ 2019-DRAFT/2019-NASNI\_ALUCP\_DEIR.pdf.
- State Board (State Water Resources Control Board). 2013. Order Number 2012-0011- DWQ, National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit Waste Discharge Requirements for State of California Department of Transportation. http://www.waterboards.ca.gov/ board\_decisions/adopted\_orders/water\_quality/2012/wq o2012\_0011\_dwq.pdf.
- SWRCB (State Water Resources Control Board). 2020. "Sites and Facilities: 2000 Visalia Row, Coronado, CA." Accessed January, 2020. https://geotracker.waterboards.ca.gov/ profile\_report.asp?global\_id=T0607323722.
- USDA (U.S. Department of Agricultural). 2020. "Web Soil Survey." Accessed February 10, 2020. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.
- USFWS (United States Fish and Wildlife Service). 2020. National Wetlands Finder. Accessed January 14, 2020. https://www.fws.gov/wetlands/Data/Mapper.html.
- The Climate Registry. 2019. "Default Emission Factors." May 2019. Accessed January 7, 2020. https://www.theclimateregistry.org/wp-content/uploads/2019/05/ The-Climate-Registry-2019-Default-Emission-Factor-Document.pdf.

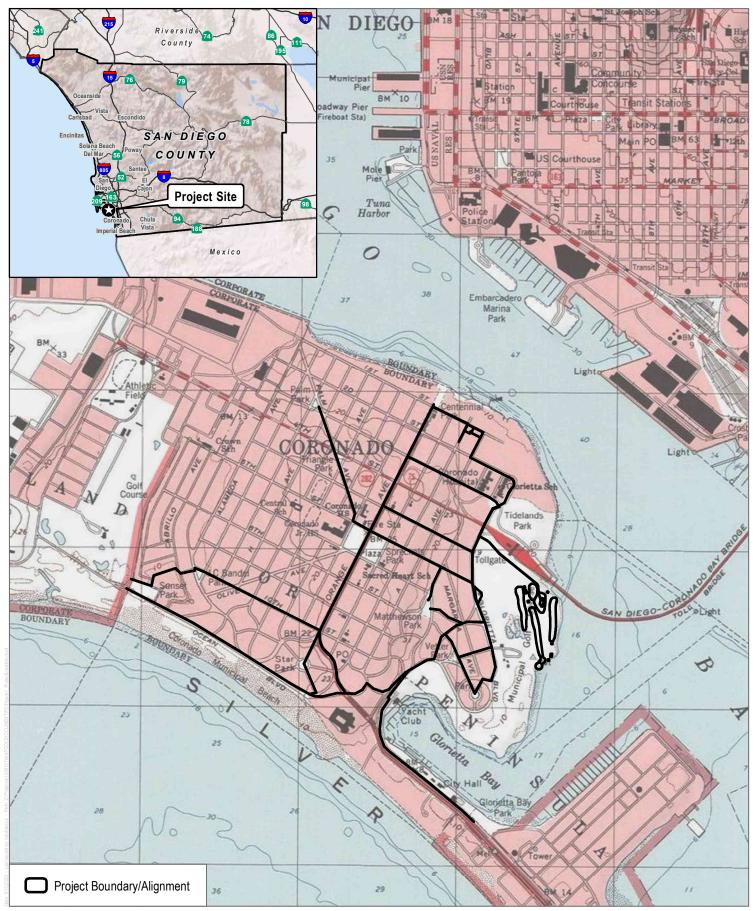
#### 4.2 List of Preparers

#### City of Coronado

Richard Grunow, Community Development Director James Newton, PE, Principal Engineer

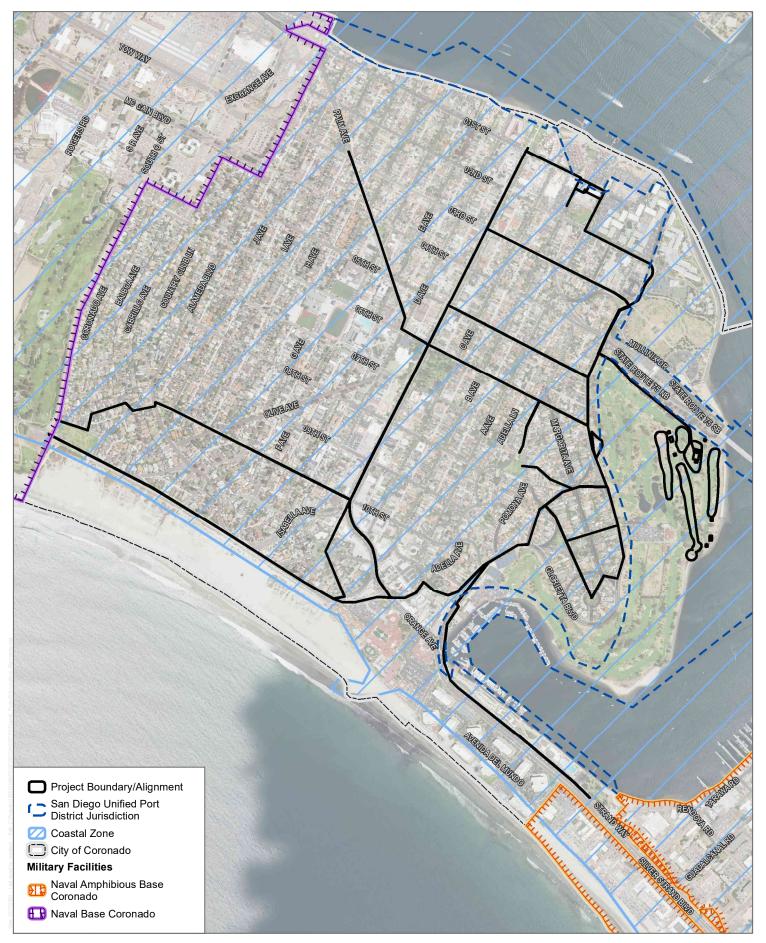
#### Dudek

Andrew Talbert, AICP, Environmental Project Manager Lillian Martin, Environmental Analyst Alex Hardy, Senior Project Manager Adam Poll, Air Quality Specialist Mark Storm, Senior Acoustician Connor Burke, Noise Analyst Jessica Colston, Archaeologist Angela Pham, Archaeologist



SOURCE: USGS 7.5-Minute Series Point Loma Quadrangle

FIGURE 1 Project Location Golf Course Water Recycling and Turf Care Facility Project



SOURCE: City of Coronado 2018, USDA 2016, SANDAG 2017, CCC 2012, Port of San Diego 2020

0

650

DUDEK **b** 

FIGURE 2 Project Site Location and Alignments Golf Course Water Recycling and Turf Care Facility Project



SOURCE: City of Coronado 2018, USDA 2016, SANDAG 2017

500



FIGURE 3 Project Overview Golf Course Water Recycling and Turf Care Facility Project



SOURCE: Atkinson Design Group 2020

#### DUDEK

Views from Concept Plan A Golf Course Water Recycling and Turf Care Facility Project



SOURCE: Atkinson Design Group 2020

#### DUDEK

Views from Concept Plan B Golf Course Water Recycling and Turf Care Facility Project









SOURCE: USDA 2016



FIGURE 5A Visual Simulation - View from Bike Path/400 Block Golf Course Water Recycling and Turf Care Facility Project









SOURCE: USDA 2016

FIGURE 5B Visual Simulation - View from Bike Path Golf Course Water Recycling and Turf Care Facility Project

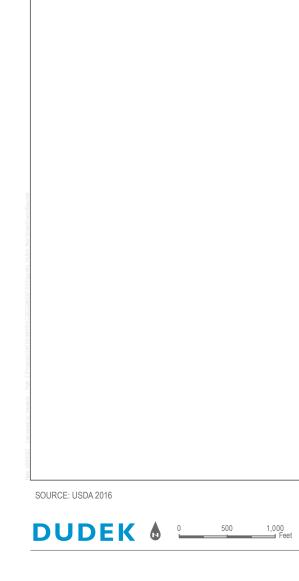


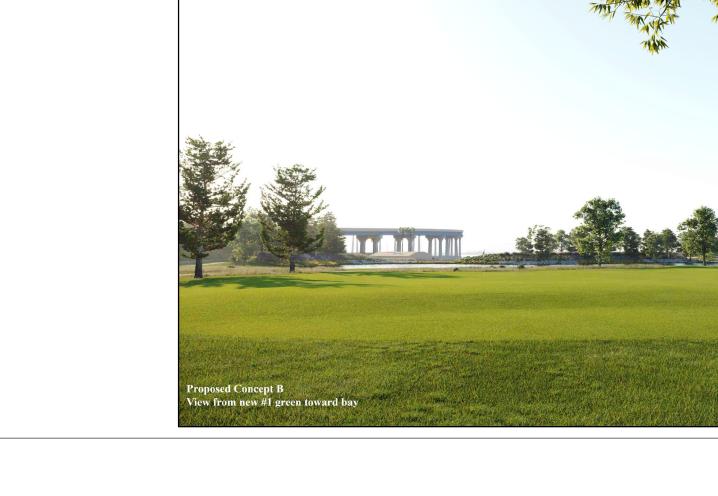




SOURCE: USDA 2016

FIGURE 5C Visual Simulation - View New # 2 Tee Toward # 2 Fairway Golf Course Water Recycling and Turf Care Facility Project





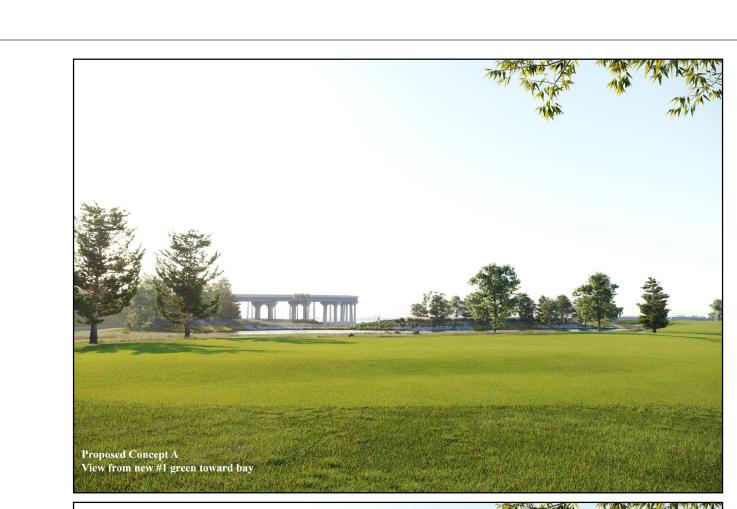




FIGURE 5D Visual Simulation - View From New # 1 Green Toward Bay

Golf Course Water Recycling and Turf Care Facility Project

	A THE A				
	01 ( B.C.)				
	N. The second	10			
	All m	The state of the s			E
	L. are	4 2 2 -		CONFAV BRID	
	B	3. Caby more the	5	ORONADO	
	TRADX OR	(75) <b>Figure</b>			
			0		
C C C C C C C C C C C C C C C C C C C	Talestoor	· · · · · · · · · · · · · · · · · · ·	A start of the	•	
C C C C C C C C C C C C C C C C C C C		Figure D		Figure63	100
	UCCUSCAS	The second		A Carlo	
	Clon	and the second second		it lines	
		TRI SING			
• Yer Location	1 - Con 12	Ow		Start Start	
Vew Location	ALC AND	- 1	stip.	1000	
Vew Location	_	and the			S. C.
	View Locat	ion	El altres -		24
					The second

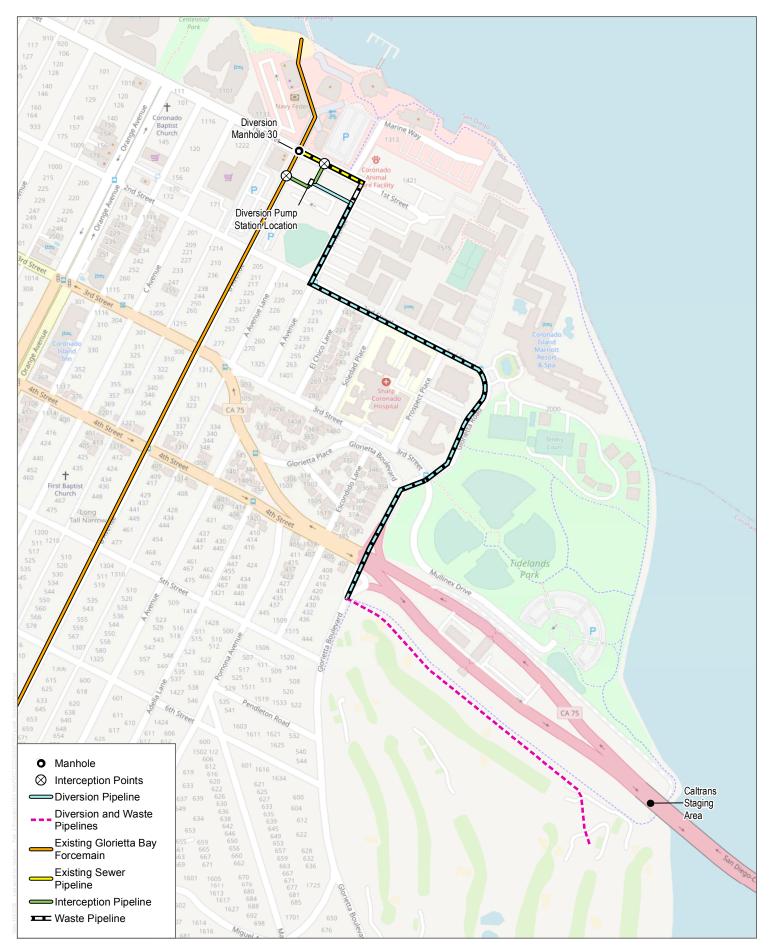


SOURCE: USDA 2016

FIGURE 5E

Visual Simulation - View From New # 3 Fairway Toward # 3 Green

Golf Course Water Recycling and Turf Care Facility Project



SOURCE: City of Coronado 2018, Open Street Map 2020

245

490 Beet

DUDEK &

FIGURE 6 Diversion Pipelines Golf Course Water Recycling and Turf Care Facility Project



FIGURE 7 Recycled Water Pipelines Golf Course Water Recycling and Turf Care Facility Project

DUDEK & <u>550 1,100</u> Feet

## Appendix A

CalEEMod Calculations

### Appendix B

Cultural Resources Inventory Report

## Appendix C

Geotechnical Investigation

#### Appendix D Noise Report

# Appendix E

Construction Noise Modeling

# Appendix F1

Responses to Comments

# Appendix F2

Public Comment Letters

### Appendix G

Mitigation, Monitoring, and Reporting Program