



South Bay Sewer Force Main Project

Initial Study/Proposed Mitigated Negative Declaration

May 2019

Prepared for:

City of Coronado
Public Services and Engineering Department
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Date: May 21, 2019

To: Responsible and Trustee Agencies, Interested Parties, and Organizations

Subject: NOTICE OF INTENT TO CONSIDER ADOPTION OF A PROPOSED MITIGATED NEGATIVE DECLARATION FOR SOUTH BAY SEWER FORCE MAIN PROJECT

The City of Coronado (City) has prepared an initial study (IS) and intends to adopt a mitigated negative declaration (MND) for the South Bay Sewer Force Main Project (Proposed Project) in compliance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines.

Project Title: South Bay Sewer Force Main Project

Lead Agency: City of Coronado

Project Location: The Proposed Project site is located within the limits of the City of Coronado. The southern portion of the project is located on the Naval Base Coronado (NBC) Coastal Campus. The northern portion of the project is located within the right-of-way of State Route 75 (SR-75), the Coronado Cays residential development and the existing Coronado Cays pump station near the intersection of SR-75 and Coronado Cays Blvd. The Silver Strand State Beach spans both sides of SR-75 and is located north of the Proposed Project on the west of SR-75 and east of SR-75.

Project Description: The City of Coronado proposes to construct approximately 14,334 linear feet of 8-inch high-density polyethylene sewer force main, pump station modifications, and odor control system improvements to extend City sewer services to the NBC Coastal Campus. The new sewer force main would connect to the existing Coronado Cays pump station at the north end of the project site and the previously approved Pump Station 1 at the NBC Coastal Campus at the south end, which is currently under construction.

Environmental Review Process: On May 7, 2019, the City Council approved the preparation of an IS/MND on the Proposed Project in accordance with the City's requirements of CEQA. The IS/MND describes the Proposed Project and provides an assessment of the proposed project's potential significant adverse impacts on the environment. It concludes that the Proposed Project would not have any significant adverse effects on the environment after implementation of mitigation measures.

Public Review Period: The IS/MND is being circulated for public review and comment for a review period of 30 days starting on May 21, 2019. Written comments should be submitted and received at the following address no later than close of business (4:00 p.m.) on June 20, 2019.

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Coronado, CA 92118

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To Review or Obtain a Copy of the Environmental Document: Copies of the IS/MND may be reviewed at the following locations:

City's Web site: <https://www.coronado.ca.us>

Coronado City Hall

1825 Strand Way
Coronado, CA 92118

Coronado Library

640 Orange Ave
Coronado, CA 92118

PROPOSED MITIGATED NEGATIVE DECLARATION

PROJECT: South Bay Sewer Force Main Project

LEAD AGENCY: City of Coronado Public Services and Engineering

PROJECT LOCATION: The Proposed Project site is located within the limits of the City of Coronado. The southern portion of the project is located on the Naval Base Coronado (NBC) Coastal Campus. The northern portion of the project is located within the right-of-way of State Route 75 (SR-75), the Coronado Cays residential development and the existing Coronado Cays pump station near the intersection of SR-75 and Coronado Cays Blvd. The Silver Strand State Beach spans both sides of SR-75 and is located north of the Proposed Project on the west of SR-75 and east of SR-75.

PROJECT DESCRIPTION: The City proposes to construct approximately 14,334 linear feet of 8-inch HDPE sewer force main, modify existing pump stations, and improve odor control systems in order to extend City sewer services to the approved NBC Coastal Campus currently under construction at the existing Silver Strand Training Complex South.

FINDINGS: An initial study/proposed mitigated negative declaration (IS/MND) has been prepared to assess the project's potential effects on the environment and the significance of those effects. Based on the analysis conducted in the IS, it has been determined that implementing the proposed project would not have any significant adverse effects on the environment after adoption and implementation of mitigation measures. This conclusion is supported by the following findings:

1. The proposed project would have no effects related to agriculture and forestry resources, land use and planning, mineral resources, population and housing, public services, utilities and service systems, and wildfire.
2. The proposed project would have a less than significant impact on aesthetics, air quality, greenhouse gases, biological resources, energy, hazards and hazardous materials, geology and soils, hydrology and water quality, and transportation.
3. The proposed project would have a less than significant impact on cultural resources, tribal cultural resources, and noise. This less than significant impact conclusion assumes adoption and implementation of the mitigation measures discussed in the IS.
4. The proposed project would not have the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory.

5. The proposed project would not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
6. The proposed project would not have possible environmental effects that are individually limited but cumulatively considerable. "Cumulative considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects.
7. The environmental effects of the proposed project would not cause substantial adverse effects on human beings, either directly or indirectly.
8. The proposed project incorporates all mitigation measures listed below and described in the IS.

MITIGATION MEASURES: The following mitigation measures will be implemented as part of the project to avoid, minimize, rectify, reduce or eliminate, or compensate for potentially significant environmental impacts. Implementation of these mitigation measures would reduce the potentially significant environmental impacts of the proposed project to less than significant levels:

Mitigation Measure CUL-1: Halt Ground-Disturbing Construction Activities if Cultural Materials Are Discovered.

The following measures shall be implemented to avoid or minimize potential impacts on cultural materials:

Where ground disturbing activities occur within the City -right-of-way in native soils, where there is no evidence of extensive past ground disturbances, or where there is evidence that suggests materials of importance to tribal entities, a Native American tribal monitor and a qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists will monitor ground- disturbing activities and/or the handling and placement of the material. Interested Native American Tribes will be provided at least seven days' notice prior to the initiation of ground disturbing activities. The determination for initiating or ending monitoring disturbance will be made based on coordination between the qualified archaeologist and Native American tribal monitor, with a final determination made by the City. If evidence of any prehistoric subsurface archaeological features or deposits are discovered during construction (e.g., midden soils or unusual amounts of shell, animal bone, flaked stone, bottle glass, ceramics) are discovered during project construction, ground disturbances in the immediate vicinity of the find shall be halted immediately. A qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists shall determine whether the resource is potentially significant as per the CRHR and a Native American representative shall determine the significance as a tribal cultural resource and identify appropriate management steps needed to protect and secure identified resources consistent with Native American tribal values.

Timing: During construction

Responsibility: City of Coronado or its consultant

Mitigation Measure CUL-2: Halt Construction Activities if Any Human Remains Are Discovered

If human remains are uncovered during ground-disturbing activities, such activities that may affect the remains will be halted within 100 feet, and the City of Coronado or its designated representative will be notified. The City or designated representative immediately will notify the County coroner and a qualified professional archaeologist. If the coroner determines that the remains are those of a Native American, the coroner will contact the NAHC by telephone within 24 hours of making that determination in accordance with California Health and Safety Code, Section 7050.5[c]. The City or its appointed representative, and the qualified professional archaeologist will consult with a Most Likely Descendant (MLD), determined by the NAHC, regarding the removal or preservation and avoidance of the remains, and will determine whether additional burials could be present in the vicinity in accordance with California Public Resources Code Section 5097.9. No ground-disturbing work will occur in the location of the remains until consultation between the NAHC and MLD has been completed, and notification by the City that construction activities may resume.

Timing: During construction.

Responsibility: City of Coronado or its consultant

Mitigation Measure NOISE-1: Implement Construction Noise Reduction Measures.

The City of Coronado and its Construction Contractor will implement the following measures to reduce noise impacts during construction:

- *Obtain Noise Permit and implement permit recommendations from the City of Coronado Community Development Department for all construction activity north of the NBC Coastal Campus to allow for construction activity in excess of 75 dBA at residential property lines. No construction work shall occur within 100 feet of residences without a Noise Permit.*
- *Provide written notification of construction activities to the Coronado Cays residents located adjacent to the Project site, or within 100 feet of such activities. Notification shall include the dates and hours when construction activities are anticipated to occur, and contact information, including a daytime telephone number, for the project representative to be contacted if noise levels are deemed excessive. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification.*
- *Locate Fixed/stationary equipment (e.g., generators, compressors) will be located as far as possible from Coronado Cays residences.*
- *Maintain all construction equipment and properly equip with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations.*
- *Shroud or shield all impact tools and intake and exhaust ports on powered construction equipment will be muffled or shielded. Equipment engine shrouds will be closed during equipment operation.*
- *Ensure all construction equipment powered by gasoline or diesel engines will have sound control devices that are at least as effective as those originally provided by the manufacturer, and all equipment will be operated and maintained to minimize noise generation. All motorized construction equipment will be shut down when not in use, to prevent excessive idling noise.*

- *Employ noise-reducing enclosures around noise-generating equipment, and temporary barriers (e.g., plywood, sound attenuation blankets) between noise sources and residential properties within 50 feet of the construction footprint, where feasible to reduce noise levels below the threshold of 75 dBA.*

Timing: *During construction.*

Responsibility: *City of Coronado or its consultant*

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ACRONYMS AND OTHER ABBREVIATIONS

APE	Area of Potential Effects
ARB	Air Resources Board
AQAT	Air Quality Attainment Plans
BMP	Best Management Practice
C&D	Construction and Demolition
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal-Am	California-American Water Company
CAL FIRE	California Department of Forestry and Fire Protection
CEQA	California Environmental Quality Act
Cal-IPC	California Invasive Plant Council
CBC	California Building Code
CCC	California Coastal Commission
CCMP	California Coastal Management Program
CGS	California Geological Survey
CH ₄	Methane
City	City of Coronado
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
CNPS	California Native Plant Society
CRHR	California Register of Historical Resources
CZMA	Coastal Zone Management Act
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FHWA	Federal Highway Association
FRA	Federal Responsibility Area
FUD	Formerly Used Defense
GHG	Greenhouse Gas

GPD	Gallons Per Day
GPM	Gallons Per Minute
GPS	Global Positioning System
HDPE	high-density polyethylene
I	Interstate
IS	Initial Study
ITE	Institute of Transportation Engineers
JRMP	Jurisdictional Runoff Management Plan
KCRC	Kumeyaay Cultural Repatriation Committee
LCP	Local Coastal Program Plan
LID	Low Impact Development
LF	Linear Feet
LOS	Level of Service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MFR	Memorandum for Record
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MTS	Metropolitan Transportation System
NAAQS	National Ambient Air Quality Standards
NAB	Naval Amphibious Base
NAHC	Native American Heritage Commission
NAGPRA	Native American Graves Protection and Repatriation Act
NBC	Naval Base Coronado
NOX	Oxides of Nitrogen
NO2	Nitrogen Dioxide
N2O	Nitrous Oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O&M	Operations and Maintenance
PM2.5	Particulate Matter Less Than 2.5 Microns in Diameter
PM10	Particulate Matter Less Than 10 Microns in Diameter
PPV	Peak Particle Velocity
PS 1	Pump Station 1

PVC	Polyvinyl Chloride
ROG	Reactive Organic Gases
SANTEC	San Diego Traffic Engineers Council
SCIC	South Coastal Information Center
SCS	Sustainable Community Strategies
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric
SDRWQCB	San Diego Bay Regional Water Quality Control Board
SIP	State Implementation Plan
SMP	Site Management Plan
SO ₂	Sulphur Dioxide
SR	State Route
SSTC	Silver Strand Training Complex
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TCP	Traditional Cultural Property
TPH	Total Petroleum Hydrocarbons
UST	Underground Storage Tank
VMТ	Vehicle Miles Traveled
WQSA	Water Quality Sensitive Area
WWTP	Wastewater Treatment Plant

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1 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

The City of Coronado proposes to construct a 14,334 linear foot (LF), 8-inch high-density polyethylene (HDPE) sewer force main, bypass connections, and odor control system improvements to extend City sewer services to the Naval Base Coronado (NBC) Coastal Campus. The Naval Base Coronado Coastal Campus Force Main Project (Proposed Project) would connect the existing Coronado Cays pump station at the north end of the project site and approved Pump Station 1 (PS 1) at the NBC Coastal Campus at the south end, which is currently under construction.

1.2 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the Proposed Project. Based on the issues evaluated in that chapter, it was determined that:

The Proposed Project would result in no impacts on the following issue areas:

- Agriculture and Forestry Resources
- Land Use
- Mineral Resources
- Population and Housing
- Public Services
- Utilities and Service Systems
- Wildfire

The Proposed Project would result in less than significant impacts on the following issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Energy
- Greenhouse Gas Emissions
- Recreation
- Geology and Soils
- Hazards and Hazardous Materials
- Transportation

The Proposed Project would result in less than significant impacts after mitigation on the following issue areas:

- Noise
- Cultural Resources
- Tribal Cultural Resources

1.3 DOCUMENT ORGANIZATION

This document is divided into the following sections:

Chapter 1, “Introduction.” This chapter briefly summarizes the Proposed Project and describes the purpose of the IS, summarizes findings, and describes the organization of this IS.

Chapter 2, “Project Description.” This chapter describes the purpose of and need for the Proposed Project, general background, and project elements.

Chapter 3, “Environmental Checklist.” This chapter presents an analysis of environmental issues identified in the CEQA environmental checklist and determines whether project implementation would result in a beneficial impact, no impact, a less than significant impact, a less than significant impact with mitigation incorporated, a potentially significant impact, or a significant impact on the environment in each issue area. Should any impacts be determined to be potentially significant or significant, an EIR would be required. For this project, however, mitigation measures have been incorporated as needed to reduce all potentially significant and significant impacts to a less than significant level.

Chapter 4, “References.” This chapter lists the references used in preparation of this IS.

Chapter 5, “Report Preparers.” This chapter identifies the individuals who prepared this document.

Appendix A, “Biological Resources Memorandum,” presents information on biological resources.

Appendix B, “Cultural Resources Memorandum,” presents information on cultural resources.

A guide to acronyms and other abbreviations used in this document is presented after the table of contents.

2 PROJECT DESCRIPTION

This chapter describes the Naval Base Coronado Coastal Campus Force Main Project (Proposed Project). The Proposed Project location and background are described along with project purpose and objectives, project characteristics, construction activities, project operations, and discretionary actions and approvals that may be required.

2.1 PROJECT BACKGROUND

The City of Coronado (City) sewer system consists of 17 sewer pump stations and more than 45 miles of underground sewer pipe line (City of Coronado, 2009). As of 2016, on average, Coronado transfers approximately 2.485 million gallons per day (mgd) of sewage, including sewage flows from two navy bases, the Naval Amphibious Base (NAB) and the Naval Air Station North Island (NASNI). Although the NAB and NASNI own and operate independent sewage facilities, they contract with the City to convey the flows through the City's system to the Transbay Pump Station from where it is pumped to the Transbay Outfall at the City of San Diego's Metropolitan wastewater collection system and conveyed to the Point Loma Wastewater Treatment Plant (City of Coronado, 2016). The City's existing annual contract capacity with the City of San Diego is 3.078 mgd (City of San Diego, 1998).

The City proposes to construct approximately 14,334 LF of 8-inch HDPE sewer force main and pump station modifications to include an odor control system in order to extend City sewer services to the approved NBC Coastal Campus currently under construction at the existing Silver Strand Training Complex South (SSTC-South). When complete, the campus would consist of a mix of instructional training and administrative facilities to support operational readiness of Naval Special Warfare Command personnel. Approximately 3,045 Navy personnel will also relocate from NAB to the new location at the NBC Coastal Campus in Coronado.

Anticipated wastewater demands associated with the new NBC Coastal Campus are approximately 0.2 mgd. Due to the transfer of Navy personnel from NAB to the NBC Coastal Campus, wastewater demand at NAB Coronado would be reduced.

Prior to commencing construction of the NBC Coastal Campus, wastewater service was provided to SSTC-South via a 4-inch diameter pressurized sewer main. At the time, only 15 percent of the system capacity was being utilized (U.S. Navy, 2015). The SSTC-South is currently receiving wastewater service under an existing 1967 service agreement between the City of Imperial Beach and the Navy because of the proximity of Imperial Beach infrastructure to the site. Extensive

upgrades to the City of Imperial sewer system would be required to serve to new NBC Coastal Campus.

Because the NBC Coastal Campus is located entirely within the corporate limits of Coronado and its municipal service area, the City proposes to provide wastewater services in order to maximize the beneficial public use of its wastewater collection services.

2.1.1 PREVIOUS ENVIRONMENTAL DOCUMENTATION

The portion of the Proposed Project located on the Navy's NBC Coastal Campus has been extensively studied in the 2015 NBC Coastal Campus Environmental Impact Statement (EIS) (U.S. Navy, 2015). The record of decision was signed on June 12, 2015. The total developed footprint for the approved NBC Coastal Campus project is approximately 169.4 acres at project completion. Construction of the NBC Coastal Campus at the SSTC-South is proposed over a 10-year period. The construction of the new campus is proposed in phases. The initial phase of development of the campus is anticipated to be operational by March 2020 and full buildout is anticipated by 2025.

The EIS evaluated the potential impacts associated with installation of utilities and wastewater generation associated with the new campus. The EIS evaluated a new wastewater conveyance system along with a proposed 450 gallon per minute (gpm) pump station, which would be constructed on-site. Operational redundancy during emergency conditions would be provided by equipping the new pump station with an emergency storage facility capable of accommodating up to six hours of average sewer inflow. A new 6-inch-diameter sewer force main would be proposed extending approximately 2,000 feet from the center of the existing Wullenweber Antenna Array within Hooper Boulevard to the connection to the existing Imperial Beach system. The EIS and a subsequent memorandum for record (MFR) also evaluated construction related direct and indirect effects within the developable area footprint and a 30-ft wide utility easement for a California-American Water Company (Cal-Am) water line installation. The MFR addressed changes to the water line alignment at Coastal Campus and temporary adjustments to the developable area.

The portion of the Proposed Project located on federal land falls entirely within the total developed footprint or utility easements of the approved NBC Coastal Campus project. The City's proposed sewer force main would be placed within the Cal-Am 30-foot wide utility easement and tie into the proposed 450-gallon pump station, which were previously analyzed and approved by the Navy.

2.2 PROJECT LOCATION

The Proposed Project is located entirely within the city limits of the City of Coronado in San Diego County. The project site is within Township 18S, Range 02W, of the “Point Loma”, “National City”, “Imperial Beach OE W”, and “Imperial Beach” U.S. Geological Survey (USGS) topographic quadrangles (Figure 2-1).

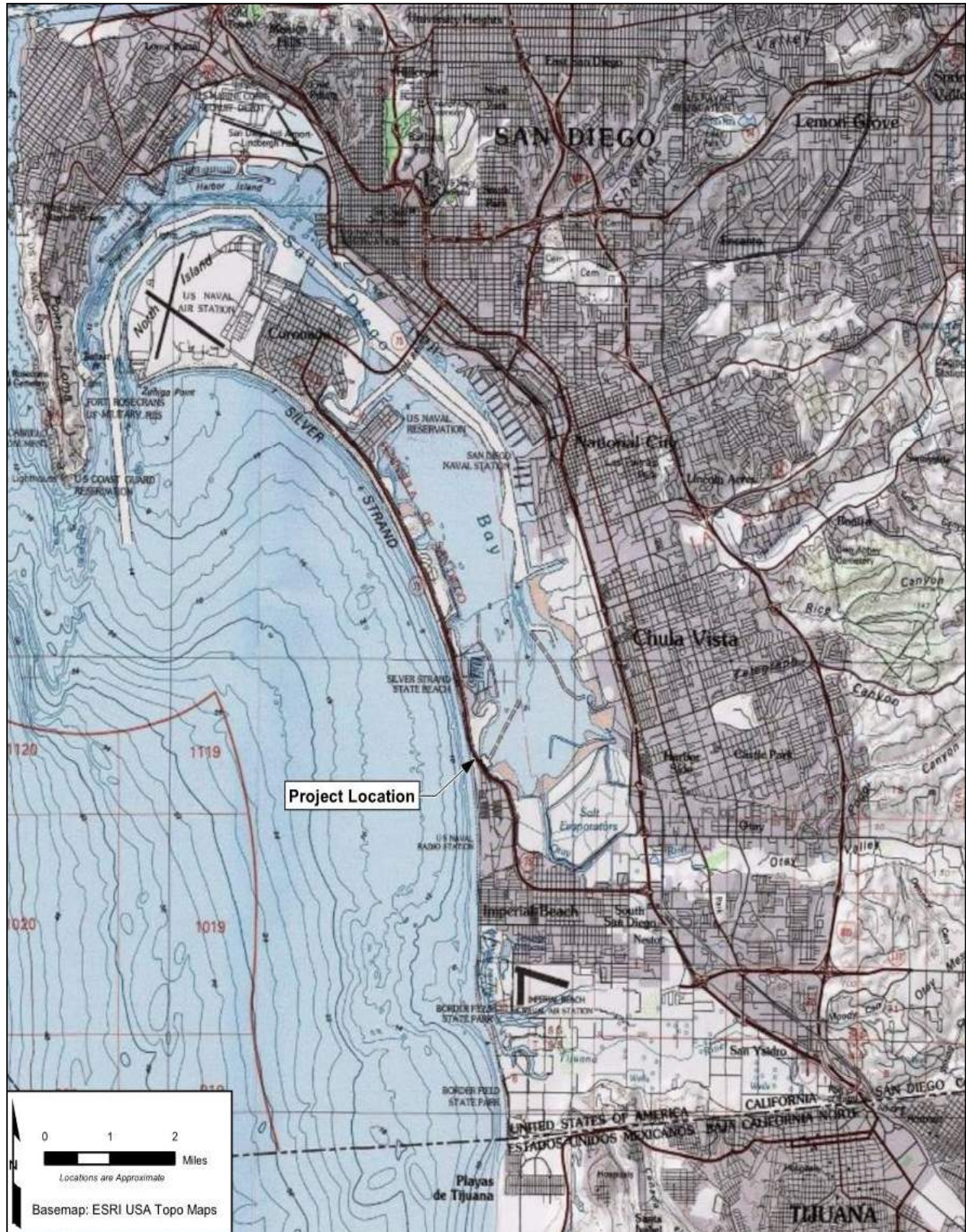
The southern portion of the Proposed Project is located on the NBC Coastal Campus accessible by State Route 75 (SR-75) and Hooper Boulevard. The NBC Coastal Campus is bounded by Silver Strand State Beach to the north, the City of Imperial Beach to the south, SR-75 and San Diego Bay to the east, and the Pacific Ocean to the west (Figure 2-1 and Figure 2-2).

The northern portion of the Proposed Project crosses beneath and runs along the east side of SR-75 and the Bayshore Bikeway, a two-lane paved Class-I bikeway. The Coronado Cays residential development, City of Coronado fire house, and Coronado Cays Park are also located to the east of Proposed Project. The Proposed Project also crosses Coronado Cays Boulevard at the signalized intersection with SR-75 and entrance to the Coronado Cays residential development (Figure 2-2 and Figure 2-4).

2.3 PROJECT PURPOSE AND OBJECTIVES

The purpose of the Proposed Project is to meet the anticipated wastewater demands for the future NBC Coastal Campus. The objectives of the Proposed Project are to:

- Facilitate the maximum beneficial public use of wastewater collection services within the City’s municipal service area by extending service to the future Naval Base Coronado Coastal Campus;
- Locate the new sewer system components to minimize the potential of environmental impacts resulting from project implementation; and,
- Construct and operate project facilities in a safe, environmentally sensitive, and cost-effective manner by March 2020.



Source: ESRI, 2018

Figure 2-1. Project Site and Vicinity Map



Source: SANGIS, 2018

Figure 2-2. Project Site Aerial Map



Looking North-North East of Pump Station 1 and Staging Area on NBC Coastal Campus



Looking North along proposed sewer force main pipeline alignment on NBC Coastal Campus

Figure 2-3. Project Site Photographs (NBC Coastal Campus)



Looking North along proposed sewer force main pipeline alignment at SR-75 Crossing



Looking North along proposed pipeline alignment at Coronado Cays Boulevard

Figure 2-4. Project Site Photographs (City Right-of-Way)

2.4 PROPOSED PROJECT

The City proposes to construct 14,334 LF of 8-inch HDPE sewer force main, bypass connections, and odor control system improvements to extend City sewer services to the NBC Coastal Campus. The new sewer force main would connect to the existing Coronado Cays pump station at the north end of the project site and the approved PS 1 at the NBC Coastal Campus at the south end, which is currently under construction (Figure 2-3 and Figure 2-5). Anticipated wastewater demands associated with the new NBC Coastal Campus are approximately 0.2 mgd. The peak hour demand is estimated to be approximately 400 gpm. The design capacity of the proposed PS 1 constructed as part of the NBC Coastal Campus will be approximately 500 gpm. The capacity of the existing pump at the Coronado Cays pump station is 1,750 gpm.

2.4.1 NBC COASTAL CAMPUS PS 1 ODOR CONTROL SYSTEM

A proposed calcium nitrate-based odor control system would consist of a Bioxide storage tank, a feed pump skid with control system, and process piping. The proposed system would be located just outside of PS 1 near the southwest corner on an 18-inch thick, 12 feet by 18 feet concrete pad with a 6-inch high concrete curb and drainline connected to the pump station wet well. The Bioxide storage tank would be a 4,400-gallon high-density cross-linked polyethylene with double wall spill containment. The tank would be approximately 10-feet 3-inches in diameter and 10 feet tall.

2.4.2 CORONADO CAYS PUMP STATION IMPROVEMENTS

A sewer force main discharge connection to the wet well, associated valves, and a new 18 feet by 18 feet odor control filter bed would be installed at the Coronado Cays Pump Station to allow for continued operations to deliver wastewater flow from the NBC Coastal Campus to the Glorietta Bay pump station. In the event issues arise with Coronado Cays Pump Station operations, a bypass connection is proposed to make direct connection between the new PS 1 force main and the existing Coronado Cays Pump Station force main. The new odor control filter bed would consist of a 12-inch thick gravel bed containing perforated polyvinyl chloride (PVC) piping and topped with a biofilter medium and native grasses. The existing odor control bed would be demolished by excavating the bed material, backfilling the area, and then reseeding it (Figure 2-6).

2.4.3 SEWER FORCE MAIN

Approximately 13,796 feet of the 8-inch HDPE sewer force main would be installed by open trench construction. Approximately 6,420 feet of pipe would be installed on the NBC Coastal Campus by open trench installation within the existing Cal-Am easement and approximately 7,376 feet of pipe would be installed by open trench within the City right-of-way along the east side of the Bayshore Bikeway. The 8-inch sewer force main would maintain a minimum 10 feet horizontal clearance or 18-inch vertical clearance from the 16-inch Cal-Am water main. The trench excavation would be up to 5-feet wide and the pipeline would be installed at depths ranging between 4 feet and 13 feet below ground surface (bgs) depending on soil conditions and the location of other utilities within the easement (Figure 2-5 through Figure 2-9). A temporary bikeway, approximately 10 feet wide and 700 feet long would be constructed to maintain pedestrian and bicycle traffic along the Bayshore Bikeway (Figure 2-10).

Two sections of pipeline would be installed using jack and bore drilling or alternative trenchless drilling techniques. Jack and bore drilling techniques would be used and trenchless drilling techniques would be used in the vicinity of PS 1 in order to avoid conflicts with underground utilities (Figure 2.5).

Approximately 17 air release and cleanout valves would be installed along the force main at localized high and low points (Figures 2-5 and 2-11). The access manholes would be cone-shaped with a 5-feet diameter base and 36-inch diameter top. Manholes depths would vary between 5 feet to 12 feet bgs. Access manhole rims would be flush with the ground surface at an elevation ranging between 7 feet and 27 feet (NAV88).

An approximate 173 LF jack and bore pipe installation, originating from the NBC Coastal Campus and exiting on the east side of SR-75, would be required to cross SR-75 in accordance with Caltrans requirements (Figure 2-8). The 8-inch sewer force main section that crosses under SR-75 would be placed inside a 14-inch diameter steel sleeve for additional protection in accordance with Caltrans requirements. The pipe would be installed at a depth of ranging between 4.5 feet and 7 feet bgs. The jack and bore pipeline installation would require the excavation of an entry pit (10 feet by 40 feet and 10 feet deep), and an exit pit (10 feet by 10 feet and 7 feet deep).

A clean out, isolation valve, and air release valve would also be installed on each end of the jack and bore constructed pipe section that crosses under SR 75 (Figures 2-8 and 2-11). The access manhole would be cone-shaped with a 5-feet diameter base and 36-inch diameter top. The access manhole rim would be flush to the ground surface at elevations ranging between 7 feet

and 27 feet (NAV88). An excavation measuring 5 feet by 5 feet and 7.5 feet deep would be required for the manhole installation.

A second 365 LF trenchless pipe installation would occur near PS 1 on the NBC Coastal Campus, with the trenchless drilling point of entry located within the previously approved development footprint for the NBC Coastal Campus south of the Wullenweber Antenna Array. The pipe laydown and assembly area would be located within the staging area (Figure 2-9).

2.5 CONSTRUCTION SCHEDULE

Construction of the Proposed Project would require approximately eight months and would commence after securing all required approvals and permits. Project construction is anticipated to start July 1, 2019 with substantial completion estimated for December 31, 2019. The Proposed Project would involve three main areas of construction (Figure 2-2).

Area I construction would involve pipe installation on Navy property and is anticipated to take approximately 165 days.

Area II construction, which would involve jack and bore pipe installation across SR-75, is anticipated to take approximately 105 days.

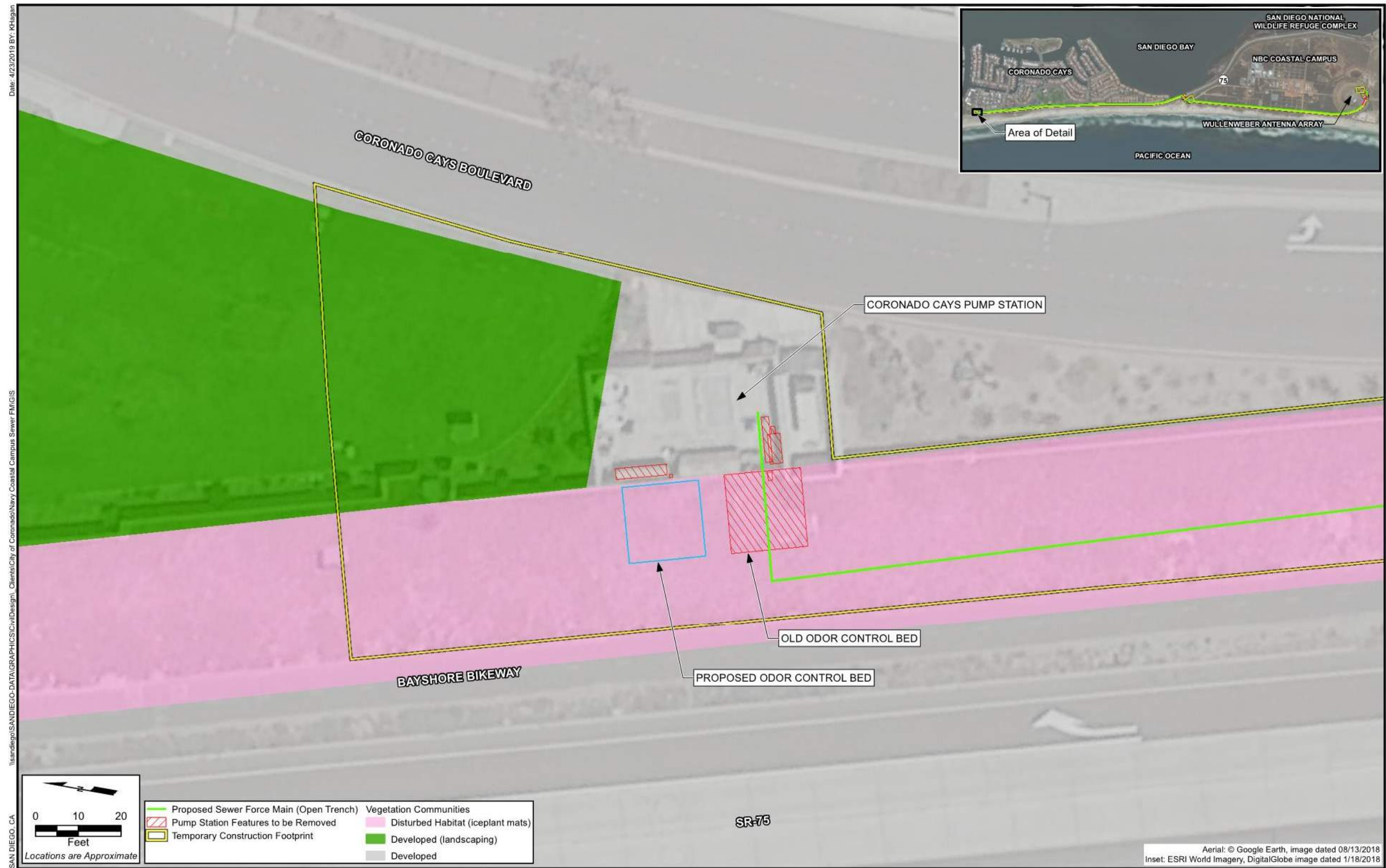
Area III, which would involve open cut installation within the City right-of-way, is anticipated to take approximately 270 days. Open cut pipe installation across Coronado Cays Boulevard is anticipated to take up to two weeks.

In Areas I and II, vegetation clearing would occur outside of the nesting season for migratory birds (February 15th through August 31st) and no work would occur during the nesting season for the Western snowy plover (March 1st through September 15th).

Work on the NBC Coastal Campus would also be restricted to Monday through Friday from 7:00 AM to 5:00 PM and work outside of the NBC Coastal Campus would be restricted to Monday through Saturday from 7:00 AM to 7:00 PM. No construction activities would occur on Sundays.



Proposed Mitigated Negative Declaration
www.kleinfelder.com



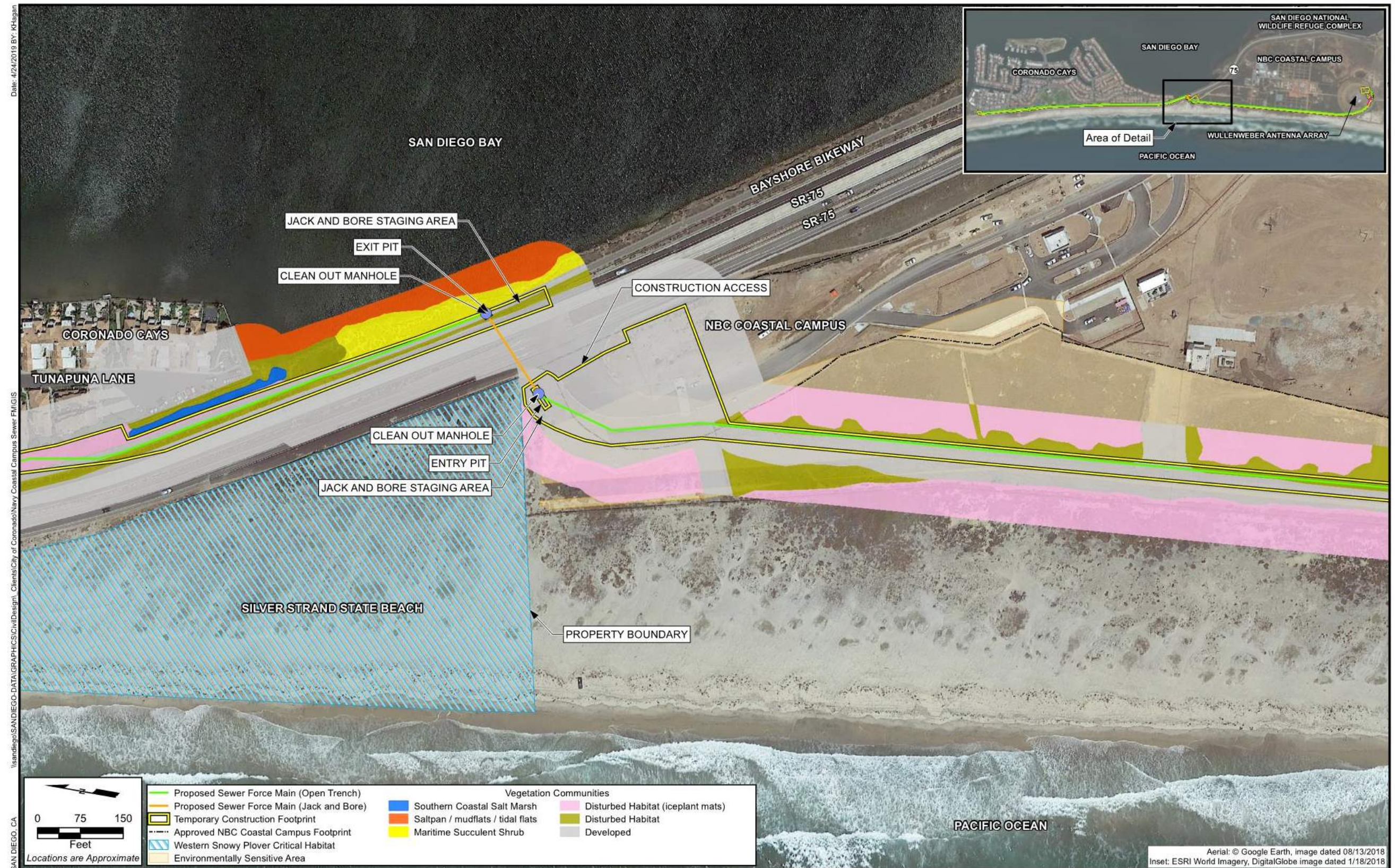
Source: SANGIS, 2018

Figure 2-6. Coronado Cays Pump Station Improvements



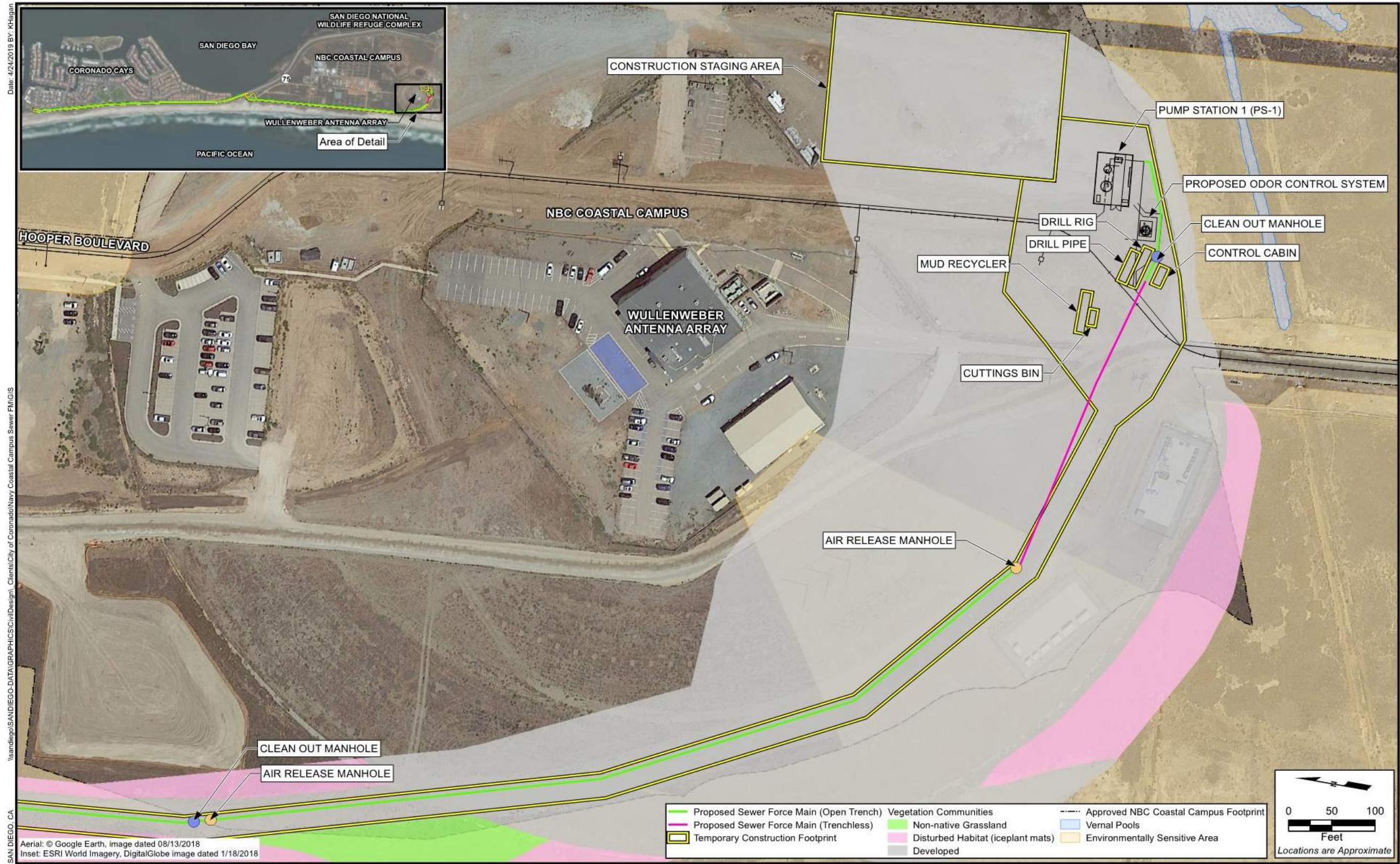
Source: SANGIS, 2018

Figure 2-7. Open Trench Crossing at Coronado Cays Boulevard



Source: SANGIS, 2018

Figure 2-8. Jack and Bore Crossing at SR-75



Source: SANGIS, 2018

Figure 2-9. NBC Coastal Campus PS 1 and Proposed Odor Control System

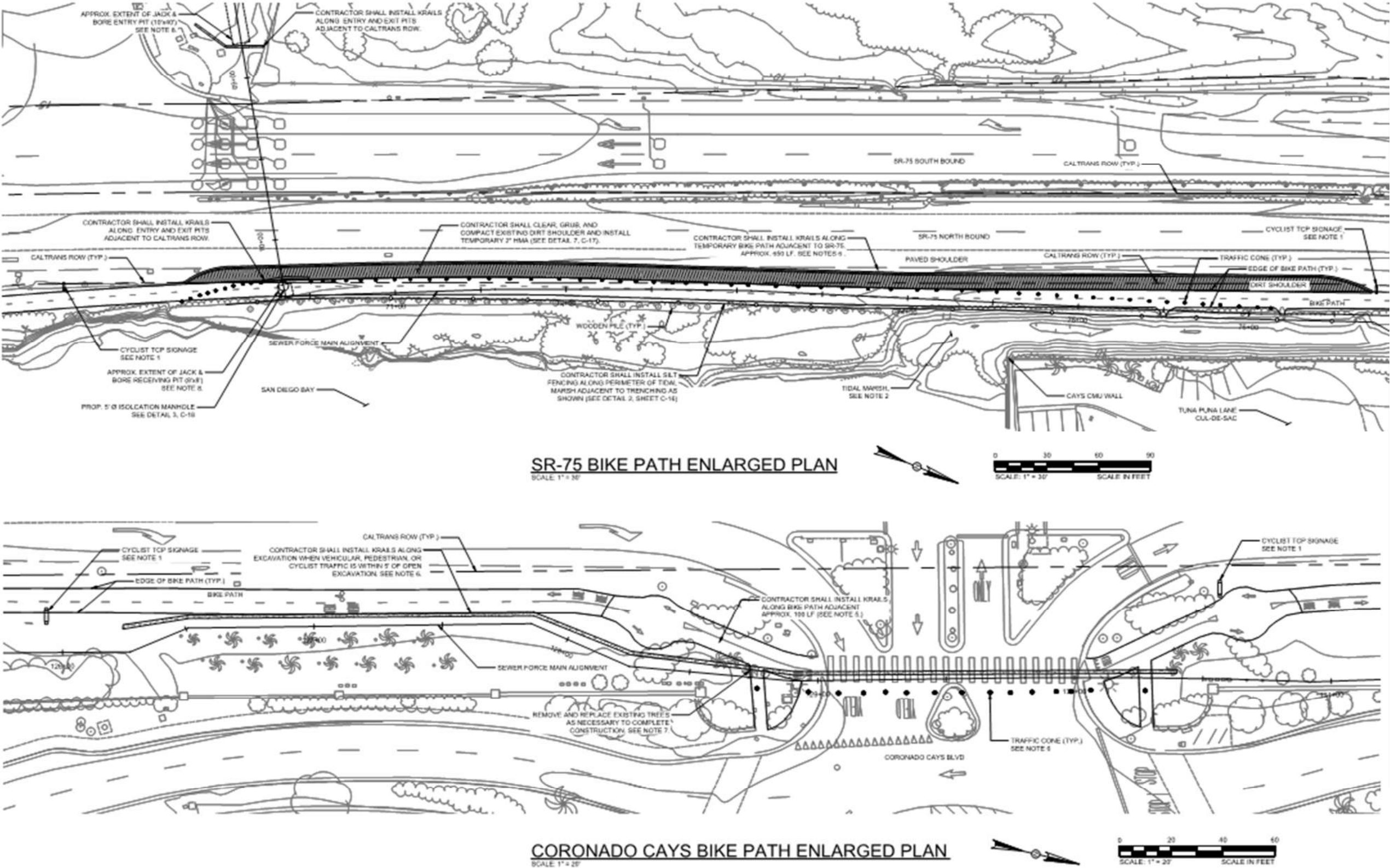
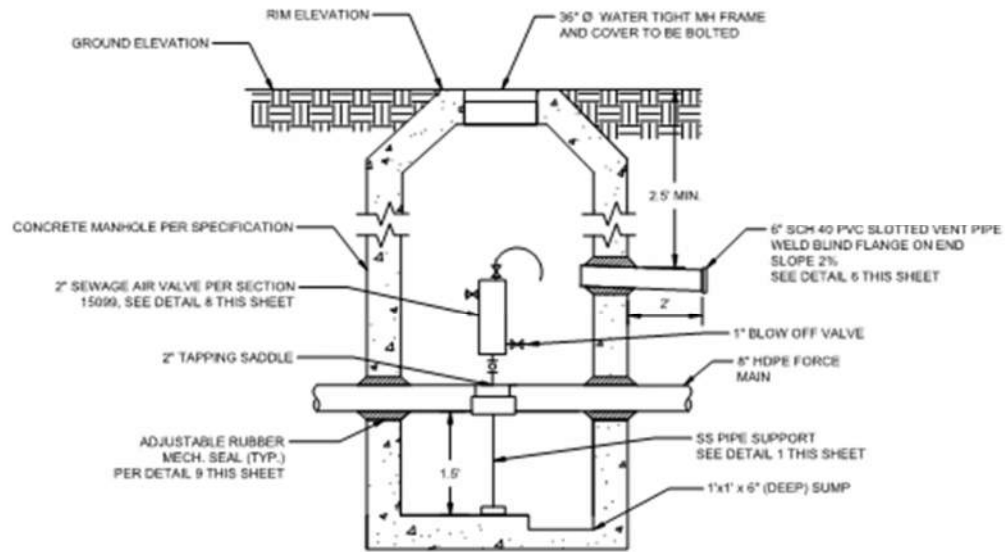
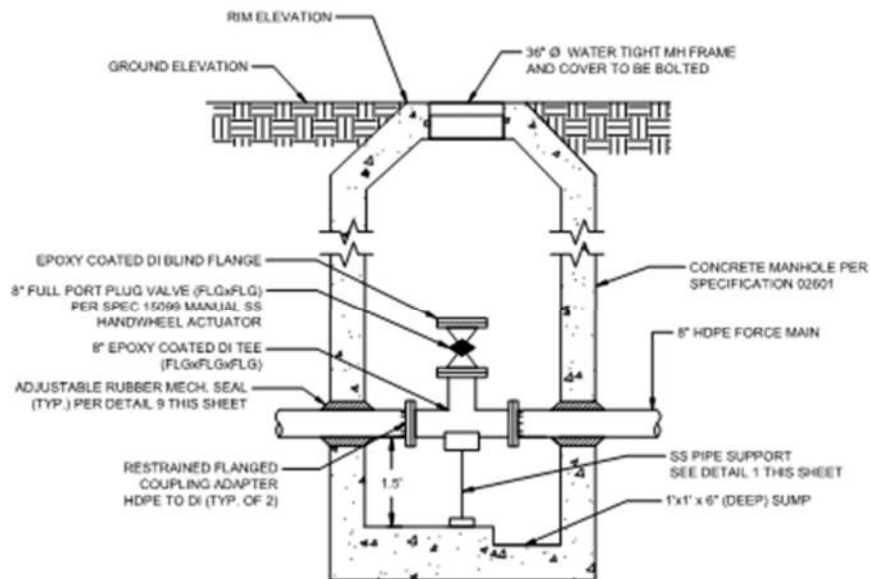


Figure 2-10. Bayshore Bikeway Traffic Control Plan



2 TYPICAL 5' Ø AIR / VACUUM ASSEMBLY MANHOLE
SCALE: NTS

Air Release Valve and Manhole



5 TYPICAL 5' Ø CLEAN OUT MANHOLE
SCALE: NTS

Cleanout Manhole

Figure 2-111. Manhole Details

2.6 GENERAL CONSTRUCTION METHODS

A combination of trenchless and open cut trenching is proposed for the construction of the sewer force main. The total anticipated temporary footprint of disturbance would be approximately 14.5 acres, consisting of approximately 7.18 acres on the NBC Coastal Campus, 0.42 acres within SR-75 Caltrans right-of-way and 6.9 acres on City property. The maximum temporary footprint of disturbance per day would be up to 0.5 acres or 1,000 LF. The total anticipated permanent footprint would be approximately 623.3 square feet consisting of approximately 260.1 square feet on the NBC Coastal Campus and 363.2 square feet on City property (Figure 2-5).

- **Site Access and Staging:** Access to the construction areas would be provided primarily by SR-75 and Interstate 5 (I-5). Ingress and egress to construction site areas would be provided by SR-75 and the north entry point to Coastal Campus from SR-75. Construction equipment and vehicles would be kept in designated staging areas at three main locations along the construction site near the Coronado Cays and NBC Coastal Campus pump stations and at the jack and bore installation. Temporary staging and laydown areas would be provided to aid with construction of the pipeline alignments and temporary storage of equipment. Staging areas would be located at least 100 feet from wetlands and sensitive habitat features to the maximum extent possible. Staging areas would be cleared of vegetation and debris outside of migratory bird nesting season occurring from February 15th to August 31st.
- **Trenchless Drilling:** Two sections along the sewer force main, under SR-75 and near PS-1 on the NBC Coastal Campus, would be installed using trenchless drilling techniques. The construction method for SR-75 crossing pipelines would include “jack and bore” drilling methods requiring entry and exit pits. The jack and bore drilling involves use of cutting heads or hydraulic jacks to install pipe from a entry (bore) pit to an exit pit. The installation would involve installing a 14-inch diameter steel casing in 10-foot sections. A pneumatic tool and first pipe section would be lowered into the entry pit and placed on adjustable bearings. A ramming tool, connected to an air compressor, would then drive or hammer the pipe section into the soil. A second section of pipe would be welded to the first pipe section and then driven in. This process would be continued until the bore is completed. Soil within the 14-inch casing would be drilled out with a cutting head and the 8-inch HDPE sewer force main would be installed within the casing. Drilling cuttings would be containerized for off-site disposal at an approved landfill.

- **Excavations and Open Cut Trenching:** Installation of the new pipeline would require excavation and shoring consisting of an open trench up to 5 feet wide where new pipeline would be placed up to 15 feet below grade. Additional excavations would be required for trenchless drilling and the installation of the access vaults. The entry pit required would be approximately 10 feet by 40 feet and 10 feet deep, and an exit pit would be 10 feet by 10 feet and 7 feet deep. In areas where dewatering is necessary, the pits would be lined with filter fabric and have crushed-rock and sump areas to clear groundwater. Shoring techniques for trench construction would likely consist of sequentially moving a shield or box along the trench excavation to provide protection for workers and nearby structures. At the end of each construction day, open excavations would be covered with plates, mesh or other covers to avoid wildlife from becoming trapped.
- **Dewatering:** Temporary dewatering would be required for open trenches and other excavations that extend below groundwater elevations. Depending on the volume of discharge, access to existing facilities and restrictions, water may be discharged either to City and privately-owned sewer system or land surface. Where feasible, groundwater would be maintained at a minimum of approximately 3 feet below bottom of excavation. Approximately 158,400 gallons per day (gpd) maximum volume of water is estimated to be generated depending on the groundwater level and the soil permeability. Discharges to the privately-owned sewer system within Coronado Cays would be restricted to a maximum of 114,000 gpd to ensure that the discharges would not exceed the available capacity of the system. Depending on the depth of dewatering required, potential methods may include localized sumps, closely spaced wells, or more widely spaced deeper wells. Potential hydrologic connection to sensitive habitat in the vicinity of construction would be considered during method selection.

Dewatering provisions would be developed and approved by the City and Navy, as appropriate, before construction commencement and in accordance with local and San Diego Bay Regional Water Quality Control Board (SDRWQCB) requirements. Discharges would also occur only in designated areas that avoid potential impacts to sensitive habitat and water features. Dewatering provisions would be implemented during construction to minimize the potential for adverse water quality impacts on surface water and groundwater. Provisions may include preparing a dewatering plan that details permit requirements, procedures for removing groundwater, equipment and methods of temporary water treatment and containment, and water disposal procedures.

- **Materials and Waste Management:** Construction materials for the new pipeline would be obtained from vendors in the greater San Diego area, up to approximately 15 miles from the project site. Cut-fill activities would involve excavating trenches for pipe installation, access manholes, and entry and exit pits for trenchless drilling activities. Additional excavation would be required for the construction of the odor control system on the NBC Coastal Campus and the demolition of the old and the construction of the new odor control filter bed. To the extent possible, excavated soil would be stockpiled on-site and used for backfill. For the total project, it is estimated that approximately 1,300 cubic yard (CY) engineered fill (gravel /subbase material) would be imported on-site. Approximately 350 CY of construction and demolition (C&D) debris would be generated during the demolition of the old odor control system and modifications to streetscape features within the City right-of-way. Exported materials would be hauled to and disposed in suitable licensed landfills with appropriate capacity to accept the material. It is assumed that the nearest landfill, Republic Services Otay Landfill, located approximately 15 miles from the project site in Chula Vista would be used. Obtaining and disposing of construction material would result in approximately 165 truck trips and 2,475 total miles. The maximum daily trips per day are estimated to be 20 trips. Haul routes would include SR-75, I-5, I-805, and Main Street.
- **Utilities:** Locations of existing utilities would be verified with the Navy, Cal-Am, and the City. Prior to construction, construction contractors would also contact Underground Services Alert to identify existing underground utilities and service connections prior to commencing any excavation work. In the vicinity of known sensitive utilities, the exact utility locations would be determined by test pits dug at locations determined and approved by the Navy and the City (also referred to as “potholing”). No temporary disruption of potable water or sewer service would be required during construction.
- **Fencing:** Temporary 6-foot tall chain-link fencing would be placed along the construction boundary to clearly mark the limits of disturbance in areas of active construction activity that are not previously developed. Temporary exclusionary fencing, consisting of sedimentation barriers such as geotextile fabric would also be installed around the perimeter of saltmarsh vegetation and would be buried to a depth of at least 2 inches. Fencing supports would be placed on the exterior of salt marsh vegetation. All fencing would be removed after all construction activity is complete.

- **Traffic and Pedestrian Control and Management:** A Traffic and Pedestrian Control and Management Plan would be implemented to manage traffic associated with construction activity on the NBC Coastal Campus and construction along SR-75 and Bayshore Bikeway and within the Coronado Cays residential development. The management plan would include safety measures for vehicle, pedestrian, and bicycle traffic and notification procedures for construction activities and traffic restrictions in accordance with Caltrans requirements and Bayshore Bikeway Plan policies. During construction, access to the NBC Coastal Campus and adjacent residences would remain open at all times. Access along shoulders of SR-75 may be restricted for up to five weeks during jack and bore drilling across SR-75. If project construction limits traffic in these areas, traffic controls would be implemented and may include signage, temporary concrete barriers, and use of flaggers. Access to portions of the Bayshore Bikeway may be limited for up to three months during project construction but would remain accessible to pedestrian and bicycle traffic. Detours, temporary lane shifts, or portage areas where bicyclists need to dismount and walk their bicycles around construction activity would be required. Figure 2-10 shows the proposed traffic control along the Bayshore Bikeway during construction.
- **Construction Best Management Practices:** During construction, standard Best Management Practices (BMPs) would be implemented to minimize heavy-duty vehicle emissions, dust, erosion, and stormwater pollution. Consistent with commercial vehicle and construction equipment idling time and dust suppression requirements of the San Diego County Air Quality Management District, idling would not occur for more than 5 minutes and temporary areas of disturbance would be treated (e.g., with water or dust suppressant) to prevent visible emissions of dust.

The Proposed Project involves the disturbance of more than one acre; therefore, a National Pollutant Discharge Elimination System (NPDES) construction permit from the SDRWQCB is required. As a condition of the permit, a storm water pollution prevention plan (SWPPP) would be prepared. The SWPPP would identify BMPs necessary for water quality protection. Temporary erosion/runoff BMPs would be implemented during construction to minimize stormwater pollution resulting from erosion and sediment migration from the construction and staging areas. These temporary control measures may include implementing construction staging in a manner that minimizes the amount of area disturbed at any one time; secondary containment for storage of fuel and oil; and the management of stockpiles and disturbed areas by means of straw wattles, straw bales, silt fences, gravel filters, mulching, revegetation, and temporary covers as appropriate.

The SWPPP also would require that BMPs be applied to prevent and control any spills of equipment fuels and fluids during construction and eliminate any unauthorized discharges that have the potential to adversely impact water quality. Emergency procedures for responding to spills also would be identified in the SWPPP.

- Site Restoration:** After completion of construction activities, the temporary facilities would be demobilized, and the site would be restored to pre-project conditions or better. Site restoration activities for areas disturbed by construction activities, including staging areas, may include regrading, reseeding, repaving, reconstructing landscaping, curb and sidewalk restoration, and other measures deemed appropriate. Disturbed areas would be restored as quickly as feasible at the end of the construction period in order to minimize the potential for windblown dust. Site restoration would be implemented in accordance with Navy requirements and City-specific urban runoff management and discharge control provisions and post-construction performance standards for their municipal separate stormwater system (MS4) NPDES permit.

2.7 CONSTRUCTION LABOR FORCE AND EQUIPMENT

The Proposed Project would be constructed in three general areas with differing constraints (Areas I, II, and III). Construction is anticipated to be completed by December 31, 2019, with full operation of the new sewer system by March of 2020. Construction equipment, personnel, and schedule restrictions for each area are summarized in Table 2.7-1.

**Table 2.7-1
Summary of Construction Areas, Equipment, and Labor Force**

Construction Phase	Schedule Restrictions ^{1,2}	Estimated Construction Duration for each Area	Construction Activity	Equipment	Personnel
Area I (NBC Coastal Campus)	February 15 th to September 15 th 1,2	165 days	Mobilization, open cut installation, trenchless drilling, and pipe testing	<ul style="list-style-type: none"> Trench excavator Wheel loader Shoring box Engine generator Backhoe The axle (dump) truck Portable compactor Dewatering pump Bull dozer 	20 workers

Construction Phase	Schedule Restrictions ^{1,2}	Estimated Construction Duration for each Area	Construction Activity	Equipment	Personnel
				<ul style="list-style-type: none"> Foreman Truck 	
Area II (SR-75 Crossing)	February 15 th to September 15 th ^{1,2}	105 days	Jack and bore pipe installation and testing	<ul style="list-style-type: none"> Jack and bore drilling rig Dewatering pump Compressor Backhoe Generator Paver 1-ton supply truck 	20 workers
Area III (City Right-of-Way)	February 15th through August 31 st (Tree removal only) ¹	270 days	Open cut installation, pipe testing, startup and commissioning	<ul style="list-style-type: none"> Trench excavator Paver Wheel loader Shoring box Engine generator Backhoe The axle (dump) truck Portable compactor Dewatering pump Compressor Bull dozer Foreman Truck 1-ton supply truck Crane 	20 workers
Notes: ¹ Vegetation clearing would occur outside of the nesting season for migratory birds (February 15th through August 31st) ² No work would occur during the nesting season for the Western snowy plover (March 1st through September 15th).					

2.8 OPERATION AND MAINTENANCE

Operation and maintenance (O&M) activities associated with the Proposed Project, including routine facility inspection, testing and maintenance would be performed as part of the City's existing O&M program for its sanitary sewer system.

Routine facility inspection and maintenance would include the following types of activities:

- Scheduled inspections and preventative maintenance, including routine cleaning of pipelines, pump stations and wet wells, and chemical treatment for root control at specific locations.
- Odor control system servicing and deliveries of chemical needed for odor control approximately once every six weeks in the summer and every 11 weeks in the winter.
- System features that are found to be not functioning properly during inspection would be maintained, repaired, and/or replaced.

2.9 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

As the lead agency under CEQA, the City has the primary responsibility for approving and carrying out the Proposed Project and for ensuring that CEQA regulations and all other applicable regulations are met. Other agencies that may also have permitting approval or review authority over portions of the Proposed Project are listed in Table 2.9-1.

**Table 2.9-1
Summary of Potential Approvals and Permits**

Agency	Action	Anticipated Permit/Approval
City of Coronado City Council	Project approval California Environmental Quality Act (CEQA) Compliance	Approval of Proposed Project Approval to prepare an Initial Study/proposed Mitigated Negative Declaration (IS/MND) (CEQA document)
City of Coronado Planning Commission	California Environmental Quality Act (CEQA) Compliance Development within the Coastal Zone (Local Coastal Program land)	Adoption of the Final IS/proposed MND Approval of a coastal development permit ¹
City of Coronado Community Development Department – Building Services Division	Construction and operation of the project	Design review/Issuance of building permit
City of Coronado Public Services & Engineering Department	Design and construction of new connection to the City's sewer system Construction of project	Design review/Approval of sewer infrastructure connections Approval of stormwater permit

Agency	Action	Anticipated Permit/Approval
	<p>Discharge of water during dewatering into City's sewer system (as applicable)</p> <p>Construction of sewer force main within City right-of-way (as applicable)</p> <p>Trenching within 10 feet of palm trees</p>	<p>Approval of dewatering permit</p> <p>Approval of right-of-way permit</p> <p>Approval of a street tree removal permit</p>
Commander, Navy Region Southwest and Naval Base Coronado	<p>Project approval</p> <p>National Environmental Policy Act (NEPA) Compliance</p> <p>Coastal Zone Management Act (Federal land) Compliance</p>	<p>Approval of a License to Construct/Bill of Sale</p> <p>Approval of Proposed Action/NEPA Compliance</p> <p>Consistency with CD-0003-14 concurrence</p>
State Water Resources Control Board	<p>Operation of the City of Coronado's Sewer Systems</p> <p>Construction of project (greater than 1 acre in size)</p>	<p>Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order 2006-0003 DWQ)</p> <p>NPDES Construction General Permit (Order 2012-0006-DWQ, CAS000002 (amending Order 2009-0009-DWQ as amended by 2010-0014-DWQ)</p>
San Diego Regional Water Quality Control Board	<p>Operation of the City of Coronado's sewer system</p> <p>Drilling slurry discharges to land during trenchless drilling</p> <p>Ground discharge of water during dewatering (as applicable)</p> <p>Surface water discharge of water during dewatering (as applicable)</p>	<p>Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region (Order R9-2007-0005)</p> <p>Conditional Waiver of Waste Discharge Requirements for Low Threat Discharges - Discharges of Slurries to Land (Waiver 9) (Order R9-2014-0041)</p> <p>Conditional Waiver of Waste Discharge Requirements for Low Threat Discharges - Discharges to Land from Short-Term Construction Dewatering Operations (Waiver 3) (Order R9-2014-0041)</p> <p>General Waste Discharge Requirements for Groundwater Extraction Discharges to Surface Waters in the San Diego Region</p>

Agency	Action	Anticipated Permit/Approval
		(Order R9-2015-0013; NPDES No. CAG919003)
Caltrans	Construction of sewer force main within SR-75 right-of-way	Approval of Encroachment Permit
<p>Notes:</p> <p>¹The portion of the project site on non-federal land is located entirely within the City's Coastal Permit jurisdiction (with appeal jurisdiction of the California Coastal Commission) (City of Coronado, 2005).</p>		

3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title:

South Bay Sewer Force Main Project

2. Lead Agency Name and Address:

City of Coronado Public Services and Engineering

City Hall

1825 Strand Way

Coronado, CA 92118

3. Contact Person and Phone Number:

Ed Walton, City Engineer

(619) 522-2408

4. Project Location:

The Proposed Project site is located within the limits of the City of Coronado. The southern portion of the project is located on the Naval Base Coronado (NBC) Coastal Campus. The northern portion of the project is located within the right-of-way of State Route 75 (SR-75), the Coronado Cays residential development and the existing Coronado Cays pump station near the intersection of SR-75 and Coronado Cays Blvd. The Silver Strand State Beach spans both sides of SR-75 and is located north of the Proposed Project on the west of SR-75 and east of SR-75.

5. Project Sponsor's Name and Address:

City of Coronado

City Hall

1825 Strand Way

Coronado, CA 92118

6. General Plan Designation:

Coronado Cays Specific Plan, Open Space and Military

7. Zoning:

Residential, Scenic Highway Overlay Zone, Wildlife Preserve Overlay Zone and Military

PROJECT INFORMATION

- 8. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)**

The City of Coronado proposes to construct approximately 14,334 linear feet (LF) of 8-inch high-density polyethylene (HDPE) sewer force main, pump station modifications, and odor control system improvements to extend City sewer services to the NBC Coastal Campus. The new sewer force main would connect to the existing Coronado Cays pump station at the north end of the project site and the previously approved Pump Station 1 (PS 1) at the NBC Coastal Campus at the south end, which is currently under construction.

- 9. Surrounding Land Uses and Setting: (Briefly describe the project's surroundings)**
- The Coronado Cays residential development is located adjacent to project. SR-75 is a designated scenic highway. The NBC Coastal Campus is designated for military use.

- 10. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)**
- Navy Region Southwest and Naval Base Coronado, Regional Water Quality Control Board, and Caltrans.

- 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.?**

On February 12, 2019, the City contacted ten Native American tribes that requested notification of projects that take place within the vicinity of the project. In response to the City's invitation for tribal consultation, four of the ten tribes responded. Consultation was requested by the Campo Band of Mission Indians in a letter dated February 21, 2019. An email recommending that a cultural study be performed and that a Kumeyaay monitor be included in the Proposed Project was received by the Kumeyaay Cultural Repatriation Committee on February 25, 2019. Monitoring was also requested in a letter sent by the Viejas Band of Kumeyaay Indians on March 7, 2019. A phone call was also received by the Jamul Indian Village on April 10, 2019. The City is continuing consultation with the four tribes in accordance with Public Resources Code section 21080.3.1

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 21083.3.2.) 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.

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.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology & Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology & Water Quality | <input type="checkbox"/> Land Use & Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population & Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities & Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> 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 **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



5-20-19

Signature

Date

Richard Grunow

Director of Community Development

Printed Name

Title

City of Coronado

Agency

3.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.1.1 ENVIRONMENTAL SETTING

The City of Coronado is located in San Diego County between the San Diego Bay and the Pacific Ocean. The City contains generally coastal, flat-lying topography. SR-75 was designated as a State Scenic Highway in 1974 (Caltrans, 2008, City of Coronado, 1994). Under the City of Coronado Local Coastal Program Plan (LCP), SR-75 and Strand Way are also considered to be view corridors that allow an unobstructed view of pleasing scenery beyond the immediate confines of streets (City of Coronado, 1980). Viewers within the Proposed Project area include motorists, Coronado Cays residents, recreational users of the Bayshore Bikeway, and future occupants of the NBC Coastal Campus.

Local scenic resources within the vicinity of the Proposed Project include views of the Pacific Ocean, dunes, beaches, and the Bay. The most notable of these features along SR-75 include unobstructed views of both San Diego Bay and Silver Strand State Beach. Chain-link fencing was recently installed along the entire border of Silver Strand State Beach. Lines of Palm trees along

the Coronado Cays residential development and ongoing construction activity in the vicinity of the NBC Coastal Campus are also prominent features of the visual landscape.

3.1.2 DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. During construction, viewers would experience temporary changes in the visual quality of the scenic view corridor, but these changes would be limited to the short period necessary to construct and maintain the sewer system infrastructure. Views of the construction activities would be temporary in nature, short in duration, and ground surfaces would be restored to pre-construction conditions.

Permanent aboveground features consist of an odor control system of the NBC Coastal campus. The proposed odor control system on the NBC Coastal Campus would be a relatively low-profile feature with a maximum height of approximately 10 feet and would be designed in accordance with Navy requirements that require consistent low-reflectivity architectural treatments in earth tone colors and would blend in with other new construction and constructed after several buildings are constructed in the immediate vicinity, including PS 1. The NBC Coastal Campus would be seen in the distant foreground for viewers other than occupants of the NBC Coastal Campus and is not considered to obstruct or detract from the scenic vista of the Pacific Ocean, Silver Strand State Beach or the Bay. For these reasons, the Proposed Project would not have a substantial adverse effect on a scenic vista or conflict with the City of Coronado scenic designations or the LCP. The impact would be **less than significant**.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact. Scenic resources within the vicinity of the Proposed Project include unobstructed views of both San Diego Bay and Silver Strand State Beach as well as lines of palm trees along the Coronado Cays residential development. There are no historic buildings identified within the Proposed Project. The project has been designed to avoid palm trees; however, up to three palm trees located on the north side of the entrance to Coronado Cays residential development may need to be temporarily removed and then replanted during pipeline installation. Prior to removal, the City arborist and the Street Tree Committee would be consulted. Committee recommendations and provisions for tree replacement in the event that the trees do not survive after replanting would be implemented in accordance with City requirements for tree removal within the right-of-way. There would be no other potential damage to scenic resources during the implementation of the Proposed Project. The view toward the Pacific Ocean or the Bay

from SR-75 would not be impacted by the Proposed Project features or project construction. Any visual impacts to scenic resources as a result of project construction would be temporary and the visual quality would be restored to pre-construction conditions. Therefore; the impact would be **less than significant**.

- 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?**

Less Than Significant Impact. For the same reasons discussed in question a) above, the Proposed Project would not substantially degrade the existing visual character or quality of the project site or its surroundings. While project construction would temporarily alter the visual character of the view corridor, as experienced by motorists, residents and recreationists; however, views to the Pacific Ocean, Bay or Silver Strand State Beach would not be restricted. After construction, the existing visual quality would be returned. This effect is not considered to be substantial or conflict with the City of Coronado scenic designations or the LCP. Therefore, the impact would be **less than significant**.

- d) **Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

Less Than Significant Impact. Construction of the Proposed Project may create a temporary new source of light and glare from construction equipment parked onsite. For work during non-daylight hours, contractors may require the use light towers, situated on each side of SR-75 or each end of the staging area, in accordance with Caltrans, Navy, and City requirements. Where possible, tower lights would be directed downward to reduce illumination of adjacent residents. Such impacts would be temporary and short in duration. No permanent lighting would be required for the operation of the Proposed Project.

The proposed odor control system on the NBC Coastal Campus would be designed in accordance with Navy requirements that entail low-reflectivity architectural treatments, which would minimize potential glare. Permanent manholes are not considered to be a substantial new source of glare. Because temporary nighttime lighting would be ceased when associated construction activities are completed and project-related materials would not introduce new sources of light or glare, the impact would be **less than significant**.

3.2 AGRICULTURE & FORESTRY RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forestry Resources.				
<p>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, as updated) 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.</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.2.1 ENVIRONMENTAL SETTING

The Proposed Project is located entirely within the city limits of the City of Coronado in San Diego County and is designated as Urban and Built-Up Land and Other Land by the California Department of Conservation Farmland and Mapping and Monitoring Program (CA Dept of Conservation, 2016). No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance exists in the Proposed Project footprint and no adjacent properties are zoned for agricultural use. There is no designated forest land or timberland within the Proposed Project footprint or immediate vicinity.

3.2.2 DISCUSSION

- 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?**

No Impact. There is no Farmland of Local Importance within the Proposed Project. The Proposed Project would be located on land designated by the California Department of Conservation as Urban and Built-Up Land and Other Land footprint (California Department of Conservation, 2016). No adjacent properties are zoned for agricultural use; therefore, the project would not result in a conflict with existing zoning for agricultural use or a Williamson Act contract. No farmland would be converted to non-agricultural use and **no impacts** would occur with respect to farmland.

- b) **Conflict with existing zoning for agricultural use or a Williamson Act contract?**

No Impact. See response to question a). **No impact** would occur.

- 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))?**

No Impact. No forest land or timberland exists within the Proposed Project footprint. There would be no conflict with existing forest land or timberland zoning and there would be no loss or conversion of forest land or timberland. **No impacts** would occur with respect to forest land or timberland.

- d) **Result in the loss of forest land or conversion of forest land to non-forest use?**

No Impact. See response to question c). **No impact** would occur.

- 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?**

No Impact. See responses to questions a) and c). **No impact** would occur.

3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.3.1 ENVIRONMENTAL SETTING

The Proposed Project is located in the San Diego County, which is within the San Diego Air Basin (SDAB). The SDAB covers approximately 4,526 square miles of complex terrain, consisting of coastal plains with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountain ranges to the east. The topography in the SDAB region varies greatly, from beaches on the west, to mountains and desert to the east.

Sensitive receptors are typically defined as residents, schools, hospitals, residential care facilities, day-care centers, and other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Of the aforementioned receptors, only residential developments are present within the Proposed Project location. West View Elementary School, is located approximately 0.35 miles south of the Proposed Project and immediately adjacent to

the southern boundary of the NBC Coastal Campus. Silver Strand Elementary School is located 1-mile north of the northernmost point of the Proposed Project.

Ambient concentrations of air pollutant emissions are determined by the amount of emissions released by pollutant sources and the atmosphere's ability to transport and dilute such emissions. Natural factors which affect transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight. Existing air quality conditions in the vicinity of the project are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

The U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) have identified six air pollutants as being of nationwide and statewide concern: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead, and particulate matter (PM). PM is subdivided into two classes based on particle size: PM equal to or less than 10 micrometers in diameter (PM_{10}) and PM equal to or less than 2.5 micrometers in diameter ($PM_{2.5}$).

Health-based air quality standards have been established for these pollutants by EPA at the national level and by ARB at the state level. These standards are referred to as the national ambient air quality standards (NAAQS) and the California ambient air quality standards (CAAQS), respectively. The NAAQS and CAAQS were established to protect the public with a margin of safety from adverse health impacts caused by exposure to air pollution. Both EPA and ARB designate areas of the state as attainment, nonattainment, maintenance, or unclassified for the various pollutant standards according to the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA), respectively. An area is designated nonattainment/transitional to signify that the area is close to attaining the standard for that pollutant. The "unclassified" designation is used in an area that cannot be classified as meeting or not meeting the standards, based on available information. Table 3.3-1 shows the attainment status of criteria pollutants in San Diego County as published by the San Diego County Air Pollution Control District (APCD, 2019a).

**Table 3.3-1
Attainment Status of Criteria Pollutants for San Diego County**

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone	Nonattainment (24 hour)	Nonattainment (1 hour)
Carbon monoxide	Attainment	Attainment
PM ₁₀	Unclassifiable	Nonattainment
PM _{2.5}	Attainment	Nonattainment
Oxides of nitrogen	Attainment	Attainment
Sulfur dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen sulfide	No Federal Standard	Unclassified
Visibility Reducing Particulates	No Federal Standard	Unclassified
Source: San Diego County, 2007		

EPA, under the provisions of the CAA, requires each state with regions that have not attained the NAAQS to prepare a state implementation plan (SIP) that details how each local area is to meet these standards. ARB is the lead agency for developing the SIP in California. Local air districts and other agencies prepare air quality attainment plans (AQAPs), or air quality management plans, and submit them to ARB for review, approval, and incorporation into the applicable SIP. The CCAA also requires that each area exceeding the CAAQS develop a plan aimed at achieving those standards (California Health and Safety Code, Section 40911 et seq.).

The San Diego Air Pollution Control District (SDAPCD) is the agency responsible for air quality planning and development of the AQAP in the project area. The AQAP establishes the strategies that will be used to achieve compliance with the CAAQS in all areas within SDAPCD's jurisdiction. All projects within SDAPCD's jurisdictional area are subject to adopted SDAPCD rules and regulations in effect at the time of construction and operation.

3.3.2 METHODOLOGY

A qualitative analysis was performed by evaluating Proposed Project construction emissions in proportion to construction emissions estimates for the construction of the NBC Coastal Campus presented in the 2015 EIS (U.S. Navy, 2015) and comparing the results to screening level thresholds recommended by the San Diego Air Pollution Control District (San Diego County, 2007). The analysis also assumes that operation of PS-1 on the NBC Coastal Campus is not part of the Proposed Project because construction and operation of the pump station has already been evaluated, approved and construction will proceed independent of the Proposed Project. Because wastewater demands are anticipated to be reduced at NAB following the transfer of Naval personnel to the NBC Coastal Campus, overall increases in wastewater demands are anticipated to be minimal. Similarly, there would negligible changes in energy demands associated with the operation of the Proposed Project.

To evaluate the potential for a significant adverse impact with respect to criteria pollutants for which the project region is non-attainment under NAAQS or CAAQS, San Diego County has published screening levels for determining significance of a Proposed Project (San Diego County, 2007).

**Table 3.3-2
Maximum Construction Emissions for the Approved NBC Coastal Campus**

Criteria Pollutant	Hourly Emission Rate (lb/hr)	Daily Emission Rate ¹ (lb/day)	Annual Emission Rate (tons/yr)
Reactive organic gases emissions (ROG)	1.95	15.6	2.03
ROG Screening Level	None	75	13.7
Greater than Screening Level?	--	No	No
Carbon monoxide emissions (CO)	2.38	19.1	2.48
CO Screening Level	100	550	100
Greater than Screening Level?	No	No	No
Respirable particulate matter emissions (PM ₁₀)	2.55	20.4	2.65
PM ₁₀ Screening Level	None	100	15
Greater than Screening Level?	--	No	No
Fine particulate matter emissions (PM _{2.5})	0.40	3.23	0.42
PM _{2.5} Screening Level	--	55 ²	10
Greater than Screening Level?	--	No	No
Oxides of nitrogen (NO _x)	2.86	22.8	2.97

Criteria Pollutant	Hourly Emission Rate (lb/hr)	Daily Emission Rate ¹ (lb/day)	Annual Emission Rate (tons/yr)
NOx Screening Level	25	250	40
Greater than Screening Level?	No	No	No
Notes: ¹ Daily emissions calculated from annual by dividing by 260 days per year and hourly by dividing by 8 hours per day. ² The current version of APCD Rule 20.2 specifies 67 lb/day for fine particulate matter. The more stringent value from the County Guidelines is used. Source: U.S. Navy, 2015c and San Diego County, 2007			

3.3.3 DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. As discussed above, the SDAPCD is responsible for developing and implementing the AQAP to address the NAAQS and CAAQS. The AQAP presents comprehensive strategies to reduce emissions from stationary, area, mobile, and indirect sources. Projects that are consistent with the assumptions and control measures used in development of the applicable air quality plan are considered to not conflict with or obstruct the attainment of the air quality levels identified in the plan.

Construction of the Proposed Project would involve the use of off-road equipment. Assumptions for off-road equipment emissions in the air quality plans were developed based on hours of activity and equipment population reported to ARB for rule compliance. The Proposed Project would not increase the assumptions for off-road equipment use in the air quality plans.

Air quality plans are developed using population and vehicle miles traveled (VMT) growth projections for a region. Projects that would result in increased VMT or other operational emissions beyond those estimated used to develop an air quality plan could conflict with or obstruct implementation of the applicable plan, which is developed to demonstrate the region's ability to attain ambient air quality standards. Therefore, because the Proposed Project would not increase lane capacity or generate additional vehicle trips beyond existing conditions, it would not result in a net increase of regional VMT.

Because the Proposed Project would be consistent with the assumptions regarding equipment activity and emissions in the AQAP and existing planning documents, it is expected that the intensity of construction and operational emissions associated with the Proposed Project would have been accounted for in the AQAP. Thus, implementation of the Proposed Project would not conflict with or obstruct implementation of the applicable air quality efforts of SDAPCD. This impact would be **less than significant**.

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?

Less than Significant Impact. Table 3.3-2 shows the estimated worst-case emissions for criteria pollutants based on calculations for the NBC Coastal Campus construction and operation. As shown in Table 3.3-2, the NBC Coastal Campus's construction and operational emissions would not exceed any of applicable thresholds of significance for criteria pollutants. The NBC Coastal Campus project is a large project of higher construction intensity and a duration of greater than five years. Due to the size, activities, and short-term duration of the Proposed Project, emissions would be significantly lower in proportion to and comparison with the NBC Coastal Campus project, therefore, the Proposed Project construction and operational emissions would not exceed any of applicable thresholds of significance for criteria pollutants. Air quality emissions associated with operations are not anticipated to substantially increase from existing conditions because the overall changes in wastewater demands are anticipated to be minimal and only seven additional vehicle trips per year would be needed for maintenance. Thus, with implementation of standard construction BMPs and adherence to Navy, City and other applicable requirements, project-generated emissions would not result in a cumulatively considerable net increase of a criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. This cumulative impact would be cumulatively **less than significant**.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Project-generated emissions of criteria air pollutants and precursors would not expose sensitive receptors to substantial criteria pollutant concentrations.

The nearest sensitive receptors in the vicinity of the Proposed Project are residential homes in the neighborhood located adjacent to the Proposed Project. An elementary school is located approximately 0.35 miles of the project site. These sensitive receptors could be exposed to localized pollutant concentrations. Pollutants that could be generated by the Proposed Project, and which could result in adverse health effects on sensitive receptors include CO, ozone precursors (ROG and NO_x), respirable particulate matter (PM₁₀ and PM_{2.5}) and toxic air contaminants (TACs).

As discussed above, Proposed Project-generated emissions would not substantially contribute to or result in an existing or projected 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. Construction and operational emissions are expected to be below screening thresholds and would not be anticipated to result in a contribution to a violation of air quality

standards, conflict with implementation of air quality planning efforts, or contribute to cumulative impacts. No changes in operation of existing stationary sources associated with the City's existing sewer system would be required for the implementation of the Proposed Project. Thus, Proposed Project-generated emissions of criteria air pollutants and precursors would not expose sensitive receptors to substantial criteria pollutant concentrations. As a result, this impact would be **less than significant**.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant. The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. During construction, potentially odor-causing emissions will include diesel exhaust and asphalt paving odors. However, odors from construction activities will be of a transient and short-term nature and diesel exhaust emissions are not generally considered an odor nuisance. The operation of the sewer system would generate sulfur-based rotten egg odors from the wastewater that is transported through the system. The odors would be most prominent at the pump station facilities which are located approximately 100 feet from the nearest sensitive receptors and in the vicinity of the air release valves. However, a new odor control system would be installed at PS-1 on the NBC Coastal Campus and the existing odor control filter bed at the Coronado Cays pump station would be replaced. Accordingly, odors from the operation of the Proposed Project would be captured and substantially reduced. The impact would be **less than significant**.

3.4 BIOLOGICAL RESOURCES

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

3.4.1 ENVIRONMENTAL SETTING

The vicinity of the Proposed Project is part of a coastal linkage that connects habitat along the California coast to the north to habitat in Baja California to the south. The undeveloped beaches of Silver Strand State Beach and the NBC Coastal Campus provide critical breeding and wintering habitat for Western snowy plover and other shorebirds. It is also part of the Pacific Flyway, a

major north/south migration route for birds that travel between North and South America. In Southern California, this migratory pathway spans a broad front, and migrating birds are not uniformly distributed across the landscape. Migrating birds are generally concentrated along the coast during the fall and in the deserts and mountains in the spring.

An Environmentally Sensitive Area (ESA) means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and development. ESAs have been delineated on the NBC Coastal Campus during the preparation of the 2015 EIS and are located within the southeastern section and along the western boundary of the campus (Figure 2-5). There is no ESA within the Proposed Project footprint on the NBC Coastal Campus. The City of Coronado's Local Coastal Development Land Use Plan (LCP) also identifies ESAs to include undisturbed coastal dunes, coastal barrel cactus habitat, and the vernal pools located on the NBC Coastal Campus. ESAs have been delineated located along the San Diego Bay shoreline on the east side of SR 75 between the San Diego National Wildlife Refuge Complex and the Coronado Cays residential development and along the shoreline of the Silver Strand State Beach (City of Coronado, 2005).

The portion of the Proposed Project located on the larger NBC Coastal Campus is located entirely within the approved NBC Coastal Campus development footprint and is actively under construction. The area with the approved footprint has been previously analyzed and impacts related to biological resources have been avoided, minimized or previously mitigated as part of the 2015 EIS (U.S. Navy, 2015).

3.4.2 METHODS

The biological resources information presented in this section is based on a biological reconnaissance survey conducted on February 21, 2019 and April 24, 2019 (Appendix A, Tierra Data, 2019), a search of biological resource databases, including the California Department of Fish and Wildlife (CDFW), California Natural Diversity Database, and the California Native Plant Society (CNPS) Inventory for the portion of the property located within the City right-of-way extensive biological resource evaluations that were performed in support of the NBC Coastal Campus EIS, and correspondence with USFWS under Section 7 of the Endangered Species Act for the construction of the NBC Coastal Campus (U.S. Navy, 2015). During the reconnaissance survey, the location and extent of the vegetation communities and plant occurrences that could be temporally disturbed during construction were delineated and recorded in the field using a Global Positioning System (GPS) data logger.

3.4.2.1 SENSITIVE VEGETATION COMMUNITIES

Sensitive natural communities are those communities that are of special concern to resource agencies for a variety of reasons, including their local or regional decline, or because they provide habitat important to common and special-status species.

Vegetation mapping of the Proposed Project site identified a total of 36 plant species were observed during the survey, nearly half of which are non-native and several are listed on the California Invasive Plant Council (Cal-IPC) list of invasive plants. Ice plant mats cover much of the undeveloped areas at both NBC Coastal Campus and Coronado Cays where the vegetation is a near monoculture of Sea fig (*Carpobrotus chilensis*) with a few other, mostly non-native species, in low numbers. As a result, there is very little area for native species (e.g. beach bur (*Ambrosia chamissonis*)) to occur, primarily on gaps in the ice plant mats or between the bicycle path and CA-75 which supports some native shrubs (primarily coastal goldenbush (*Isocoma menziesii* var. *vernonioides*)). Some larger shrubs within and palm trees located within and adjacent to the Proposed Project within the City right-of-way that could potentially provide nesting habitat for MBTA species, discussed below. Table 3.4-1 provides a summary of the vegetation communities within the Proposed Project footprint.

**Table 3.4-1
Vegetation Communities within the Proposed Project Footprint**

Vegetation Community	Area of Temporary Disturbance (acres)	Area of Permanent Disturbance (square feet)
Developed	8.33	387.63
Disturbed Habitat (ice plant mats)	4.95	394.7
Disturbed Habitat	0.64	0
Landscaped	0.55	0
Total	14.47	782.33

At the NBC Coastal Campus (Area I and II), the Proposed Project is predominantly developed or under development by the U.S. Navy to construct the NBC Coastal Campus. What little vegetation remains is almost entirely comprised of ice plant mats. A narrow strip of disturbed soils between the dirt road on the east edge of the site and the ice plant mats is essentially the only area where sparse native plants occur among a variety of non-native weeds.

The majority of Coronado Cays section of the project (Areas II and III) is almost entirely developed for roads, an asphalt bicycle path, residential housing, or landscaping with non-native horticultural species.

Native habitat type identified during the survey site occurs in Area II at the southern end of the Coronado Cays where there is a narrow drainage feature that supports southern coastal salt marsh vegetation including pickleweed (*Salicornia bigelovii*), alkali heath (*Frankenia salina*), and saltwort (*Batis maritima*). The feature is approximately 9 feet wide and 295 feet long and drains to San Diego Bay. Rip rap has been placed within portions of the feature. It is surrounded by disturbed habitat and a stormwater outfall is located just south of the feature. Further south along the east side of SR-75 is an area of maritime succulent scrub that supports approximately 25 Palmer's frankenia (*Frankenia palmeri*) plants (Figure 2-8). The southern coastal salt marsh and maritime succulent scrub described above qualify as sensitive natural communities.

3.4.2.2 SPECIAL-STATUS WILDLIFE SPECIES

Table 3.4-2 shows a listing of sensitive animal species with the potential to occur in the vicinity of the Proposed Project. Special-status wildlife species include those listed by USFWS under the federal ESA and by the CDFW under the CESA. Additional species receive federal protection under the Migratory Bird Treaty Act (MBTA) and state protection under CEQA Section 15380(d) and sections of the California Fish and Game Code related to fully protected species.

Previous habitat suitability assessments that were performed as part of the NBC Coastal Campus EIS note that the only federally-listed species with the potential to occur and breed within NBC Coastal Campus are San Diego fairy shrimp (*Branchinecta sandiegonensis*) and Pacific pocket mouse (*Perognathus pacificus longimembris*). Western snowy plover (*Charadrius nivosus nivosus*) breeds outside and to the west of the NBC Coastal Campus development boundary, and Light-footed Ridgway's rail (*Rallus obsoletus levipes*) breeds to the east of the NBC Coastal Campus in the South Bay Marine Biological Study Area on the east side of SR-75. CNDDDB data also depicts historic occurrences of the silvery legless lizard, a state-listed rare species, on the NBC Coastal Campus in the vicinity of the proposed pipeline alignment; however, this species was not found during surveys conducted as part of the NBC Coastal Campus EIS. Historical occurrences of state-listed migratory bird species of concern, including Northern Harrier have also been recorded (U.S. Navy, 2015).

Table 3.4-2
Sensitive Animal Species Present within 1-mile of the Proposed Project

Common Name	Species Name	Status ¹	Potential to Occur
Invertebrates			
Globose dune beetle	<i>Coelus globosus</i>	G1G2 S1S2, IUCN-V	Known to occur on the dunes of Silver Strand State Beach. No dune habitat within project footprint.
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	FE	Low. Known to occur at NBC Coastal Campus, south of project footprint. No
Sandy beach tiger beetle	<i>Cicindela hirticollis grvida</i>	G5S2	None. Known to occur on the beaches on the west side of NBC Coastal Campus.
Western beach tiger beetle	<i>Cicindela latesignata</i>	G2G4S1	None. Known to occur on the beaches on the west side of NBC Coastal Campus.
Western tidal-flat tiger beetle	<i>Cicindela gabbii</i>	G2G4S1	None. No tidal flats present within the project footprint.
Birds			
American peregrine falcon	<i>Falco peregrinus anatum</i>	BCC	Low. Observed foraging in the vicinity, but no nesting habitat present within
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	SE	Low. Small area of salt marsh habitat present at south end of Coronado Cays,
California least tern	<i>Sternula antillarum browni</i>	FE, SE	None. Known to nest on Silver Strand State Beach but not at NBC Coastal Campus. No nesting habitat at Coronado Cays. May be an occasional flyover, but no open water foraging areas within project area.
Light-footed Ridgway's rail	<i>Rallus longirostris levipes</i>	FE, SE	None. No cordgrass habitat within project footprint.
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT	Low. Known to nest on the beaches on the west side of NBC Coastal Campus,
Mammals			
Hoary bat	<i>Lasiurus cinereus</i>	SSC, G5 S4	Low. No roosting structures within project area. May be used for occasional foraging.
Mexican long-tongued bat	<i>Choeronycteris mexicana</i>	SSC, IUCN-NT,	Low. No roosting structures within project area. May be used for

Common Name	Species Name	Status ¹	Potential to Occur
<p>Notes:</p> <p>¹Status:</p> <p>FE = Federally listed as Endangered</p> <p>FT = Federally listed as Threatened</p> <p>SE = State endangered</p> <p>ST = State threatened</p> <p>SR = State rare</p> <p>BCC = Birds of Conservation Concern</p> <p>SSC = Species of Special Concern</p> <p>CSC = California species of special concern</p> <p>CFP = California fully protected species</p> <p>- = no status</p> <p><u>International Union for Conservation of Nature (IUCN) Ranks</u></p> <p>NT = Near Threatened</p> <p>VU = Vulnerable</p> <p>Global/State Rankings: 1: Critically Imperiled, 2: Imperiled, 3: Vulnerable, 4: Apparently Secure. 5: Secure</p> <p>Source: Tierra Data 2019</p>			

No sensitive wildlife species were detected during the reconnaissance survey. Given the degraded nature of much the project footprint, and the predominance of dense ice plant mats, the potential for sensitive wildlife within the project footprint is extremely low. At most, the project area may serve for occasional foraging for birds such as peregrine falcons or by bat species, but long-term residence is very unlikely.

Some larger shrubs within and palm trees located within and adjacent to portion of the Proposed Project within the City right-of-way could potentially provide nesting habitat for MBTA species. Potential nesting birds are associated with small shrubs, palm trees, overhanging ornamental shrubs and trees from residences, openings in the ice plant patches, and small patches of other low vegetation. Species include bushtit (*Psaltirparus minimus*), house finch (*Haemorhous mexicanus*), savannah sparrow (*Passerculus sandwichensis*), hooded oriole (in the palm trees) (*Icterus cucullatus*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), and killdeer (*Charadrius vociferous*).

3.4.2.3 SPECIAL STATUS PLANT SPECIES

Table 3.4-3 shows a listing of sensitive plant species with the potential to occur in the vicinity of the Proposed Project. Special-status plant species include those listed as endangered, threatened, or rare; and species proposed for listing by USFWS or CDFW. Special-status plant species also include those listed by CNPS on List 1 or 2 of the Inventory of Rare and Endangered Plants of California.

Table 3.4-3
Sensitive Plant Species Present within 1-mile of the Proposed Project

Common Name	Species Name	Status ₁	Potential to Occur
Asteraceae			
Beach goldenaster	<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>	1B.1	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.
Chaparral ragwort	<i>Senecio aphanactis</i>	2B.2	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.
Decumbent goldenbush	<i>Isocoma menziesii</i> var. <i>decumbens</i>	1B.2	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.
Orcutt's pincushion	<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	1B.1	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.
Boraginaceae			
Brand's star phacelia	<i>Phacelia stellaris</i>	1B.1	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.
Cactaceae			
San Diego barrel cactus	<i>Ferocactus viridescens</i>	2B.1	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.
Snake cholla	<i>Cylindropuntia californica</i> var. <i>californica</i>	1B.1	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.
Chenopodiaceae			
Aphanisma	<i>Aphanisma blitoides</i>	1B.2	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.
Coulter's saltbush	<i>Atriplex coulteri</i>	1B.2	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.

Common Name	Species Name	Status ₁	Potential to Occur
Estuary seablite	<i>Suaeda esteroa</i>	1B.2	Moderate. Small area of coastal salt marsh at south end of Coronado Cays. No plants observed.
Crassulaceae			
Blochman's dudleya	<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	1B.1	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.
Variegated dudleya	<i>Dudleya variegata</i>	1B.2	Low. Minimal scrub habitat occurs between the bike path and Hwy-75. Habitat is highly disturbed. No plants observed.
Fabaceae			
Nuttall's acmispon	<i>Acmispon prostratus</i>	1B.1	Presence confirmed within project footprint at NBC Coastal Campus and City right-of-way.
Frankeniaceae			
Palmer's frankenia	<i>Frankenia palmeri</i>	2B.1	Presence confirmed in maritime succulent scrub along Hwy-75. No habitat or plants observed within project footprint.
Orobanchaceae			
Salt marsh bird's-beak	<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	FE, SE, 1B.2	Known to occur at NBC Coastal Campus, but well south of the project area. No habitat within project footprint.
Polygonaceae			
Coast woolly-heads	<i>Nemacaulis denudata</i> var. <i>denudata</i>	1B.2	Moderate. No dune habitat present within project footprint. However, species tends to favor similar habitats as Nuttall's acmispon, which does occur in the footprint. Presence confirmed on Silver Strand State Beach.

Common Name	Species Name	Status ₁	Potential to Occur
<p>Notes:</p> <p>Status:</p> <p>FE = Federally listed as Endangered</p> <p>SE = State listed as Endangered</p> <p><u>California Native Plant Society California Rare Plant Ranks</u></p> <p>1B = Plants rare, threatened, or endangered in California and elsewhere</p> <p>2B = Plants rare, threatened, or endangered in California, but more common elsewhere</p> <p>Extensions:</p> <p>0.1 = Seriously endangered in California (>80% of occurrences are threatened and/or high degree and immediacy of threat)</p> <p>0.2 = Fairly endangered in California (20–80% of occurrences are threatened)</p> <p>- = no status</p> <p>Source: Tierra Data, 2019.</p>			

The reconnaissance survey resulted in negative findings for all potential plant species that are State or federally listed as threatened or endangered (Tierra Data 2019). The Nuttall's acmispon (formerly referred to as the Nuttall's lotus), which is ranked as a CRPR 1B.1 sensitive species was found to occur in many areas on the NBC Coastal Campus in disturbed soils situated between the dirt roads and ice plant mats. The plants ranged from as small as a few centimeters in diameter to up to a meter and at least 200-300 plants were estimated to be present within the Proposed Project footprint. An additional occurrence of four plants was found at the Coronado Cays area between the bicycle path and SR-75. Approximately 25 Palmer's Frankenia plants, which are ranked as a CRPR 2B.1 sensitive species, were found within maritime succulent scrub vegetation located on the east side of SR-75 adjacent to the Proposed Project footprint. Several dozen Coast woolly heads plants, ranked as a CRPR 1B.2 sensitive species, were observed adjacent to the Proposed Project behind a fenced area on Silver Strand State Beach.

3.4.3 DISCUSSION

- 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?**

Less than Significant Impact. The portion of the Proposed Project located on the east side of SR-75 does not contain suitable habitat for special-status wildlife species with the potential to occur in the vicinity of the project; however, one special-status plant, the Nuttall's acmispon and potential suitable habitat for migratory birds is found within this portion of the Proposed Project footprint. The proportion of the Proposed Project on the NBC Coastal Campus is under active

construction and either previously disturbed or developed and; however, critical habitat for Western snowy plover and the San Diego fairy shrimp, and previously delineated ESAs that may support special-status species is located in the immediate vicinity outside of the previously approved development footprint for the NBC Coastal Campus. Western snowy plover federally designated critical habitat with known nest sites is located immediately north of the Proposed Project on Silver Strand State Beach. As a result, the Proposed Project has been designed to avoid impacts on critical habitat, ESA and special-status species.

POTENTIAL IMPACTS ON SPECIAL-STATUS PLANT SPECIES

Less than Significant Impact. The Nuttall's acmispon, is the only special-status plant documented in the Proposed Project footprint on the portion of the project within the NBC Coastal Campus and within the City right-of-way in disturbed habitat or developed areas. The four Nuttall's acmispon plants identified within the City right-of-way are on the opposite side of the bicycle path from the footprint and thus are unlikely to be affected. Although the project has been designed to avoid special-status plant populations, approximately 29,158 square feet containing Nuttall's acmispon plant species is located within the Proposed Project footprint on the NBC Coastal Campus and could be directly impacted during construction (Tierra Data 2019).

Individuals of this species located within the Proposed Project footprint are found in previously disturbed or developed areas, or naturally in unstable soils such as dunes. Impacts to the Nuttall's acmispon resulting from the construction of the Proposed Project are not likely to affect the health and survival of the overall population in the area. The area of impact is adjacent to larger populations that are close enough to the Proposed Project footprint for significant genetic exchange. The species is ephemeral, with a very quick life cycle completed during cool times of year; it is likely to have completed its seed production or have died before project impacts would occur. Furthermore, the species will be able to re-colonize the project area following construction due a relatively intact seed bank. The impacts to Nuttall's acmispon have been previously identified in the 2015 EIS and associated regulatory permits. As part of the 2015 EIS, the Navy agreed to provide at least 3:1 mitigation for the direct impacts to Nuttall's acmispon through restoration of 7 acres of appropriate habitat. Since the 2015 EIS's Record of Decision and start of construction, the Navy has conducted 14.9 acres of ice plant treatment in 2015, 5.6 acres of ice plant retreatment, and 11.2 acres of ice plant removal in 2016. In addition, Naval Base Coronado has been conducting dune habitat restoration along the ocean side of the Silver Strand in the amount of 6.5 acres since 2016. Both of these activities support the goals of providing suitable habitat for Nuttall's acmispon among other dune plant species. Because the impact Nuttall's acmispon has been previously evaluated and mitigated as part of the 2015 EIS for the

NBC Coastal Campus and implementation of the Proposed Project is not likely to affect the health and survival of the overall population in the area, the impact would be **less than significant**.

POTENTIAL IMPACTS ON SPECIAL-STATUS WILDLIFE

Potential Impacts on Western Snowy Plover

No Impact. Western snowy plover habitat includes intertidal beaches (between mean low water and mean high tide), associated dune systems, and river estuaries. No suitable nesting habitat for the plover is located within the Proposed Project footprint. Western snowy plover federally designated critical habitat with known nest sites exists north of the Proposed Project on Silver Strand State Beach and approximately 450 feet south of the NBC Coastal Campus approved development boundary and the Proposed Project footprint. Extensive surveys have been previously performed in the vicinity of the nesting sites and it has been determined that plovers are not present between March 1st and September 15th (U.S. Navy, 2015). As discussed in the project description, no vegetation removal activities would occur between February 15th and August 31st during the migratory bird nesting period and no construction activities would occur on the NBC Coastal Campus or the SR-75 jack and bore crossing between March 1st and September 15th during the Western snowy plover nesting period. As such, the Western snowy plover would not be present during construction activities. There would also be no direct impacts to critical habitat or nesting sites during project construction. Because the Western snowy plover would not be present during construction activities, there would be no direct or indirect impacts to habitat during construction, and no impacts associated with operation and maintenance of the Proposed Project, there would be **no impacts** to the Western snowy plover.

Potential Impacts on San Diego Fairy Shrimp

Less than significant. San Diego fairy shrimp are found in natural vernal pools, basins, road ruts, soil depressions, drainage channels, and other features that pond water. Federally designated critical habitat (vernal pools) with known populations of San Diego fairy shrimp is located approximately 100 feet south of Proposed Project on the NBC Coastal Campus in the vicinity of the construction of trenchless pipeline installation and the odor control system (Figure 2-10). There are no vernal pools within the project footprint and there would be no direct impacts to fairy shrimp populations or suitable habitat.

Ground disturbance and dewatering activities in the vicinity of vernal pools could generate dust, stormwater runoff, or dewatering discharges that could indirectly effect habitat with known populations of fairy shrimp. Pipeline installation using trenchless technology would require

dewatering; however, vernal pools not considered to be hydrologically connected to underlying groundwater and would not be indirectly affected by the temporary lowering of the groundwater levels for dewatering. During dewatering activities, provisions would be implemented to restrict land discharges of extracted groundwater to designated areas that avoid potential impacts to sensitive habitat, including wetlands and vernal pools. As discussed in Section 2.1, "Project Description", a SWPPP would be prepared and erosion control measures and other construction BMPs would be implemented to manage construction areas to prevent discharge of polluted runoff and dust from the project site to off-site areas, including potentially suitable habitat for the fairy shrimp. Implementation of these provisions would minimize any indirect impacts associated with construction activities. A large-scale accidental release of calcium nitrate Bioxide solution from the proposed 4,400-gallon aboveground storage tank, while highly unlikely, could potentially adversely impact adjacent fairy shrimp habitat. Accordingly, the project has been designed to avoid accidental releases of the Bioxide solution to the environment. The storage tank has been designed with double wall containment and additional secondary containment with a 6-inch high concrete curb and drain line connected to the PS-1 wet well. Impacts associated with the implementation of the Proposed Project would be **less than significant**. In addition, the City may be required to incorporate additional measures to comply with NEPA, permitting, and/or Navy licensing requirements, which would further reduce any environmental impacts to biological resources during the implementation of the Proposed Project.

Potential Impacts on Migratory Birds

Less than Significant Impact. There would be no impacts to MBTA species in Areas I and II for the same reasons described above for the Western snowy plover. Based on the site reconnaissance, Area III of the construction footprint contains larger shrubs near salt marsh habitat and palm trees that are considered to be suitable nesting habitat for species protected under the MBTA. No active nests were identified during surveys. The project has been designed to avoid larger shrubs and palm trees within the project footprint to the greatest extent possible; however, up to three palm trees, located on the north side of the entrance to Coronado Cays residential development, may need to be temporarily removed and then replanted during pipeline installation. Prior to removal, the City arborist and the Street Tree Committee would be consulted. Committee recommendations and provisions for tree replacement in the event that the trees do not survive after replanting would be implemented in accordance with City requirements for tree removal within the right-of-way. Palm trees would not be removed during nesting season. Indirect nest disturbance from noise is also not expected due to the high ambient noise levels immediately adjacent to the SR-75 highway from pedestrian, bicycle, and highway traffic. Therefore, the impact

would be **less than significant**. The City may be required to incorporate additional measures to comply with NEPA, permitting, and/or Navy licensing requirements, which would further reduce any environmental impacts to biological resources during the implementation of the Proposed Project.

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

No Impact. As discussed previously, sensitive natural communities are those communities that are of special concern to resource agencies for a variety of reasons, including their local or regional decline, or because they provide habitat important to common and special-status species. Elimination or substantial degradation of these communities would constitute a significant impact under CEQA. The Proposed Project has been designed to avoid impacts on sensitive vegetation communities, including salt marsh vegetation, ESA and critical habitat. Refer to a.) for a discussion of potential impacts related to habitat that supports special-status species, including critical habitat. Refer to c.) for a discussion of potential impacts related to wetlands, including salt marsh. As shown in Table 3.4-1, there would be no impacts to riparian habitat or other sensitive natural communities within the Proposed Project footprint other than what is discussed under a.) and c.). Because impacts to riparian habitat and other sensitive communities would be avoided during the implementation of the Proposed Project, there would be **no impact**.

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?

Less than Significant. The Proposed Project has been designed to avoid any removal or direct impacts to wetlands, including vernal pools and salt marsh vegetation. The Proposed Project would be located within the previously approved development boundary for the NBC Coastal Campus that was established and avoids direct impacts to ESA including wetlands and vernal pools. As shown on Figure 2.9, salt marsh vegetation is present in a stormwater drainage feature located within the City right-of-way on the east of SR-75 in the vicinity of pipeline installation; however, the project has been designed to avoid any direct impacts to salt marsh vegetation. There would be no loss in wetland vegetation as a result of Proposed Project implementation.

During construction potential indirect effects to ESA, vernal pools or salt marsh vegetation could occur if stormwater runoff or water generated during dewatering activities migrate off-site to these areas. In addition, indirect effects could occur during dewatering, if wetland features are hydrologically connected to groundwater.

As discussed in Section 2.1, "Project Description", a SWPPP would be prepared and erosion control measures and other construction BMPs would be implemented to manage construction areas to prevent dust and discharge of polluted runoff from the project site to off-site areas, including adjacent ESA, wetlands and vernal pools. Temporary exclusionary fencing consisting of sedimentation barriers such as geotextile fabric would also be installed around the perimeter of saltmarsh vegetation and would be buried to a depth of at least 2 inches.

During dewatering activities, provisions would be implemented to restrict land discharges of extracted groundwater to designated areas that avoid potential impacts to sensitive habitat, including wetlands and vernal pools. Implementation of these provisions would minimize any impacts associated with stormwater runoff or dewatering discharges.

Vernal pools and salt marsh consisting of pickleweed (*Salicornia bigelovii*), alkali heath (*Frankenia salina*), and saltwort (*Batis maritima*) vegetation are not considered to be hydrologically connected to underlying groundwater and would not be adversely affected by the temporary lowering of the groundwater levels during construction activities. Because direct impacts to wetlands have been avoided and indirect impacts have been minimized with the implementation of construction BMPs and adherence with applicable regulations, impacts to wetlands would be **less than significant**. The City may be required to incorporate additional measures to comply with NEPA, permitting, and/or Navy licensing requirements, which would further reduce any environmental impacts to biological resources during the implementation of the Proposed Project.

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?

No Impact. No migratory fish corridors or native wildlife nursery sites are located in the immediate vicinity of the project. The Proposed Project would be located with the SR 75 right-of-way and within a portion of the larger fence-enclosed NBC Coastal Campus. The Proposed Project is not considered to be a significant wildlife corridor and would not introduce project features that would impede wildlife movement. The Proposed Project is located within the Pacific Flyway and in the vicinity of established migratory bird nesting sites, specifically, the Western snowy plover; however, the project will be implemented in a manner that would avoid impacts to migratory birds, including the Western snowy plover. As discussed in Chapter 2, vegetation clearing would occur outside of the nesting season for migratory birds. No construction activities would occur in the vicinity of known nesting sites for migratory birds, including the NBC Coastal Campus and staging area east of SR-75 during the nesting season for the Western snowy plover. Because of this, there would be **no impact**.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No impact. City of Coronado has a tree ordinance that establishes heritage tree criteria for all trees, including palm trees. Because the project has been designed to avoid palm trees within the Proposed Project footprint through the establishment of a 10-foot buffer around all palm trees, no tree removal would occur. Therefore, the project would not conflict with an applicable tree preservation policy or ordinance. The Proposed Project is located within the coastal zone and subject to applicable plans and policies related to the protection of ESAs, wetlands, and other coastal resources in the California Coastal Management Program (CCMP) for the portion of the project located on Navy property and the City of Coronado LCP for the remaining portion of the project. The Navy has previously conducted a CCMP consistency evaluation for activities associated with the NBC Coastal Campus Development in compliance with the Coastal Zone Management Act (CZMA). The evaluation indicated that the NBC Coastal Campus was fully consistent with the CCMP, and thus, that it satisfies the standard of being consistent to the maximum extent practicable. The California Coastal Commission (CCC) concurred with the Navy's consistency determination (CD-0003-14) on November 12, 2014 (CCC, 2014).

During consultation with the CCC, the Navy agreed to provide at least 3:1 mitigation for the direct impacts to Nuttall's acmispon through restoration of 7 acres of appropriate habitat. The habitat restoration consists of the eradication of ice plant in various areas of Naval Base Coronado, which facilitates the recovery and spread of native southern fore dune vegetation, including Nuttall's acmispon. Where appropriate, native dune plants have been planted as well. The Navy is funding this habitat restoration through the base's Integrated Natural Resources Management Plan. Since the Coastal Campus project's Record of Decision and start of construction, the Navy has conducted 14.9 acres of ice plant treatment in 2015, 5.6 acres of ice plant retreatment, and 11.2 acres of ice plant removal in 2016. In addition, Naval Base Coronado has been conducting dune habitat restoration along the ocean side of the Silver Strand in the amount of 6.5 acres since 2016. Both of these activities support the goals of providing suitable habitat for Nuttall's acmispon among other dune plant species.

The portion of the project within the jurisdiction of the City's LCP has been designed to avoid impacts to ESA including wetlands. The project will also be designed and certified to ensure that it would not contribute to coastal erosion or be threatened by natural erosion processes during the lifetime of the structure; thereby, further protecting ESA and other coastal resources. A coastal development authorization will also be obtained by the City's Planning Commission prior to construction. Consequently, the Proposed Project would not conflict with existing LCP policies. There would be **no impact**.

- 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?**

No impact. There are no adopted conservation plans that specifically address the project area. Therefore, there would be **no impact**.

3.5 CULTURAL RESOURCES

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

3.5.1 ENVIRONMENTAL SETTING

The portion of the Proposed Project located on NBC Coastal Campus has been previously disturbed and/or excavated during installation of the Cal-Am water main and other ongoing construction activity on the NBC Coastal Campus. The NBC Coastal Campus was previously extensively evaluated as part of the 2015 Final NBC Coastal Campus EIS (U.S. Navy, 2015). The EIS indicated that there is one, CA-SDI-5454/12270, archeological site identified as eligible for the National Register of Historic Places (NAHC) within the NBC Coastal Campus, but outside the Proposed Project area. The CA-SDI-5454 is a large multi-locus site with a substantial shell midden. It contains the densest concentration of prehistoric cultural material on the NBC Coastal Campus. The site is a large area (10 acres) of midden that was disturbed by construction of the base, although determined to be eligible for the National Register. Fragments of human remains were discovered during a project in 2001 (U.S. Navy, 2012). During Native American Graves Protection and Repatriation Act (NAGPRA) consultation, the site was treated as a traditional cultural property (TCP) with the participation and concurrence of Kumeyaay tribal representatives from the Kumeyaay Cultural Repatriation Committee.

A TCP is a property that is “eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community.” “Traditional” refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the

property plays in a community's historically rooted beliefs, customs, and practices. A culturally sensitive area boundary has been delineated on the NBC Coastal Campus to provide an adequate protective buffer around the identified TCP. Although CA-SDI-5454 is noted within the EIS as potentially being located within the area of off-site utilities, this site is not located within the Proposed Project footprint. The Proposed Project is located approximately 0.40 miles from the culturally sensitive area boundary. There are no additional TCPs at NBC Coastal Campus that are listed in the National Register and no known sites that are considered potentially eligible for listing. For the portion of the Proposed Project located off of the Navy property, a request for a sacred lands files record search as well as a Native American contact list for the project area was requested from the NAHC. A response from the NAHC was received on December 19, 2019, and the Sacred Lands File search was positive. A review of the sacred lands files by the NAHC identified positive search results for sacred site files available from the Kumeyaay Cultural Repatriation Committee (KCRC). A total of ten tribes were identified for the project site: The Campo Band of Diegueno Mission Indians, the Ewiiapaayp Band of Kumeyaay Indians, the Lipay Nation of Santa Ysabel, the Jamul Indian Village, the Kumeyaay Cultural Repatriation Committee, the Kwaaymii Laguna Band of Mission Indians, the La Posta Band of Diegueno Mission Indians, the Manzanita Band of Kumeyaay Nation, the Sycuan Band of Kumeyaay Nation, and the Viejas Band of Kumeyaay Indians.

The Sacred Lands File, operated by the NAHC, is a confidential set of records containing places of religious or social significance to Native Americans. To address the possibility of sacred sites within the Proposed Project footprint, the KCRC was contacted on February 28, 2019. The tribe responded that there are no special areas of concern within the portion of the project located within the City right-of-way (pers. com. Linton, 2019).

An archaeological study was also conducted in March 2019 for the portion of the Proposed Project located within the City right-of-way.

As part of the study, a cultural resources records search was requested at the California Historical Resources Information System's South Coastal Information Center (SCIC). The SCIC records search results indicate that nine sites within the project vicinity have been previously recorded, two of which intersected the boundaries of the project APE. P-37-000058 / CA-SDI-58 is a prehistoric campsite that was first recorded and described in 1967 as containing a hearth feature, several pieces of fire-affected rock, many pottery fragments, and some shell (Appendix B, PanGIS, 2019). P-37-13073 is the historical Coronado Railroad grade, which was first recorded in 1993. The railroad was constructed in the late 1880s. These previously documented sites were not encountered during the pedestrian survey (PanGIS, 2019).

On March 1, 2019, an intensive pedestrian survey of the Area of Potential Effects (APE) was conducted by a PanGIS archeologist. A follow-up survey was performed on May 14, 2019 due to APE revisions. Two historic isolates were located within the project APE. COR-ISO-1 is a colorless glass bottle fragment. The fragment is a thick neck/finish piece. It has a continuous thread closure, which came to prominence in the early 20th century. COR-ISO-2 is an aqua glass bottle fragment. The fragment is an Owens-Illinois bottle base with markers suggesting that the bottle was for Pepsi and likely from the mid to late 1950's. A third historic isolate was recorded just outside the APE. COR-ISO-3 is a colorless glass bottle fragment. The fragment is a Foster-Forbes bottle base with markers and style suggesting that it was from 1942-1983. As isolates, the resources recorded during the current survey are not eligible for listing on the National Register of Historic Places (NRHP), the California Register for Historic Resources (CRHR), or the City of Coronado Historic Preservation Ordinance (PanGIS, 2019).

The study concluded that no evidence of prehistoric resources, historic structures, or archaeological deposits have been identified in the project APE (PanGIS, 2019).

3.5.2 DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. No historical resources were identified in the footprint of the Proposed Project. The project would involve ground disturbance activities only to the new pipeline corridor and the footprints of the proposed pump station upgrades. There would be new structures built as a result of this project; however, these new structures would be located within the Cal-Am easement or right-of-way or adjacent to the existing structures. The entire Proposed Project footprint has been previously disturbed and/or excavated to depths of proposed open trench pipeline installation.

Thus, this project would not result in the demolition or substantial adverse change to a significant historical resource and therefore, there would be **no impact**.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than Significant with Mitigation. The Proposed Project would not cause a substantial adverse change in the significance of an archaeological resource; no archaeological resources were identified in the footprint of the Proposed Project on the NBC Coastal Campus or City right-of way. Because the portion of the Proposed Project on NBC Coastal Campus has been previously disturbed and/or excavated to depths of proposed open trench pipeline installation, no intact archaeological deposits of significance would be encountered.

Although field surveys revealed no archaeological resources within the portion of the Proposed Project within the City right-of-way, it is possible that previously undiscovered or unknown archaeological exist at the site and could be encountered or uncovered during project construction within the City right-of-way where ground disturbing activities occur in native soils, or where there is no evidence of extensive past ground disturbances. Therefore, this impact would be potentially significant.

Mitigation Measure CUL-1: Halt Ground-Disturbing Construction Activities if Cultural Materials Are Discovered.

The following measures shall be implemented to avoid or minimize potential impacts on cultural materials:

Where ground disturbing activities occur within the City right-of-way in native soils, where there is no evidence of extensive past ground disturbances, or where there is evidence that suggests materials of importance to tribal entities, a Native American tribal monitor and a qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists will monitor ground- disturbing activities and/or the handling and placement of the material. Interested Native American Tribes will be provided at least seven days' notice prior to the initiation of ground disturbing activities. The determination for initiating or ending monitoring disturbance will be made based on coordination between the qualified archaeologist and Native American tribal monitor, with a final determination made by the City.

If evidence of any prehistoric subsurface archaeological features or deposits are discovered during construction (e.g., midden soils or unusual amounts of shell, animal bone, flaked stone, bottle glass, ceramics) are discovered during project construction, ground disturbances in the immediate vicinity of the find shall be halted immediately. A qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists shall determine whether the resource is potentially significant as per the CRHR and a Native American representative shall determine the significance as a tribal cultural resource and identify appropriate management steps needed to protect and secure identified resources consistent with Native American tribal values.

Timing: During construction

Responsibility: City of Coronado or its consultant

Implementation of Mitigation Measure CUL-1 would reduce this impact to a **less than significant** level.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant with Mitigation. No evidence of human remains at the project sites was found in during the pedestrian survey or documentary research. Because the portion of the Proposed Project on NBC Coastal Campus has been previously disturbed and/or excavated to depths of proposed open trench pipeline installation, human remains are not expected to be encountered. However, presently unknown prehistoric burials possibly could be uncovered during project construction in previously undisturbed areas within the City right-of-way. California law recognizes the need to protect interred human remains, particularly Native American burials and associated items of patrimony, from vandalism and inadvertent destruction. In light of the potential to uncover unknown or undocumented Native American burials, the impact would be potentially significant. However, with implementation of Mitigation Measure CUL-2, the impact would be reduced to a **less than significant** level.

Mitigation Measure CUL-2: Halt Construction Activities if Any Human Remains Are Discovered

If human remains are uncovered during ground-disturbing activities, such activities that may affect the remains will be halted within 100 feet, and the City of Coronado or its designated representative will be notified. The City or designated representative immediately will notify the County coroner and a qualified professional archaeologist. If the coroner determines that the remains are those of a Native American, the coroner will contact the NAHC by telephone within 24 hours of making that determination in accordance with California Health and Safety Code, Section 7050.5[c]. The City or its appointed representative, and the qualified professional archaeologist will consult with a Most Likely Descendant (MLD), determined by the NAHC, regarding the removal or preservation and avoidance of the remains, and will determine whether additional burials could be present in the vicinity in accordance with California Public Resources Code Section 5097.9. No ground-disturbing work will occur in the location of the remains until consultation between the NAHC and MLD has been completed, and notification by the City that construction activities may resume.

Timing: During construction.

Responsibility: City of Coronado or its consultant

Implementation of Mitigation Measure CUL-2 would reduce this impact to a less than significant level.

3.6 ENERGY

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

3.6.1 ENVIRONMENTAL SETTING

Energy resources include electricity, natural gas, and other fuels. The production of electricity requires the consumption of conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources into energy. Both the production and the use of energy result in the depletion of nonrenewable resources and emission of pollutants.

Based on SDG&E monthly summaries between February 2017 and January 2019, monthly energy demands associated with the operation of the Coronado Cays Pump Station range from 1,295 kWh to 13,965 kWh, with an average monthly usage of 5,762 kWh. Energy consumption tends to occur at slightly higher rates in the summer months at the Coronado Cays pump station (SDGE, 2019)

3.6.2 DISCUSSION

- a) **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. Development of the proposed project would involve the use of energy during construction and operation. Site preparation, grading, and construction would consume energy in the form of gasoline and diesel fuel through the operation of heavy off-road equipment, trucks, and worker traffic; however, the consumption of such resources is not considered to be inefficient or substantial. Overall increases in wastewater demands for the City's sewer system are anticipated to be minimal because wastewater demands would be reduced at the NAB following the transfer of personnel to the NBC Coastal Campus. Similarly, there would

negligible changes in energy demands associated with the operation of the Proposed Project. Due to the limited scale of the proposed project and minimal changes in existing energy demands associated with project operations, any impacts would be **less than significant**.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant. The City of Coronado is currently in the initial stages of preparing a Climate Action Plan, which is anticipated to be completed in early 2021. Therefore, no applicable local plan exists for renewable energy or energy efficiency. The Air Resource Board's (ARB) Scoping Plan Update includes measures and strategies established to meet California's goal of reducing emissions to 1990 levels by 2020 (California Air Resources Board, 2017). Executive Order B-30-15 and SB 32 extend the goals and set a 2030 goal of reducing emissions 40 percent from 2020 levels. Projects that are consistent with the goals and strategies of the AB 32 Scoping Plan Update would not be considered conflicting with the Scoping Plan's emissions reduction targets. The proposed Project would be required to comply with applicable regulations, including those developed as measures in the ARB Scoping Plan Update that address energy efficiency.

Vehicle trips originating as a result of the construction and operation and maintenance of the Proposed Project would be minimal and there would be negligible changes in energy demands associated with the operation of the Proposed Project.

Because the proposed project would be required to comply with City, Navy and other applicable State regulations that address renewable energy or energy efficiency, the Proposed Project would not conflict with or obstruct implementation of state or local plans. This impact would be **less than significant**.

3.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant 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:				
i) 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 California Geological Survey Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.7.1 ENVIRONMENTAL SETTING

The Proposed Project is located within the coastal plain section of the Peninsular Range Geomorphic Province of California. The province is characterized by mountainous terrain on the east mostly of Mesozoic igneous and metamorphic rocks, and relatively low-lying coastal terraces to the west underlain by late Cretaceous-age, Tertiary-age, and Quaternary-age sedimentary units (RORE Inc., 2016a and RORE Inc., 2016b). Most of the coastal region of San Diego County, including the project area, occur within the coastal plain section and are underlain by sedimentary units.

The Peninsular Ranges are traversed by several major active faults including the Newport-Inglewood, Whittier-Elsinore, San Jacinto, San Andreas, Rose Canyon, Coronado Bank, and San Diego Trough fault systems (California Geological Survey, 2003). Major tectonic activity associated with these and other faults within the regional tectonic framework is characterized by right-lateral and strike-slip movement. Several new faults have developed since the late Pliocene in Southern California, which has created a new tectonic regime superposed on the flat-lying section of the Tertiary and late Cretaceous rocks in the San Diego region.

The Rose Canyon Fault Zone in particular consists of predominantly right-lateral strike-slip faults that extend southwest to southeast through the San Diego metropolitan area. The fault zone extends offshore at La Jolla and continues north-northwest subparallel to the coastline (RORE Inc., 2016a and RORE Inc. 2016b). In the San Diego area, the Rose Canyon fault zone splays out to the south as a number of strands, which include the San Diego fault, the Downtown Graben faults, the Silver Strand fault, the Coronado fault, and the Spanish Bight fault (California Geological Survey, 2002).

The Silver Strand Fault and the Coronado Fault crosses the Silver Strand peninsula just north of the project limits and the Spanish Bight fault crosses the northern side of the City of Coronado (California Geological Survey, 2010). No known active faults are located within the project footprint. Table 3.7-1, below, summarizes the faults nearest to the Proposed Project.

**Table 3.7-1
Faults Near the Proposed Project**

Fault Name	Distance from Site	Activity Status
San Diego Fault	5.8 miles north of the Proposed Project site	Active with interpreted Holocene activity
Downtown Graben Faults	5.3 miles north of the Proposed Project site	Active with well-defined Holocene activity
Silver Strand Fault	1.3 miles west of the Proposed Project site	Active with well-defined Holocene activity

Fault Name	Distance from Site	Activity Status
Coronado Fault	2.9 miles west of the Proposed Project site	Active with interpreted Holocene activity
Spanish Bight Fault	4.2 miles northwest of the Proposed Project site	Active with interpreted Holocene activity
Source: California Geological Survey, 2002.		

Surface soils are predominantly composed of poorly-graded sand and silty sand on the NBC Coastal Campus artificial fill in the City of Coronado along the Proposed Project footprint (Kleinfelder, 2019). The surface soils are generally underlain by beach deposits consisting of sandy lean clay or poorly graded sand with clay. Clay lenses of low plasticity have been reported along the NBC Coastal Campus (U.S. Navy, 2015).

Old Paralac Deposits (previously known as the Bay Point Formation) are present within the Proposed Project footprint. These deposits are present at the ground surface to depths greater than 50 feet bgs on the portion of the Proposed Project on Navy property (RORE Inc., 2016a, RORE Inc. 2016b, and Kleinfelder, 2019). However, the majority of the Proposed Project on the NBC Coastal Campus has been previously disturbed and/or excavated to depths of proposed open trench pipeline installation. East of SR-75, Old Paralac Deposits are present at depths ranging from 7 feet bgs to greater than 11.5 feet bgs within the City right-of-way. Old Paralac Deposits are not present in the portion of the Proposed Project that is within the City right-of-way north of Coronado Cays Park (Kleinfelder, 2019).

3.7.2 DISCUSSION

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**
 - i) ***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 California Geological Survey Special Publication 42.)***

Less than Significant Impact. The project site is not within or adjacent to an Alquist-Priolo Earthquake Fault Zone; however, it lies near major active fault systems including the Rose Canyon fault zone (California Geological Survey, 2002). The location of surface rupture generally can be assumed to be along an active or potentially active major fault trace. The damage from surface fault rupture is generally limited to a linear zone that is a few yards wide. No active or

potentially active faults have been mapped on the project site (RORE Inc. 2016a, RORE Inc. 2016b, and Kleinfelder, 2019). Therefore, surface fault rupture would be unlikely to occur, and the impact would be **less than significant**.

ii) Strong seismic ground shaking?

Less Than Significant Impact. The project site is located in a seismically active region. Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The extent of ground-shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. According to geotechnical investigations, the Proposed Project would be susceptible to strong ground shaking during a maximum moment magnitude earthquake (RORE Inc. 2016a, RORE Inc. 2016b, and Kleinfelder, 2019).

Although the Proposed Project could be exposed to strong seismic ground shaking, the project would be designed and constructed consistent with City, Navy and Caltrans design standards which are required to adhere to State seismic design parameters identified in the California Building Code (CBC). Therefore, this impact would be **less than significant**.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction is a condition whereby a loose, unconsolidated, saturated soil loses its shear strength during periods of ground shaking and the ground surface loses its load-supporting capacity. Loose granular soils and silts that are saturated by relatively shallow groundwater are susceptible to liquefaction. Other factors known to influence liquefaction include relative density, grain size, confining pressure, depth to groundwater and the intensity and duration of seismic ground shaking.

According to geotechnical investigations, soils beneath the project site consist of poorly-graded sand and silty sand and the risk of liquefaction is considered to be low (RORE Inc. 2016a, RORE Inc., 2016b, and Kleinfelder, 2019).

The project area is not generally susceptible to liquefaction given the sandy composition of the soils; however, soils could soften as a result of seismic shaking. As described in (ii) above, the Proposed Project would be designed and constructed in accordance to applicable standards addressing the potential risk of liquefactions as a result of seismic activity. Therefore, this impact would be **less than significant**.

iv) Landslides?

No Impact. The Proposed Project is not located within a landslide zone (California Geological Survey, 2005). Based on the relatively flat topography and lack of any significant slopes in the vicinity of the project, there is no potential for landslides. Consequently, there would be **no impact**.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Construction activities associated with the Proposed Project would include minor earth-disturbing activities (i.e., cut and fill, vegetation removal, grading, trenching, excavation, and movement of soil) that could expose disturbed areas and stockpiled soils to winter rainfall and storm water runoff. Areas of exposed or stockpiled soils could also be subject to wind or water erosion.

As discussed in Section 2.1, "Project Description", erosion control measures and other construction BMPs would be implemented to manage sediment and prevent discharge of sediment from the project site to storm drains and surface waterways, and to prevent wind and water erosion from preconstruction through postconstruction activities. A SWPPP would also be prepared to minimize stormwater pollution resulting from erosion and sediment migration from the construction and staging areas. During construction, contractors would be required to comply with federal, State, and local requirements and guidelines to minimize the potential for soil erosion, including the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, 2009-0009-DWQ, as amended by 2010-0014-DWQ (General Construction Permit) and the City's stormwater permit. Because of this, the impact would be **less than significant**.

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?

Less Than Significant Impact. As discussed above, based on the topography and lack of any significant slopes in the vicinity of the Proposed Project, there is no potential for landslides at the site. Soil liquefaction can result in sand boiling, ground subsidence and failure, differential settlement, and lateral spreading of the ground and structures located within or above the liquefiable soil layers. The project area is not generally susceptible to liquefaction given the sandy composition of the soils; however, soils could soften as a result of seismic shaking.

As discussed in (iii) above, the project is not generally susceptible to liquefaction given the poorly-graded sandy composition of the soils. Although liquefaction is unlikely, soils could soften as a result of seismic shaking, which could result in lateral spreading and settlement. As described in

(ii) above, the Proposed Project would be designed and constructed in accordance to applicable standards addressing the potential risk of liquefactions as a result of seismic activity. Therefore, this impact would be less than significant.

Although the project site is located within a geologic unit that could be unstable as a result of the Proposed Project, the Proposed Project would be designed and constructed consistent with City, Navy and Caltrans design standards which adhere to State seismic design parameters to address soil instability resulting from liquefaction, seismic-induced settlement, and lateral spreading. This impact would be **less than significant**.

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

Less than Significant. Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking) and are generally associated with clayey soils. The near-surface soils found at the site generally consist of fine- to medium-grained sands with traces of non-expansive silt. This sandy surface soil is underlain by dense to very dense silty to clayey sand with interbeds of very dense sand and gravel. Soil testing conducted as part of geotechnical investigations indicate that soils at the project site have a low expansion potential (RORE Inc., 2016a and RORE Inc., 2016b). Because the Proposed Project would be designed and constructed in accordance with geotechnical investigation recommendations for soils found at the project site and other applicable standards addressing expansive soils, the impact would be **less than significant**.

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?

No Impact. Septic tanks or other alternative waste water disposal systems where sewers are not available would not be a part of the Proposed Project. Thus, **no impact** would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. Old Paralic Deposits (previously known as the Bay Point Formation) are present within the Proposed Project footprint. Old Paralic Deposits are considered to have a high paleontological sensitivity as marine terrace deposits of the Bay Point Formation and the Lindavista Formation that have produced large and diverse assemblages of marine

invertebrate fossils locally along the coast and inland to elevations of about 300 feet (City of San Diego, 2011).

Based on geotechnical investigations, Old Paralac Deposits are present within the City right-of-way at depths ranging from 7 feet to greater than 11.5 feet bgs; however, are not anticipated to be impacted during construction because trenching in this area would be to a maximum depth of 5.5 feet.

Because the Proposed Project would be constructed in the same footprint and depth that has been previously disturbed during excavation for the installation of the Cal-Am water line, it is highly unlikely that any significant intact paleontological resources remain or would be encountered during grading, open trenching or excavation activities on the NBC Coastal Campus.

However, the SR-75 jack and bore activities would require the excavation of a 10-foot by 40-foot entry pit approximately 10 feet deep and the installation of approximately 173 LF of pipeline at depths ranging from 4.5 feet to 7 feet in previously undisturbed Old Paralac Deposits on the NBC Coastal Campus and beneath SR-75. While the potential for encountering buried unique paleontological resources during the SR-75 jack and bore activities is unknown, the possibility cannot be completely discounted.

The City of San Diego has established guidelines for determining the significance of paleontological resources based on the sensitivity of the geologic formation and the volume of material associated with excavation (City of San Diego, 2011). According to the City of San Diego's guidelines, a significant impact would occur if more than 1,000 CY of excavation occurs within a highly sensitivity geologic unit. Based on the entry pit and pipeline dimensions, approximately 155 CY of material would be excavated within previously undisturbed Old Paralac Deposits. Therefore, the impact would be **less than significant**.

3.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.8.1 ENVIRONMENTAL SETTING

Certain gases in the Earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. A portion of the solar radiation that enters Earth's atmosphere is absorbed by the Earth's surface, and a smaller portion of this radiation is reflected back toward space. Infrared radiation is absorbed by GHGs; as a result, infrared radiation released from the Earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth.

GHGs are present in the atmosphere naturally, are released by natural sources and anthropogenic sources, and are formed from secondary reactions taking place in the atmosphere. GHGs that are widely accepted as the principal contributors to human-induced global climate change that are relevant to the project include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O).

3.8.2 METHODOLOGY

A qualitative analysis was performed by evaluating Proposed Project construction emissions in proportion to construction emissions estimates for the construction of the NBC Coastal Campus presented in the 2015 EIS (U.S. Navy, 2015) and comparing the results to screening level thresholds recommended by San Diego County (San Diego County, 2013). The analysis assumes that operation of PS-1 on the NBC Coastal Campus is not part of the Proposed Project because construction and operation of the pump station has already been evaluated, approved and construction will proceed independent of the Proposed Project. Because wastewater demands

are anticipated to be reduced at NAB following the transfer of Naval personnel to the NBC Coastal Campus, overall increases in wastewater demands are anticipated to be minimal. Similarly, there would negligible changes in energy demands associated with the operation of the Proposed Project.

Table 3.8-1 shows the estimated GHG emission estimates in terms of metric tons per year (MT/yr) CO₂-equivalents (CO₂e) for construction of the Approved NBC Coastal Campus (U.S. Navy, 2015). In comparison, the construction of the Proposed Project represents a very small fraction of the emissions generated by the NBC Coastal Campus as shown in Table 3.8-1.

**Table 3.8-1
Maximum Construction GHG Emissions for the Approved NBC Coastal Campus**

Criteria Pollutant	Annual Emission Rate (MT/yr)
GHG construction emissions (CO ₂ e) ¹	1,047
GHG Screening Level (CO ₂ e) ²	2,500
Greater than Screening Level?	No
Notes: ¹ NBC Coastal Campus EIS, Table 4-2 (U.S. Navy, 2015c). ² San Diego County, 2007 Source: U.S. Navy, 2015c, San Diego County, 2007.	

3.8.3 DISCUSSION

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less than Significant. As shown in Table 3.8-1, the NBC Coastal Campus's GHG construction emissions would not exceed screening level thresholds that, if are not exceeded, impacts are considered to be less than significant. The NBC Coastal Campus project is a large project of higher construction intensity and a duration of greater than five years. Due to the comparatively small size, limited activities, and short-term duration of the Proposed Project, GHG emissions would only be a small fraction in comparison to the GHG emissions generated by the NBC Coastal Campus project. Therefore, it is likely that the Proposed Project GHG construction emissions would also be lower than screening criteria. In addition, air quality emissions associated with operations are not anticipated to substantially increases from existing conditions because the overall changes in wastewater demands are anticipated to be minimal and seven additional vehicle trips per year would be needed for maintenance. Thus, with implementation of standard

construction BMPs and adherence to Navy, City and other applicable requirements, project-generated GHG emissions would be **less than significant**.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. The City of Coronado is currently in the initial stages of preparing a Climate Action Plan, which is anticipated to be completed in early 2021. Therefore, for the purposes of this analysis, the applicable GHG reduction plan used to evaluate the Proposed Project is the statewide AB 32 Scoping Plan Update. The ARB Scoping Plan Update includes measures and strategies established to meet California's goal of reducing emissions to 1990 levels by 2020 and identifies specific actions to meet the State's 2030 GHG limit (California Air Resources Board, 2017). The Scoping Plan Update also reiterates the state's role in the long-term goal established in Executive Order S-3-05, which is to reduce GHG emissions to 80% below 1990 levels by 2050. Executive Order B-30-15 and SB 32 extend the goals of AB 32 and set a 2030 goal of reducing emissions 40 percent from 2020 levels. Projects that are consistent with the goals and strategies of the AB 32 Scoping Plan Update would not be considered conflicting with the Scoping Plan's GHG reduction target.

The Scoping Plan Update did not directly create any regulatory requirements for the Proposed Project. ARB's Scoping Plan Update includes a summary of actions completed to date that would address SB 32 goals for 2030. In addition, the Scoping Plan Update included recommended transportation measures that would indirectly address GHG emissions from construction activities, such as provisions for heavy-duty vehicle GHG reduction.

The Proposed Project would be required to comply with applicable regulations, including those regulations originally developed as measures in the ARB Scoping Plan, including prohibiting idling of commercial vehicles and construction equipment for more than 5 minutes. The Proposed Project would not generate short-term construction or operational related GHG emissions that are considered a significant impact on the environment or have a cumulatively incremental contribution to a significant impact on the environment. Therefore, the proposed Project would not be expected to conflict with existing California legislation and GHG reduction plans adopted to reduce statewide GHG emissions and the impact would be **less than significant**.

3.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hazards and Hazardous Materials. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.9.1 ENVIRONMENTAL SETTING

A regulatory records search was performed for the Proposed Project and immediate vicinity using the State Water Resources Control Board (SWRCB) GeoTracker database (SWRCB, 2019), the California Department of Toxic Substances Control (DTSC) EnviroStor database (DTSC, 2019), and the Formerly Used Defense Sites (FUDS) database (USACE, 2019). These lists are a compilation of information from various sources listing potential and confirmed hazardous waste

and hazardous substances sites in California in accordance with Section 65962.5 of the California Government Code. In addition, the NBC Coastal Campus EIS (U.S. Navy, 2015) and the Site Management Plan (SMP) for Naval Base Coronado and Outlying Activities (SDNFEC, 2002) were also reviewed for information related to hazardous material sites.

The GeoTracker database search identified 27 sites in the vicinity of the Proposed Project, 25 of which are located on the NBC Coastal Campus. A total of 21 sites on the NBC Coastal Campus are listed as closed Underground Storage Tank (UST) sites with No Further Action (NFA) status, two are listed as military cleanup sites with NFA status, and two are listed as inactive formerly used defense (FUD) sites needing evaluation. Further evaluation of the two listed FUD sites, Coronado Heights Military Reservation and Fort Emory, indicate that the listings are duplicate entries. Coronado Heights Military Reservation was more commonly known as US Army Fort Emory. In 1998, these sites were identified as duplicates and reported as ineligible for FUD site classification because the site properties were identified as part of an active Naval installation (i.e., NBC Coastal Campus) (DERP, 1998). None of the listed sites identified on the NBC Coastal Campus are located within the footprint of the Proposed Project.

Of the site listings on the NBC Coastal Campus, only two (UST 1828 and 1832) reported a release groundwater. At the time of site closure, the residual total petroleum hydrocarbon as diesel (TPH-d) concentrations in groundwater were 670 parts per million (ppm) for UST 1828 and 1700 ppm for UST 1832 (U.S. Navy, 1993). Current residual groundwater concentrations are unknown. The depth to water in the vicinity in of the two sites is approximately 25 feet above mean sea level (U.S. Navy, 2015). These sites are located approximately 250-300 feet east of the Proposed Project.

The other two GeoTracker sites are listed as Coronado Cays Subdivision and the Loews Coronado Bay Resort (SWRCB, 2019). The Coronado Cays Subdivision is located approximately 0.40 miles west of the Proposed Project. Information indicates that no clean up actions were reported, and the case was closed in 1989. The other listing, Loews Coronado Bay Resort, located approximately 0.35 miles east of the Proposed Project, was a voluntary cleanup associated with a release of chlorinated hydrocarbons associated with a dry-cleaning operation at the resort. In 1999, the site received NFA status (SWRCB, 2019).

Review of the DTSC EnviroStor database search listings, the NBC Coastal Campus EIS or SMP did not identify any additional sites beyond those described for the GeoTracker database list in the immediate vicinity of the Proposed Project footprint.

The nearest school, West View Elementary School, is located approximately 0.35 miles south of the Proposed Project and immediately adjacent to the southern boundary of the NBC Coastal

Campus. The Proposed Project is located approximately 1.5 miles north of the Naval Outlying Landing Field and approximately 6.6 miles south of the NAS North Island Terminal, both of which are private Naval airports. The closest public airport is the San Diego International Airport, which is located approximately 7 miles to the north. The project site is not located within the airport's area of influence, an air installation compatible use zone or land use compatibility plan (U.S. Navy, 2011 and SDCRAA, 2014).

The California Department of Forestry and Fire Protection (CAL FIRE) classify land in California based on fire hazard severity. An area that is not located within State of California CAL FIRE jurisdiction is designated as either a Local Responsibility Area (LRA) or Federal Responsibility Area (FRA) for fire protection. The portion of the project site on City-owned property is designated as an LRA and the portion of the project site on Navy property is designated as a FRA. The entire project area is classified as a non-very high fire hazard severity zone.

In San Diego County, overall county response to disasters is coordinated through the Unified San Diego County Emergency Services Organization, Office of Emergency Services. (City of Coronado, 2005). The San Diego County Emergency Operations Plan (EOP) was approved in September 2018. The plan is used by all key partner agencies within the county for mutual aid to respond to major emergencies and disasters, including the City of Coronado. SR-75 is designated as the primary transportation route for an evacuation effort in the City (USDCESO, 2018).

3.9.2 DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant. Project construction would involve the incidental transport and use of small quantities of common hazardous materials to operate construction equipment, such as oils, lubricants, and fuels, as well as specific materials for building construction, such as asphalt and concrete. 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. Project O&M would require infrequent use of very limited amounts of hazardous materials in accordance with the City's Sewer System Master Plan. DTSC has primary regulatory authority for enforcing hazardous materials regulations. State hazardous waste regulations are contained primarily in Title 22 of the California Code of Regulations. The California Occupational Health and Safety 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. The impact would be **less than significant**.

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

Less than Significant. Accidental spills or releases of hazardous materials during project construction and operation in areas with recreational use and environmentally sensitive areas could result in the exposure of workers, the recreating public, and the environment to hazardous materials. As noted under Question a) above, Proposed Project activities would only require the use of minor amounts of hazardous materials during construction. However, as discussed in Chapter 2, "Project Description," a SWPPP would be prepared before and implemented during all ground-disturbing activities. The BMPs identified in the SWPPP would minimize the potential for hazardous, toxic, or petroleum substances release at the project site during construction and establish emergency response procedures in the unlikely event a release would occur.

Following construction, ownership and O&M responsibilities of the new facilities on the Navy property would be transferred to the Navy; however, the City would provide maintenance services for the new Bioxide odor control system. Although Bioxide is not a hazardous material, a large-scale accidental release of the calcium nitrate Bioxide solution could potentially adversely impact adjacent environmentally sensitive areas. Accordingly, the project has been designed to avoid accidental releases of the Bioxide solution to the environment. The storage tank has been designed with double wall containment and additional secondary containment with a 6-inch high concrete curb and drain line connected to the PS 1 wet well. New facilities on the City property and the odor control system on the Navy property would be operated and maintained in accordance with the City's Sewer System Master Plan. Any impacts would be **less than significant**.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. As discussed in a) above, the potential to expose the public to hazardous materials during project construction is negligible. Operation of the Proposed Project would not generate hazardous emissions or waste. West View Elementary School is located adjacent to the southern boundary of the NBC Coastal Campus near the Hooper Boulevard entrance and approximately 0.35 miles from the Proposed Project. Access to the Proposed Project during construction and maintenance activities would be restricted to the main entrance located off of SR-75; therefore,

no potential exists for hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. **No impact** would occur.

- d) **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Less than Significant. A search of publicly available databases indicated a total of 27 listed sites in the vicinity of the project, including 25 that are located on the NBC Coastal Campus property; however, all of these sites have been previously evaluated and given regulatory case closure for previous unauthorized releases of hazardous materials. None of these listed sites are within the Proposed Project footprint. Some residual fuel oil groundwater contamination may remain at the UST 1828 and UST 1832 sites that previously received NFA site closure. These sites are located approximately 250-300 feet east of the Proposed Project. Depths to groundwater beneath the Proposed Project in this area was measured during geotechnical investigation to be approximately 19 feet below ground surface; therefore, groundwater is not anticipated to be encountered in the vicinity of these sites during construction (Kleinfelder, 2019). Because the listed sites have been previously evaluated with the oversight of a regulatory agency and have subsequently been issued NFA closure and groundwater is not anticipated to be encountered during construction in the vicinity of potential residual groundwater contamination, it is unlikely that the sites pose any remaining significant hazard to the public or the environment. The impact 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 Proposed Project is located approximately 1.5 miles north of the Naval Outlying Landing Field and approximately 6.6 miles south of the NAS North Island Terminal, both of which are private Naval airports. The San Diego International Airport, the closest public airport, is located approximately 7 miles to the north of the Proposed Project. The project site is not located within an air installation compatible use zone, area of influence or land use compatibility plan for any of these airports. Therefore, there is **no impact**.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant. SR-75 is designated as the primary transportation route for regional emergency response and evacuation within the City of Coronado. During the construction of the Proposed Project, temporary construction and staging areas would be located within the SR-75 right-of-way. Access along shoulders of SR-75 may be restricted for up to five weeks during jack and bore activities across SR-75; however, SR-75 would remain fully accessible and would not interfere with emergency response or evacuation plans. Open trench installation of the pipeline across Coronado Cays Boulevard would also result in partial lane closures for up to two weeks. A Traffic and Pedestrian Control and Management Plan would also be implemented during project construction that would require notification of shoulder access restrictions to Caltrans and emergency response agencies. Therefore, potential temporary impacts would be **less than significant**.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No Impact. The Proposed Project would not include the development of habitable structures and is not located within a high fire hazard severity zone. There is also no wildland vegetation in the vicinity of the Proposed Project; therefore, the Proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. There is **no impact**. Refer to Section 3.20 for an additional discussion related to wildfires.

3.10 HYDROLOGY AND WATER QUALITY

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

3.10.1 ENVIRONMENTAL SETTING

The Proposed Project is located on the Silver Strand which is a narrow strip of land with the San Diego Bay on the east and the Pacific Ocean on the west. Due to Coronado's location and its

relatively flat topography, stormwater at the project site would flow in the direction of existing topography to lower lying areas or be directed to a storm water swale located adjacent to the Bayshore Bikeway that drains to San Diego Bay. Storm water runoff on the NBC Coastal Campus is currently handled by older drainage swales and natural drainage basins; however, improvements to on-site drainage will be implemented as part of the NBC Coastal Campus construction.

San Diego Bay and the Pacific Ocean are the primary surface water receiving bodies of runoff from the project. The Water Quality Control Plan for the San Diego Basin (Basin Plan) classifies the San Diego Bay and the Pacific Ocean with the following beneficial uses: industrial service supply, navigation, contact and non-contact water recreation, commercial and sport fishing, preservation of biological habitats of special significance, wildlife and marine habitat, rare, threatened, or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development, shellfish harvesting, estuarine habitat (San Diego Bay only), and aquaculture (Pacific Ocean only) (SDRWQCB, 2016). Additionally, San Diego Bay is a 303(d) listed surface water body and is impaired for mercury, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs) (SWRCB, 2017).

The City of Coronado's Jurisdictional Runoff Management Plan (JRMP) designates a portion of the Proposed Project on City and Navy property in the vicinity of the SR-75 jack and bore crossing as a Water Quality Sensitive Area (WQSA). The City has designated the first 200 feet from ESA, including 303(d) listed water bodies, RARE water bodies and City designated sensitive areas to protect water quality as a WQSA for planning purposes. Projects within WQSAs are required to implement Low Impact Development (LID) and source control BMPs as a condition of development approval (City of Coronado, 2016).

The Proposed Project is located within the Coronado Hydrologic Area (910.10) of the Otay Hydrologic Unit (910.00) in the San Diego Hydrologic Basin Planning Area. Groundwater below the NBC Coastal Campus is located within the Coastal Plain of San Diego Groundwater Basin (9-033). Groundwater within the Otay Hydrologic Unit does not have beneficial uses and no water quality objectives have been established (SDRWQCB, 1994). No sustainable groundwater management plan has been prepared for the portion of the project located within the Coastal Plain of San Diego Groundwater Basin (9-033). This basin has not been assigned a prioritization rank and it is unknown at this time if a groundwater management plan will be required. Groundwater below the Proposed Project within the City right-of-way ranges from 3.5 feet bgs at the south end to greater than 11.5 feet bgs at the north end. Groundwater on the NBC Coastal Campus is expected to be encountered at depths between 10 and 19 feet bgs (Kleinfelder, 2019). Groundwater levels at the site are expected to fluctuate with tidal cycles.

The Proposed Project is not located within a high-risk flood zone. The majority of the Proposed Project within the City right-of way is located outside the 200-year floodplain and is designated as Flood Zone X; however, the jack and bore staging area is located within a subarea of Flood Zone X which is characterized as either being within the 200-year floodplain or the 100-year floodplain with average flood depths of less than 1 foot or with drainage areas less than 1 square mile (FEMA, 2012). Flood risks associated with Flood Zone X designations are considered to be low to moderate. The portion of the Proposed Project on the NBC Coastal Campus is located within Flood Zone D, which is an area where flood hazards are undetermined, but possible.

The Proposed Project is located entirely within a tsunami inundation area, with the exception of a small area north of the Wullenweber Radar Array on the NBC Coastal Campus (CalEMA et. al, 2009). The Proposed Project is also located adjacent to the San Diego Bay, which is an enclosed bay that may be susceptible to seiches.

3.10.2 DISCUSSION

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact. Construction activities associated with the Proposed Project would include minor earth-disturbing activities (i.e., cut and fill, vegetation removal, grading, trenching, excavation, and movement of soil) that could expose disturbed areas and stockpiled soils to winter rainfall and storm water runoff. Areas of exposed or stockpiled soils could also be subject to wind or water erosion. Construction activities would also include dewatering on both the NBC Coastal Campus and within the City right-of-way adjacent to ESAs and WQSAs.

As discussed in Section 2.1, "Project Description", erosion control measures and other construction BMPs would be implemented to manage construction areas to prevent discharge of polluted runoff from the project site to storm drains and surface waterways, and to prevent wind and water erosion from preconstruction through postconstruction activities. During construction, contractors would be required to comply with federal, State, and local requirements and guidelines to minimize the potential for polluted stormwater runoff, including the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, 2009-0009-DWQ, as amended by 2010-0014-DWQ (General Construction Permit) and the City's stormwater permit. A SWPPP would also be prepared to minimize stormwater pollution resulting from general construction activities.

Up to a maximum of 158,400 gpd of water would be generated during dewatering activities. As discussed in Section 2.1, dewatering provisions would be developed and approved by the City

before construction commencement and would be in accordance with City and SDRWQCB requirements as presented in Table 2.9-1. Dewatering provisions would be implemented during construction to minimize the potential for adverse water quality impacts on surface water and groundwater. Discharges to land would also occur only in designated areas that avoid potential impacts to sensitive habitat and water features. Provisions may include preparing a dewatering plan that details permit requirements, acceptable areas for land discharge, procedures for removing groundwater, equipment and methods of temporary water treatment and containment, and water disposal procedures. Adherence to construction BMPs and the various regulatory requirements governing construction, dewatering and drilling activities result in **less than significant** impacts associated with the construction of the Proposed Project. The City may be required to incorporate additional measures to comply with NEPA, permitting, and/or Navy licensing requirements, which would further reduce any environmental impacts to water quality during the construction of the Proposed Project.

Following the construction of the Proposed Project, the City's sewer system would be operated and maintained in accordance with the City's Sewer System Master Plan and the General Order and WDR issued by the State or San Diego Water Boards described in Table 2.2. Adherence to the operation and maintenance procedures included in the Sewer Master Plan and various regulatory requirements governing sewer system operation would result in **less than significant** impacts associated with the operation and maintenance of the Proposed Project.

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

No Impact. The Proposed Project would not result in the construction of large areas of impervious surfaces that would prevent water from infiltrating into the groundwater. The approximate 623 square feet of impervious surface associated with the new odor control system and manhole covers is considered to be negligible. The underlying groundwater basin is not currently used as a water supply source by the City. Dewatering would be required during construction in certain areas; however, where possible, extracted groundwater would be discharged to land where it would infiltrate to the groundwater table. In areas where ground discharge is not possible, dewatering would not result in a substantial depletion of groundwater sources such that there would be a net deficit in aquifer volume that would interfere with the sustainable management of the groundwater basin. Because of this, there would be **no impact**.

- c) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**
 - i) ***Result in substantial erosion or siltation on- or off-site;***
 - 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. The Project would not alter any natural waterways or drainages (see the response to a) above regarding potential impacts associated with erosion and increases in polluted runoff associated with construction). The approximate 623 square feet of additional impervious surface associated with the implementation of the Proposed Project is considered to be negligible and would not cause a substantial change in the volume of surface runoff or cause an increase in flooding. The Proposed Project would be designed to maintain existing drainage patterns and by directing runoff to existing storm water collection systems. The Project is not designated in a high risk or special flood hazard area; however, flood hazards are possible. The majority of the Proposed Project would be installed underground or within existing or previously planned facilities. The new odor control system that includes a 4,400-gallon bioxide storage tank would be located on the NBC Coastal Campus outside of a known 100-year floodplain. Consequently, the Proposed Project would not result in the encroachment of substantial aboveground structures that could impede or redirect flood flows if a 100- or 200-year flood event would occur. As a result, this impact would be **less than significant**.

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

Less than Significant. As discussed above, the Proposed 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 (see the response to a) above regarding potential impacts associated with erosion and increases in polluted runoff associated with construction). The majority of the Proposed Project would be installed underground; however, a new odor control system that includes a 4,400-gallon bioxide storage tank would be located on the NBC Coastal Campus. The bioxide calcium nitrate solution is not considered to be hazardous but would

be considered to be a pollutant if released to the environment. In the unlikely event of inundation during a tsunami, a release of the bioxide calcium nitrate solution could potentially occur; however, the odor control system would be designed to meet new California building standards that must be implemented by January 2020 and that require certain structures located within tsunami inundation zones to be designed for the maximum effects of a tsunami. Therefore, the impact would be **less than significant**.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. Groundwater within the Proposed Project area does not have any beneficial uses or water quality objectives. No sustainable groundwater management plan has been prepared or is currently planned. The project would not require long-term water use or a dedicated water supply.

As discussed above in a), the Proposed 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 SWRCB or SDRWQCB) and City stormwater and dewatering permits. Projects that are consistent with the goals and objectives of the Basin Plan would not be considered conflicting with the Basin Plan. Therefore, the Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan and there would be **no impact**.

3.11 LAND USE AND PLANNING

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

3.11.1 ENVIRONMENTAL SETTING

The Proposed Project site is located entirely within the limits of the City of Coronado. The southern portion of the project is located on the NBC Coastal Campus. The northern portion of the project is located within the right-of-way of SR-75, the Coronado Cays residential development, and the existing Coronado Cays pump station near the intersection of SR-75 and Coronado Cays Boulevard. The Silver Strand State Beach spans both sides of SR-75 and is located within the northern most portion of the Proposed Project on the west of SR-75, and just north of the Proposed Project footprint within the City right-of-way on the east of SR-75. Surrounding land uses in the vicinity of the project site include residential, managed open space for recreation and conservation, scenic transportation corridor, and military installation.

The Proposed Project is designated as residential and right-of-way in the City of Coronado's Coronado Cays Specific Plan and as a Wildlife Preserve (Modifying Overlay) Zone, Scenic Highway (Overlay) Zone, and Military Zone in the City's General Plan (Coronado, 2005 and Coronado Municipal Code). Underground utility transmission/distribution facilities are a permitted use in the Wildlife Preserve (Modifying Overlay) Zone and Scenic Highway (Overlay) Zone (Coronado Municipal Code, 2019a and Coronado Municipal Code, 2019b).

The project site resides within the California Coastal Zone, as defined by the California Coastal Act. The portion of the project located outside of the NBC Coastal Campus is under the jurisdiction of the City of Coronado LCP. Projects determined to be "developments" within the jurisdiction of the City's LCP, must be consistent with the goals, policies and recommendations of the City's LCP Land Use Plan. The LCP Land Use Plan was certified by the CCC in 1983 and last amended in 2005. Policies addressing diking, dredging and filling, and shoreline structures, water and

marine resources/environmentally sensitive areas, and visual resources and special communities would be applicable to the Proposed Project (City of Coronado, 2005).

The portion of the proposed project located on the NBC Coastal Campus is under the jurisdiction of the Navy. Through the CZMA of 1972, as amended, authority to evaluate projects is given to the Federal government and projects affecting the coastal zone must be consistent, to the maximum extent practicable, with the provisions of federally approved state coastal plans. The CCC developed the CCMP pursuant to the requirements of the CZMA. The CCC is responsible for assess the consistency of federal activities with the federally approved CCMP. The Navy previously conducted a CCMP consistency evaluation in compliance with the CZMA and prepared a Coastal Consistency Determination (CCD). The CCD indicated that NBC Coastal Campus was fully consistent with the CCMP, and thus, that it satisfies the standard of being consistent to the maximum extent practicable. The CCC concurred with the Navy's consistency determination (CD-0003-14) on November 12, 2014 (CCC, 2014).

The project is also within the planning area of the Bayshore Bikeway. The Bayshore Bikeway Plan contains an overview of recommended improvements, design guidelines, and information related to management, maintenance and security. The plan also acknowledges the need for temporary bikeway closures and includes recommendations for mitigating impacts associated with closures (SANDAG, 2006).

3.11.2 DISCUSSION

a) **Physically divide an established community?**

No Impact. The Proposed Project would not include permanent features that would physically divide an established community. The Proposed Project would be implemented to allow for uninterrupted connectivity to the main entrance of the Coronado Cays residential development at Coronado Cays Boulevard, the Silver Strand State Beach, transit stops, and the Bayshore Bikeway. Therefore, there would be **no impact**.

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?**

No Impact. The installation, operation and maintenance of utilities are considered to be an allowable use on lands within the Proposed Project footprint. The project would be consistent with the City's General Plan land use and zoning designations for the project site. The Proposed Project would also be consistent with policies included in other plans applicable to the project, including the City's LCP and the Bayshore Bikeway Plan. Specific impacts associated with other

resource and issue areas are addressed in each resource issue section of Chapter 3, "Environmental Checklist," where appropriate. These sections address applicable plans and policies and provide a detailed analysis of other relevant environmental effects resulting from project implementation and identify mitigation measures, if necessary, to reduce effects to a less than significant level. Thus, the Proposed Project would not conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect; therefore, no **impact** would occur.

3.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.12.1 ENVIRONMENTAL SETTING

Within the Coronado area, mineral resource potential is limited to minerals associated with San Diego Bay and include bedrock, clay, sand, silts, and salt. These materials have been historically utilized for brick manufacturing and beach replenishment (City of Coronado, 2005).

The California Geological Survey (CGS) has established a classification system to denote both the location (i.e., zone) and significance of key extractive mineral resources. Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists are classified as a Mineral Resource Zone (MRZ)-2.

The Proposed Project is mapped in MRZ-3, indicating that it is located in an area that contains mineral deposits, but the significance of which cannot be determined from available data. Although it is mapped in MRZ-3, there are no known mineral resource deposit sites within the Proposed Project (San Diego County, 2008). Moreover, any potential mineral resources located within or adjacent to the project site would not be commercially viable to extract because all properties in the immediate vicinity have either been previously developed with incompatible land uses or are designated as parkland.

3.12.2 DISCUSSION

- 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?**

No Impact. Construction of the Proposed Project would involve cut and fill activities for the installation of the sewer force main; however, to the extent feasible material excavated for the

installation of the pipeline would be reused as backfill. Project construction would require using common construction materials, such as asphalt, concrete, and gravel. These materials are widely available throughout the region; therefore, the project would not result in the loss of regionally or locally designated “significant” deposits of mineral resources (i.e., deposits classified by CGS as MRZ-2 or deposits listed as locally important on a general plan). Additionally, existing land use incompatibilities would preclude use of the site for future mining. Because the Proposed Project is not located in a known mineral resource area and the project would not affect mineral resources that are known to be important to the region and state residents, there would be **no impact**.

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?

No Impact. See response to question a). **No impact** would occur.

3.13 NOISE

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

3.13.1 ENVIRONMENTAL SETTING

Surrounding land uses in the vicinity of the Proposed Project include residential, managed open space for recreation and conservation, transportation corridor, and a military installation. The closest residential properties are located at the Tunapuna Lane cul-de-sac, approximately 25 feet from the City right-of-way. Additional residences along Tuna Puna Lane, where backyard property lines border along the City right-of-way, would be approximately 35 feet from the Proposed Project footprint. Residential homes located along Delaport Way would be approximately 50 feet from the construction footprint. A concrete wall separates all of these residences from the City right-of-way. Other residences in the vicinity of the Proposed Project would be more than 100 feet away. The NBC Coastal Campus is currently under construction and there would be no permanent occupants on the property during construction of the Proposed Project.

NOISE CONDITIONS

The dominant ambient noise sources in the project vicinity include vehicular, residential activities within the Coronado Cays residential area, aircraft overflights, recreational use of local parks and beaches, and natural noise (i.e., vocalizations by birds and other wildlife, breaking waves, and wind). Concurrent construction of the NBC Coastal Campus would also generate additional noise.

Ambient sound levels were estimated to be 69 A-weighted decibels (dBA) L_{eq} at 100 feet from the centerline of SR-75 on the NBC Coastal Campus. Additionally, recorded sound levels in Coronado Cays Park and residential area ranged from 52 to 58 dBA (U.S. Navy, 2015).

Noise can be generated by a number of sources, including mobile sources (transportation noise sources), such as automobiles, trucks and airplanes; and stationary sources (non-transportation noise sources), such as construction sites, machinery, commercial and industrial operations. As acoustic energy disperses from the source to the receiver, noise levels attenuate (decrease) dependent on ground absorption characteristics, atmospheric conditions, and the presence of physical barriers (walls, building facades, berms). Noise generated from mobile sources generally attenuate at a rate of 4.5 dB per doubling of distance. Stationary noise sources spread with more spherical dispersion patterns which attenuate at a rate of 6 dB to 7.5 dB per doubling of distance.

Table 3.13-1 presents an overview of the range of typical noise levels associated with construction equipment.

**Table 3.13-1
Typical Construction Equipment Noise Levels**

Equipment	Measured Lmax at 50 feet (dBA)¹	Typical Noise Level at 50 feet (dBA)²
Backhoe	78	80
Compactor	83	82
Dozer	82	85
Excavator	81	Not measured
Generator	81	81
Horizontal Boring/Hydraulic Jack	82	Not measured
Loader	79	85
Truck	75	88
Notes: VdB = vibration decibels ¹ Federal Highway Administration Roadway Construction Noise Model Default Noise Emission Reference Levels ² Federal Transit Administration Construction Equipment Noise Emission Levels Source: FHWA, 2006, FTA, 2018		

3.13.1.1 NOISE CRITERIA

City of Coronado noise ordinance (Municipal Code Section 41.10) prohibits construction on Monday through Saturday between 7:00 PM and 7:00 AM, on Sundays, as well as holidays. In addition, average sound level for any one-hour time period during construction cannot exceed 75 dBA at the property line of any residential zone without the approval of variance and issuance of a noise permit.

GROUNDBORNE VIBRATION CONDITIONS

The dominant ambient source of groundborne vibration to the Coronado Cays residential area comes from vehicular traffic along SR-75. Concurrent construction of the NBC Coastal Campus would also generate additional groundborne vibration.

Groundborne vibration is energy transmitted in waves through the ground. In general, vibration attenuates at a rate of approximately 50 percent for each doubling of distance from the source. This estimate considers only the attenuation from geometric spreading and tends to provide for a conservative assessment of vibration level at the receiver. Table 3.13-2 presents an overview of the typical groundborne vibration levels associated with construction equipment.

**Table 3.13-2
Typical Construction Equipment Groundborne Vibration Levels**

Equipment	PPV at 25 feet (in/sec)
Haul truck	0.076
Large bulldozer	0.089
Cassion drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003
<small>Notes: in/sec = inches per second; PPV = peak particle velocity. Source: Caltrans, 2013.</small>	

3.13.1.2 GROUNDBORNE VIBRATION CRITERIA

The City of Coronado's noise ordinance does not specify additional criteria for groundborne vibration. In the absence of vibration thresholds specific to the city where the project site is

located, Transit Noise and Vibration Impact Assessment (FTA, 2006) and the Transportation- and Construction-Induced Vibration Guidance Manual (Caltrans, 2013) serve as useful guidance for evaluating transportation- and construction-induced vibration impacts. Caltrans guidelines recommend that a standard of 0.2 inch per second peak particle velocity (PPV) not be exceeded for the protection of normal residential buildings (Caltrans, 2013). Thresholds have also been established to address the subjective reactions of people to both transient and continuous vibration sources (Table 3.13-2).

**Table 3.13-3
Guidelines on Potential Criteria for Vibration Annoyance**

Human Response	Impact Levels (PPV, in/sec)	
	Transient Sources ¹	Continuous/Frequent Intermittent Sources
Barely perceptible	0.040	0.010
Distinctly perceptible	0.250	0.040
Strongly perceptible	0.900	0.100
Severe	2.000	0.400
<p><u>Notes:</u> in/sec = inches per second; PPV = peak particle velocity</p> <p>¹Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory equipment.</p> <p>Source: Caltrans, 2013.</p>		

3.13.2 DISCUSSION

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?**

Less than Significant with Mitigation Incorporated. The Proposed Project would not result in any new stationary noise sources or a substantial increase in traffic noise levels currently experienced in the project area. Construction noise would be short-term and temporary, and operation of heavy-duty construction equipment would be intermittent throughout the day during construction. However, as shown in Table 3.13-1, typical construction equipment would generate noise at levels exceeding the City's 75 dBA noise threshold within 50 feet of the of the Proposed Project. Residences within the Tunapuna cul-de-sac, along Tunapuna Lane and Delaport Way could be adversely affected by construction noise. For residences that would be within 35 feet of construction activity; noise levels are expected to be higher than what is presented in Table 3.13-1. Exceedance of the 75 dBA noise threshold would result in potentially significant impacts.

Mitigation Measure NOISE-1: Implement Construction Noise Reduction Measures.

The City of Coronado and its Construction Contractor will implement the following measures to reduce noise impacts during construction:

- Obtain Noise Permit and implement permit recommendations from the City of Coronado Community Development Department for all construction activity north of the NBC Coastal Campus to allow for construction activity in excess of 75 dBA at residential property lines. No construction work shall occur within 100 feet of residences without a Noise Permit.
- Provide written notification of construction activities to the Coronado Cays residents located adjacent to the Project site, or within 100 feet of such activities. Notification shall include the dates and hours when construction activities are anticipated to occur, and contact information, including a daytime telephone number, for the project representative to be contacted if noise levels are deemed excessive. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification.
- Locate Fixed/stationary equipment (e.g., generators, compressors) will be located as far as possible from Coronado Cays residences.
- Maintain all construction equipment and properly equip with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations.
- Shroud or shield all impact tools and intake and exhaust ports on powered construction equipment will be muffled or shielded. Equipment engine shrouds will be closed during equipment operation.
- Ensure all construction equipment powered by gasoline or diesel engines will have sound control devices that are at least as effective as those originally provided by the manufacturer, and all equipment will be operated and maintained to minimize noise generation. All motorized construction equipment will be shut down when not in use, to prevent excessive idling noise.
- Employ noise-reducing enclosures around noise-generating equipment, and temporary barriers (e.g., plywood, sound attenuation blankets) between noise sources and residential properties within 50 feet of the construction footprint, where feasible to reduce noise levels below the threshold of 75 dBA.

Implementation: The City of Coronado and its Construction Contractor

Timing: Before and during construction.

Enforcement: The City of Coronado

Implementation of Mitigation Measure NOISE-1: "Implement Construction Noise Reduction Measures." would reduce impacts associated with construction-related noise to a **less than significant** level because minimization measures would be implemented before and during construction.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact with Mitigation Incorporated. The Proposed Project would not result in any new stationary sources groundborne vibration or result in substantial increase in traffic-related ground vibration. Construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. At lowest vibration levels, it may be perceived as an inaudible annoyance and at the highest levels of vibration, architectural damage to structures such as loosening, and cracking of plaster or stucco coatings would result. Construction activities that result in audible vibration levels resulting in strong human responses or potential architectural damage would be considered potentially significant. As shown in Table 3.13-2, 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. The vibration generated from construction would not be at levels to incur architectural damage to residential homes, sidewalks or other structures; however, as shown in Table 3.13-3, it would be considered to be distinctly perceptible to strongly perceptible. At this level, some people find the vibration at this level annoying in most quiet occupied areas. Although short-term construction related vibration impacts are not considered to be severe, for more sensitive individuals, the annoyance associated with vibration could be potentially significant. Implementation of Mitigation Measure NOISE-1: "Implement Construction Noise Reduction Measures." would minimize impacts associated with construction-related vibration to a **less than significant** level because minimization measures would be implemented before and during construction.

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. The Proposed Project is not located within 2 miles of a private airstrip or airport land use plan and will not develop new inhabited structures or buildings. Therefore, there is **no impact** from airstrips or airports.

3.14 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population and Housing. Would the project:				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.14.1 ENVIRONMENTAL SETTING

Over the past decade, the City of Coronado's population has remained relatively stable, decreasing slightly from approximately 24,702 in 2010 to approximately 24,417 in 2017 (U.S. Census). The project site is located in the Coronado Cays Specific Plan area (City of Coronado, 2013). Residential homes are located immediately adjacent to the portion of the Proposed Project located on the east side of SR-75.

3.14.2 DISCUSSION

- a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

No Impact. The Proposed Project does not involve the construction of new residential or commercial units that would generate new population. The Proposed Project would extend City sewer services to exclusively serve the previously approved NBC Coastal Campus, where approximately 3,045 Navy personnel would relocate from NAB to the NBC Coastal Campus. The City of Coronado is currently providing sewer services to the NAB. Due to the transfer Navy personnel, wastewater demand at NAB Coronado would be reduced and net change in overall wastewater demand is considered to be minimal. Consequently, the Proposed Project would not enable additional development and population growth beyond what has been previously approved and already supported by the City's current sewer system, therefore, there would be **no impact**.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Proposed Project would not displace existing homes or people, necessitating the construction of replacement housing elsewhere. Because of this, there would be **no impact**.

3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.15.1 ENVIRONMENTAL SETTING

The City of Coronado Fire Department responds to all calls for emergency services within city limits that include fires, emergency medical incidents, public assists, traffic and vehicle accidents, and other emergency situations. The Coronado Fire Department has two fire stations operating on a twenty-four-hour basis (City of Coronado, 2005). The nearest fire station, Fire Station 2, is located within the Coronado Cays residential development approximately 500 feet to the east of the Proposed Project. Responders from the Coronado Fire Department would arrive from the nearest location within the City when the call was received. The Coronado Fire Department has a response time of 6 minutes and 35 seconds (pers. Com. Peake, 2019).

Fire protection at NBC Coastal Campus is the provided by the base Fire and Emergency Services (F&ES), which is the responsibility of the Federal fire department (U.S. Navy, 2015). Typical response times for NAB Coronado F&ES was reported to be 13:01 (U.S. Navy, 2015).

The City of Coronado Police Department and the San Diego County Sheriff's Department provide law enforcement services. The California Highway Patrol provides traffic enforcement services

within the limits of the City of Coronado. Law enforcement at NBC Coastal Campus is the responsibility of NBC Security under the supervision of the Commander Navy Region Southwest Security Forces (U.S. Navy, 2015).

The nearest school, West View Elementary School, is located approximately 0.35 miles south of the Proposed Project and immediately adjacent to the southern boundary of the NBC Coastal Campus. Silver Strand Elementary School is located 1-mile north of the northernmost point of the Proposed Project.

The Silver Strand State Beach spans both side of SR-75 and is immediately north of the sections of the Proposed Project located on the NBC Coastal Campus on the west of SR-75 as well as the City right-of-way on the east of SR-75. Coronado Cays Park, a six-acre park with sports fields, tennis courts and a playground, is also located within the Coronado Cays residential development and immediately adjacent of the project site. No other parks are located within one mile of the project site.

3.15.2 DISCUSSION

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

Fire protection?

No Impact. Implementation of the Proposed Project would not include any new housing, businesses, or other development that would increase demand for fire protection services and facilities; therefore, **no impact** would occur.

Police protection?

No Impact. Implementation of the Proposed Project would not include any new housing, businesses, or other development that would increase demand for police protection services and facilities, nor degrade the quality of existing services. Access for standard-size police patrol vehicles on all public and private roadways would be maintained during construction; therefore, **no impact** would occur.

Schools?

No Impact. Implementation of the Proposed Project would not alter existing school facilities or result in an increase in population that would generate new students in the City of Coronado. **No impact** would occur.

Parks?

No Impact. Implementation of the Proposed Project would not alter existing parks or result in an increase in population that would require new or expanded park facilities in the City of Coronado. **No impact** would occur.

Other public facilities?

No Impact. Implementation of the Proposed Project would not include any new housing, businesses, or other development that would require new or expanded other public facilities such as hospitals or libraries in the City of Coronado. No other public facilities exist in the vicinity of the project. **No impact** would occur.

3.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.16.1 ENVIRONMENTAL SETTING

A variety of recreational facilities are located in the vicinity of the Proposed Project. Coronado Cays Park, a six-acre park with sports fields, tennis courts and a playground, is located within the Coronado Cays residential development and immediately adjacent to the project site. The Coronado Cays Park is under the jurisdiction of the City of Coronado (City of Coronado, 2001).

The 24-mile Bayshore Bikeway extends from the Coronado Ferry Landing all the way around the southern tip of the San Diego Bay to the Embarcadero Marina Park. In the vicinity of the Proposed Project, the Bayshore Bikeway is a two-lane paved Class-I bikeway, allowing for bicycle and pedestrian access along SR-75 (City of Coronado, 2018). The City of Coronado is responsible for maintaining the section of the bikeway within the SR-75 right-of-way.

The Silver Strand State Beach spans both sides of SR-75 and is immediately north of the section of the Proposed Project located on the NBC Coastal Campus on the west of SR-75, and north of the section of the Proposed Project within the City right-of-way on the east of SR-75. Pedestrian access to the State Beach is available at Coronado Cays Boulevard. As part of the Coastal State Parks System, the California Department of Parks and Recreation is responsible for maintaining Silver Strand State Beach.

3.16.2 DISCUSSION

- a) **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. Implementation of the Proposed Project is not anticipated to induce population growth that would increase the use of existing neighborhood and regional parks or recreational facilities. As part of the Proposed Project, a Traffic and Pedestrian Control and Management Plan would be implemented to allow for the continued use of the existing bikeway and would not displace or redirect existing users to other recreation facilities that could result in accelerated physical deterioration of the facility. **No impact** would occur.

- b) **Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?**

Less than Significant. The Proposed Project would not include the construction of new or expanded permanent recreational facilities. During construction, access to portions of the Bayshore Bikeway may be limited for up to three months during project construction; however, the bikeway would remain accessible to pedestrian and bicycle traffic through the implementation of a Traffic and Pedestrian Control and Management Plan (refer to Section 2.6) and the construction of a 109-foot long and 10-foot wide temporary paved bikeway. The management plan would include measures for bikeway traffic and notification procedures for construction activities and traffic restrictions in accordance with the Bayshore Bikeway Plan policies. These measures would also assist to minimize potential adverse effects to the environment. The provision of a paved temporary bikeway would also allow for the continued use of the bikeway and would not displace existing users to other recreation facilities. The temporary bikeway has been designed to avoid and minimize potential adverse environmental impacts during construction activities. Following the completion of construction activities, the temporary bikeway would be removed, and the site would be restored to pre-project conditions or better. Because of this, the impact would be **less than significant**.

3.17 TRANSPORTATION

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

3.17.1 ENVIRONMENTAL SETTING

EXISTING CIRCULATION PLANS

Transportation in San Diego County is planned through SANDAG in a regional effort. *San Diego Forward: The Regional Plan* (SANDAG, 2015) was adopted by the SANDAG Board of Directors in October 2015 and projects regional growth and impacts to multimodal transportation. The Regional Plan contains Sustainable Community Strategies (SCS), which are intended to integrate public policies, strategies, and investments to maintain, manage, and improve the transportation system and help the region meet GHG reduction targets. In 2018, the City of Coronado prepared a Comprehensive Active Transportation Plan and Complete Streets Strategy that provides citywide recommendations to assist in the planning and implementation of infrastructure for people who walk, bike, and use other non-motorized forms of travel (City of Coronado, 2018a).

ROADWAYS

The existing circulation network within the City of Coronado is comprised of arterials, collector streets, and local streets. SR-75 is a four-lane divided highway which connects the City of Coronado to the City Imperial Beach to the south and the City of San Diego via the SR-75 bridge to the northeast. SR-75 carries approximately 23,100 vehicles per day near the Silver Strand

State Beach (Caltrans, 2017). The speed limit along SR-75 through the project site is 65 miles per hour. Access to Coronado Cays Boulevard, the main access road to the Coronado Cays residential development, is provided by signalized on- and off-ramps to SR-75.

PEDESTRIAN AND BICYCLE ACCESS

The 24-mile Bayshore Bikeway extends from the Coronado Ferry Landing all the way around the southern tip of the San Diego Bay to the Embarcadero Marina Park. In the vicinity of the Proposed Project, the Bayshore Bikeway is a two-lane paved Class-I bikeway, allowing for bicycle and pedestrian access along SR-75 (City of Coronado, 2018a). Signalized pedestrian crossings along Coronado Cays Boulevard are located across the northbound SR-75 on-ramp and the southbound SR-75 off-ramp, allowing for access between the Coronado Cays residential development and Silver Strand State Beach. The Bayshore Bikeway Plan contains an overview of recommended improvements, design guidelines, and information related to management, maintenance and security (SANDAG, 2006).

PUBLIC TRANSIT

Metropolitan Transit System (MTS) provides bus service along SR-75 through Coronado with connections to Otay Mesa-Nestor and Downtown San Diego. Northbound and southbound bus stops are located immediately adjacent to the Proposed Project footprint at the entrance of the Coronado Cays residential development at the intersection of SR-75 and Coronado Cays Boulevard. The bus routes provide daily service every 15 minutes on weekdays during peak periods and every 30 minutes on weekdays during non-peak periods and on weekends.

3.17.2 DISCUSSION

This analysis used the recommended screening criterion from the Institute of Transportation Engineers (ITE)/ the San Diego Traffic Engineers Council (SANTEC) Guidelines (ITE/SANTEC 2019) for assessing the effects of construction projects that create temporary traffic increases. To account for the large percentage of heavy trucks associated with typical construction projects, the guidelines recommend a threshold level of 500 daily trips or 50 new peak-direction (one-way) trips during the peak hour. Operations after completion of the Proposed Project would be negligible in comparison to existing conditions. Therefore, project-related traffic impacts were not analyzed using level of service (LOS) or VMT because LOS and/or VMT are used primarily to analyze long-term effects of projects on traffic flow and circulation.

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

Less Than Significant. As discussed above, a project level LOS or VMT analysis was not performed because the Proposed Project would not result in long-term effects on traffic flow and circulation.

An evaluation of traffic congestion was carried out through the calculation of the along SR-75 in the project site. The mean roadway capacity for the segment of SR-75 along Silver Strand is estimated to be of 3,082 (USDCESO, 2018). City of Coronado data from August 2018 indicates that peak hour traffic on SR-75 is approximately 2,250 vehicles (City of Coronado, 2018b). The 2000 Highway Capacity Manual indicates that a v/c ratio that is less than 0.85 generally indicates adequate traffic capacity is available and vehicles are not expected to experience significant queues and delays (FHWA, 2000). The calculated v/c ratio for Silver Strand would be approximately 0.73, which indicates adequate traffic capacity.

Obtaining and disposing of construction material would result in approximately 165 truck trips and 2,475 total miles. The maximum daily hauling trips per day are estimated to be 20 one-way trips. Haul routes would include SR-75, I-5, I-805, and Main Street. There would also be a maximum of 20 one-way trips per day for workers. O&M of the Proposed Project would result in approximately seven one-way trips per year. Traffic associated with the construction and operation of the Proposed Project is considered to be minimal and not expected to adversely affect the calculated v/c ratio for SR-75 and would not conflict with adopted policies, plans, or programs related to traffic congestion. The Proposed Project is also not anticipated to substantially adversely affect road traffic or transportation patterns within the project site.

Project implementation would require temporary partial lane closures across Coronado Cays Boulevard for approximately two weeks and shoulder closures along SR-75 for up to five weeks during open trench and jack and bore pipeline installations. During construction, access to portions of the Bayshore Bikeway may also be restricted for up to three months during project construction. While access may be temporarily constrained, Coronado Cays Boulevard, Bayshore Bikeway, and transit stops would remain accessible through the implementation of a Traffic and Pedestrian Control and Management Plan (refer to Section 2.6). The management plan would include measures for traffic and notification procedures for construction activities and traffic restrictions in accordance with City and Caltrans requirements and the Bayshore Bikeway Plan policies. Therefore, the project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, and it would not otherwise substantially decrease the performance of such facilities. The impact would be **less than significant**.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact. As discussed above, a project level LOS or VMT analysis was not performed because the Proposed Project would not result in a long-term effect on traffic flow, circulation or traffic congestion. Therefore, the project would not conflict or be inconsistent with the CEQA Guidelines section 15064.3, subdivision (b). There would be **no impact**.

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

Less Than Significant Impact. The Proposed Project would not require permanent changes the layout of any public roadway or intersection. Implementation of the Proposed Project would also not result in any changes in land uses and would not alter the compatibility of uses served by the roadway network or introduce incompatible uses. As discussed in a.) above, access to the Bayshore Bikeway may be limited, but not entirely restricted, for up to three months during project construction. The construction of the temporary paved bikeway would result in a temporary shift in the bike path configuration and alignment; however, the shift in the bike path would be gradual. In addition, a Traffic and Pedestrian Control and Management Plan would be implemented as part of the project that would identify traffic control safety measures which may include a. approximately 10 feet wide and 700 feet long temporary bikeway, signage, temporary concrete barriers, and use of flaggers. Because safety measure 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, the impact would be **less than significant**.

d) Result in inadequate emergency access?

Less Than Significant. Project implementation would require temporary partial lane closures across Coronado Cays Boulevard for approximately two weeks and shoulder closures along SR-75 for up to five weeks during open trench and jack and bore pipeline installations. Such access impairments could adversely impact the types of emergency response vehicles and equipment that could be used in emergency responses or increase response times during the construction period; however, traffic flow is not anticipated to be substantially interrupted on any roadway. The Traffic and Pedestrian Control and Management Plan would be prepared and implemented to address access and traffic issues during construction. In addition, coordination with Caltrans and the City of Coronado Fire Marshall would be required during project review and any recommendations or modifications requested by Caltrans and/or the Fire Marshall would be required to be implemented prior to construction.

Because the Fire Marshall and Caltrans would be consulted and recommendations to avoid or minimize any impacts would be implemented prior to finalizing project designs and initiating construction, any potential temporary impacts associated with inadequate emergency access would be **less than significant**.

3.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Tribal Cultural Resources. Would the project:				
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.18.1 ENVIRONMENTAL SETTING

Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe that is listed, or determined to be eligible for listing, in the national, state, or local register of historical resources. Additionally, a tribal cultural resource may also be a resource that the lead agency determines, in its discretion, is a tribal cultural resource. While cultural resources are generally defined as traces of human occupation and activity that include prehistoric and historic archaeological sites, districts, and objects; standing historic structures buildings, districts, and objects; and locations of important historic events of sites of traditional and/or cultural importance to various groups, tribal cultural resources could include intangible resources that provide cultural value to a tribe.

If tribal cultural resources are identified within a project site, impacts must be avoided or mitigated to the extent feasible. AB 52 protects these resources by requiring that lead agencies seek tribal consultation prior to the release of any CEQA documentation. In accordance with Section 21080.3.1 of the California Public Resources Code and AB 52, the City consulted the NAHC and Native American tribes. To help determine whether a project could cause a substantial adverse change in the significance of a tribal cultural resource, the City contacted the California Native American tribes traditionally and culturally affiliated with the geographic area of the Proposed Project.

On February 12, 2019, the City contacted ten Native American tribes that requested notification of projects that take place within the County: A total of 10 tribes were identified for the Proposed Project: The Campo Band of Diegueno Mission Indians, the Ewiiapaayp Band of Kumeyaay Indians, the Iipay Nation of Santa Ysabel, the Jamul Indian Village, the Kumeyaay Cultural Repatriation Committee, the Kwaaymii Laguna Band of Mission Indians, the La Posta Band of Diegueno Mission Indians, the Manzanita Band of Kumeyaay Nation, the Sycuan Band of Kumeyaay Nation, and the Viejas Band of Kumeyaay Indians. The City's notice included a project description and provided an opportunity for tribes to request consultation regarding the presence of potential tribal cultural resources in the project area.

In response to the City's invitation for tribal consultation, 4 of the 10 tribes responded. Consultation was requested by the Campo Band of Mission Indians in a letter dated February 21, 2019. An email from recommending that a cultural study be performed and that a Kumeyaay monitor be included in the Proposed Project was received by the Kumeyaay Cultural Repatriation Committee on February 25, 2019. Monitoring was also requested in a letter sent by the Viejas Band of Kumeyaay Indians on March 7, 2019. A phone call was also received by the Jamul Indian Village on April 10, 2019.

To date, no known tribal cultural resources within the project footprint have been identified.

3.18.2 DISCUSSION

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

No Impact. As discussed in Section 3.5, "Cultural Resources", No historical resources or cultural landscapes were identified in the footprint of the Proposed Project; therefore, there would be no impact.

- 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?**

Less than Significance with Mitigation. No known tribal cultural resources have been identified on the Proposed Project through previous archeological investigations or in consultation with affiliated tribes. The Kumeyaay Cultural Repatriation Committee has indicated that there are no special areas of concern within the portion of the project located within the City right-of-way (PanGIS, 2019). A traditional cultural property containing prehistoric cultural material, including midden and fragments of human remains is present on the NBC Coastal Campus; however, this site is a least 0.40 miles from the Proposed Property.

No evidence of human remains or archeological resources at the project sites was found in during the pedestrian survey or documentary research. Because the portion of the Proposed Project on NBC Coastal Campus has been previously disturbed and/or excavated to depths of proposed open trench pipeline installation, Native American burials or archaeological deposits that could be determined to be tribal cultural resources are not expected to be encountered. However, presently unknown prehistoric burials or archaeological deposits could possibly be uncovered during project construction in previously undisturbed areas within the City right-of-way.

In light of the potential to uncover unknown or undocumented remains that could be determined to be Native American burials or tribal cultural resources, the impact would be potentially significant. However, with implementation of Mitigation Measure CUL-1, and CUL-2 the impact would be reduced to a **less than significant** level.

3.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. Utilities and Service Systems. Would the project:				
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.19.1 ENVIRONMENTAL SETTING

WASTEWATER SERVICE

The City of Coronado collects wastewater through the City's system to the Transbay Pump Station from where it is pumped to the Transbay Pump Station from where it is pumped through a 24-inch force main under San Diego Bay to the City of San Diego's Point Loma Wastewater Treatment Plant (WWTP), where it is treated and then reused or discharged through an ocean outfall located two miles offshore. (City of Coronado, 2016). On average, Coronado transfers approximately 2.485 mgd of sewage, including sewage flows from two Navy bases, the NAB and the NASNI. The City's existing annual contract capacity with the City of San Diego is 3.078 mgd (City of San Diego, 1998).

Portions of the Coronado Cays residential development, including connections along Delaport Way, Cays Court, and Tunapuna Lane, are serviced by a private sewer system. Available remaining capacity of this system is estimated to be approximately 114,000 gpd.

WATER SYSTEM

The City of Coronado and the NBC Coastal Campus obtains its domestic water from the Cal-Am Water Company, whose primary supplier is the City of San Diego. The San Diego County Water Authority supplies approximately 90 percent of San Diego's water, imported from the Colorado River and the California Water Project, while the remaining 10 percent of the raw water supply comes from local reservoir systems owned and operated by the City of San Diego.

STORMWATER DRAINAGE SYSTEM

Due to Coronado's location and its relatively flat topography, most storm water runoff flows by gravity into either the Pacific Ocean or San Diego Bay. There is a storm water swale located adjacent to the portion of the Proposed Project within the City's right-of-way at the proposed SR-75 crossing. All public right-of-way projects are required to be designed compatibly with existing and planned drainage systems and infrastructure.

There are no existing underground drainage facilities on the NBC Coastal Campus. The site has been intentionally graded in a manner to develop low points where runoff collects and ponds in order to evaporate and/or infiltrate. The storm water runoff is currently handled by older drainage swales and natural drainage basins; however, improvements to on-site drainage will be implemented as part of the NBC Coastal Campus construction.

SOLID WASTE

Solid waste is provided by the City of Coronado through a private waste collection service and is disposed of at the Otay landfill in the City of Chula Vista. Solid waste generated at the NBC Coastal Campus is transported to and disposed of at Miramar Landfill. Miramar Landfill will be filled to capacity and close by 2022 (pers. com Loveland and Aasen, 2019). Construction and demolition (C&D) debris landfill diversion is mandated by Commander Navy Region When C&D activities being undertaken through use of a private contractor, a 50 percent diversion of C&D waste from Miramar Landfill is required (U.S. Navy, 2015).

ENERGY

The City of Coronado obtains its energy supply of natural gas and electricity from the San Diego Gas & Electric Company (SDG&E). The NBC Coastal Campus obtains electricity only from SDG&E. No high-pressure gas or hazardous liquid pipelines are located in the Project area (USDOT, 2019).

COMMUNICATIONS SYSTEMS

Existing communication include an AT&T from a line that runs north-south along the eastern side of the SR-75 and fiber-optic lines and sensitive fiber-optic lines are located on the NBC Coastal Campus and within the City right-of-way.

3.19.2 DISCUSSION

- a) **Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?**

Less Than Significant. The Proposed Project would involve the construction of a sewer force main and pump station modifications in order to extend City sewer services to the previously approved NBC Coastal Campus. The sewer force main would be installed within an existing Cal-Am easement containing a 16-inch water line and cross several other utilities. To avoid potential utility conflicts and relocation during construction, a section of the pipeline in the vicinity of PS 1 would be installed using trenchless technologies. In addition, as described in Section 2.1, "Project Description", the location of utilities would be verified with the City, Navy and utility companies, a utility clearance would be performed, and test pits would be hand dug to confirm the locations of sensitive utilities to minimize potential impacts. The sewer force main would be designed and constructed in accordance with applicable regulations, including utility separation requirements. No relocation, modification or disruption other utilities would be required for the implementation of the Proposed Project. Therefore, impacts would be **less than significant**.

- b) **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

No Impact. The Project would not require significant water supply during or after construction. Water needed for the project would be minimal and may include water used for dust control during construction and for irrigation after construction. Water supply would come from dewatering activities or the City of Coronado municipal water supplies. Existing on-site and municipal water supplies would be sufficient to accommodate the minor temporary and short-term water needs for the project. Therefore, **no impact** would occur.

- c) **Result in a determination by the wastewater treatment provider that 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?**

Less Than Significant. Construction of the Proposed Project would require dewatering and discharge to the City's and a privately-owned sewer system. As discussed in Section 2.1, "Project Description" discharges to the privately-owned sewer system within Coronado Cays would be restricted to a maximum of 114,000 gpd to ensure that the discharges would not exceed the available capacity of the system. Anticipated wastewater demands associated with the new NBC Coastal Campus are approximately 0.2 mgd. Due to the transfer Navy personnel from NAB to the NBC Coastal Campus, wastewater demand at NAB Coronado is anticipated to be proportionally reduced. The City of Coronado currently discharges 2.485 mgd to the City of San Diego under an existing service contract City of San Diego for a maximum annual daily average discharge of 3.078 mgd; therefore, there is adequate contract capacity to handle existing commitments and the wastewater demands of the NBC Coastal Campus. The peak hour wastewater demand is estimated to be approximately 400 gpm. The design capacity of the approved PS 1 being constructed as part of the NBC Coastal Campus will be approximately 500 gpm and the capacity of the existing pump at the Coronado Cays pump station is 1,750 gpm; therefore, there is adequate pumping capacity to serve the project. Because there would be restrictions during construction to limit discharges to ensure that system capacities are not exceeded and there is adequate capacity within the existing system infrastructure and agreements for operation, the impact would be **less than significant**.

- d) **Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

No Impact. Construction of the Proposed Project would generate solid waste as result of demolition and pipe installation activities. A total of approximately 1,300 CY of excavated soil and vegetation would be generated during construction of the Proposed Project requiring off-site disposal. Approximately 200 CY of C&D waste would be generated from demolition of a concrete wall and the existing odor control system within the City right-of-way. Exported soil and C&D waste would be hauled to and disposed of at Republic Services Otay Landfill in accordance with their acceptance criteria. Republic Services Otay Landfill would have adequate capacity to accept the quantities of waste generated by the Proposed Project (pers com Loveland and Aasen, 2019), **no impacts** would occur.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. C&D debris would be 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. No long-term solid waste generation would be expected after construction. **No impact** would occur.

3.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Wildfire.				
Is the project located in or near state responsibility areas or lands classified as high fire hazard severity zones?	<input type="checkbox"/> Yes			<input checked="" type="checkbox"/> No
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.20.1 ENVIRONMENTAL SETTING

The Proposed Project site is located within the city limits of the City of Coronado in San Diego County. The Proposed Project site is bounded by Silver Strand State Beach to the north, the City of Imperial Beach to the south, SR-75 and San Diego Bay to the east, and the Pacific Ocean to the west. The topography in the area is generally level and near sea level and lacks wildland vegetation that would exacerbate wildfire risk. As a totally developed urban peninsula surrounded by the Pacific Ocean and San Diego Bay, wildfires are of little concern in the vicinity of the Proposed Project (City of Coronado, 2005).

CAL FIRE classifies land in California based on fire hazard severity. An area that is not located within State of California CAL FIRE jurisdiction is designated as either an LRA or FRA for fire protection. The portion of the project site on City-owned property is designated as an LRA and the portion of the project site on Navy property is designated as an FRA. The entire project area is classified as a non-very high fire hazard severity zone.

3.20.2 DISCUSSION

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The vicinity of the Proposed Project lacks wildland vegetation and is not located on state responsibility areas or lands classified as very high or high fire hazard severity zones (California Department of Forestry and Fire Protection, 2016, California Department of Forestry and Fire Protection, 2017). The project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan that is specifically related to wildfires. Therefore, **no impact** would occur. Refer to Section 3.9, "Hazards and Hazardous Materials" for further discussion of regional emergency response and evacuation for other hazards.

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?

No Impact. Implementation of the Proposed Project would not include the development of habitable structures and is not located within a high fire hazard severity zone. There is also no wildland vegetation in the vicinity of the project; therefore, the Proposed Project would not exacerbate wildfire risks, nor would it expose project occupants to pollutant concentrations as a result of wildfire occurrence. There is **no impact**.

c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. Implementation of the Proposed Project would involve the construction of a sewer force main and pump station modifications in order to extend City sewer services to the approved NBC Coastal Campus. It does not require the installation of roads, fuel breaks, emergency water sources, power lines. This construction and operation of the existing City's sewer system would not exacerbate fire risk. There is **no impact**.

- 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?**

No Impact. Implementation of the Proposed Project would not expose people or structures to significant wildfire risks. The project location is not vulnerable to wildfire propagation, nor the spread of wildfire due to its geographic isolation. Downslope or downstream flooding or landslides subsequent to impacts from wildfires would not be anticipated as the topography in the project site is relatively flat and not sufficiently varied as to be vulnerable to such mass movement events. There is **no impact**.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant 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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.21.1 DISCUSSION

- 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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?**

Less than Significant Impact with Mitigation Incorporated. The Proposed Project involves the construction and operations of a sewer force main and pump station modifications in order to extend City sewer services to the approved NBC Coastal Campus. As described in this Initial Study, implementation of the Proposed Project has the potential to adversely affect previously undiscovered cultural resources, tribal cultural resources and/or human remains. With application

of standard best management practices, the mitigation measures recommended in this Initial Study, compliance with City, Navy, and Caltrans requirements, and adherence to applicable regulations the implementation of the Proposed Project would not (1) degrade the quality of the environment; (2) substantially reduce the habitat of fish or wildlife species; (3) cause a fish or wildlife population to drop below self-sustaining levels; (4) threaten to eliminate a plant or animal community; (5) reduce the number or restrict the range of a rare or endangered plant or animal; or (6) eliminate important examples of the major periods of California history.

- 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. The impacts of the Proposed Project are individually limited and not cumulatively considerable. The Proposed Project would extend sewer services to the previously approved NBC Coastal Campus, where the net change in overall wastewater demand is considered to be minimal and already supported by the City’s current sewer system. All environmental impacts that could occur as a result of the Proposed Project would be reduced to a less than significant level through implementation of the mitigation measures recommended in this Initial Study and, when viewed in conjunction with other closely related past, present or reasonably foreseeable future projects, would not substantially contribute to a cumulative effect on the environment.

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

Less than Significant Impact with Mitigation Incorporated. The purpose of the project is to facilitate the maximum beneficial public use of wastewater collection services within the City’s municipal service area by extending service to the previously approved NBC Coastal Campus. As described in this Initial Study, the project has been designed to avoid adverse impacts associated with aesthetics, traffic, use of the Bayshore Bikeway, and beach access; however, implementation of the Proposed Project could result in temporary noise and public service impacts during the construction period. Implementation of the mitigation measures recommended in this Initial Study, compliance with standard construction practices, City, Navy and Caltrans regulations, and adherence to applicable regulations, would ensure that environmental effects that would cause substantial direct or indirect adverse effects on human beings would be minimized.

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APPENDIX A

Biological Resources Memorandum



May 13, 2019

Kleinfelder, Inc.
550 West C Street, Suite 1200
San Diego, CA 92101

Subject: Biological Survey Memorandum for City of Coronado Pump Station and Sewer Force Main Alignment, Coronado, California

INTRODUCTION

Tierra Data, Inc. (TDI) is pleased to provide Kleinfelder, Inc., and the City of Coronado (City) with this Biological Survey Memorandum (memorandum) for the proposed project (Project) located in the City of Coronado (City) at the U.S. Naval Base Coronado (NBC) Silver Strand Training Complex South Coastal Campus (Coastal Campus) installation, and alongside the California State Route 75 (CA-75) right-of way at the Coronado Cays residential complex. The City is proposing a pump station upgrade and an approximate 2.9 mile-long, 8-inch diameter force main pipeline to convey wastewater from the Coastal Campus to the City's sewer system. The force main pipeline would span U.S. Navy and City properties, and the CA-75 right-of way.

This report was prepared to provide an analysis of potential constraints presented by the biological resources present or potentially occurring at the site. It describes the Project site's current biological conditions, vegetation communities, and notable plant and wildlife species observed or detected during the survey. The report also provides a review of existing environmental documents pertinent to the project area and California Natural Diversity Database (CNDDB) and U.S. Fish and Wildlife Service (USFWS) records of sensitive flora and fauna in the vicinity.

This memorandum describes observations of sensitive natural resources that currently exist in the Project footprint, and the potential for other resources to occur given limitations of the survey methods to detect them.

Existing natural resources, including vegetation, rare plants, and sensitive wildlife, at the NBC portion of the project area have previously been thoroughly studied, described and documented in an Environmental Impact Statement (EIS) and Section 7 consultation for the construction of the Coastal Campus facilities (currently on-going) (USDON 2015, USFWS 2014, 2016).

LOCATION AND SITE CHARACTERIZATION

The project footprint for the surveys described in this report occurs in two sections. The first section stretches 1.4 miles along the east side of CA-75 between the road/bike path and the Coronado Cays residential area (Figure 1), on the San Diego Bay side of the Silver Strand peninsula. The other segment runs along the western edge of the Coastal Campus Naval facility that overlooks the Pacific Ocean, and extends for 1.4 miles at the southern

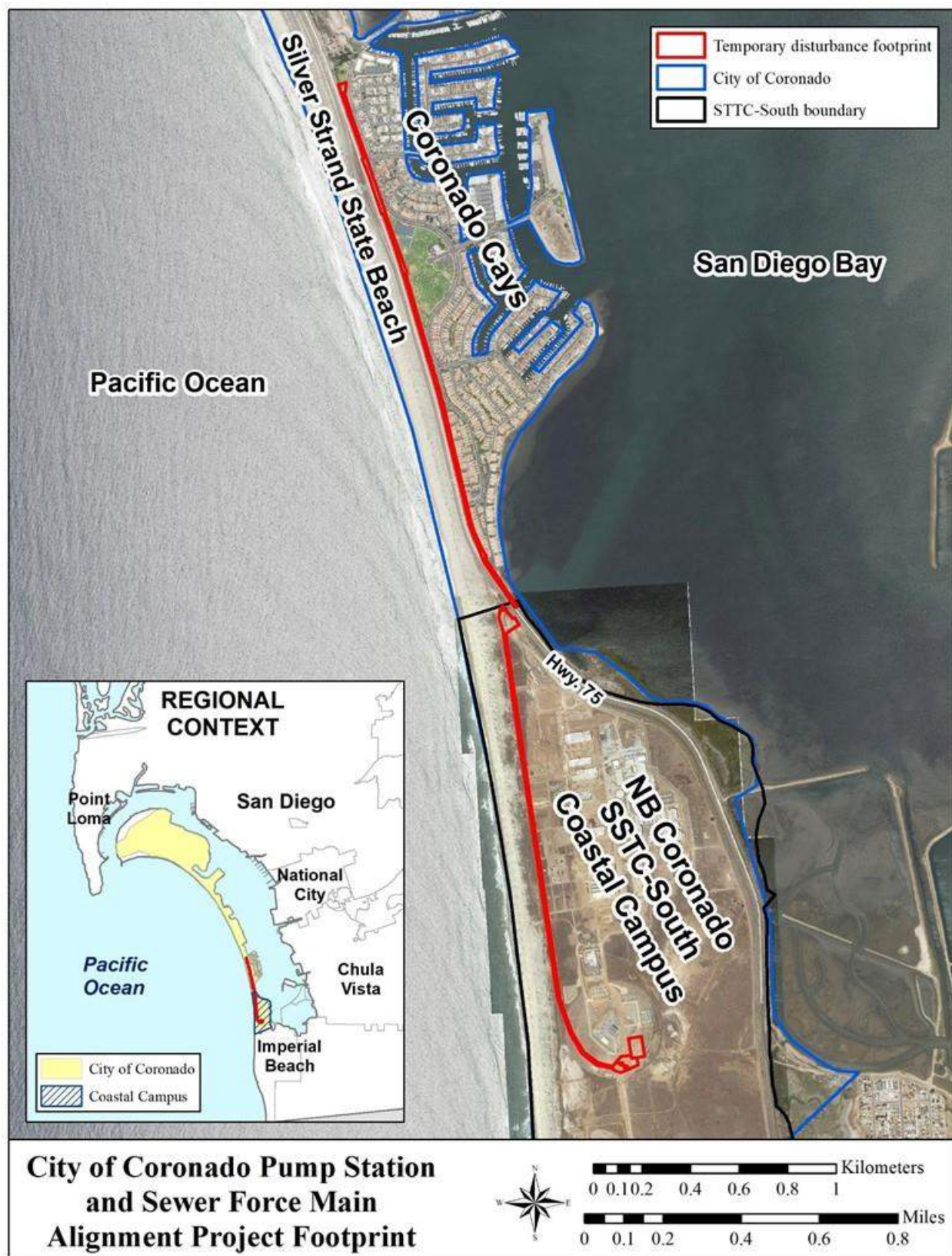


Figure 1. Project Footprint.

end of the Silver Strand peninsula (Figure 1). The two parts would be connected utilizing jack and bore methods to cross CA-75.

The Coronado Cays section of the project area is almost entirely developed or landscaped, including a public bicycle path and roadside buffer between the bike path and the housing area wall. At the southern end of the Coronado Cays alignment is a constructed drainage feature, including some placed riprap, which drains into a tidal mudflat of San Diego Bay. There is also a small section of native Maritime Succulent Scrub vegetation which borders on the project footprint but does not overlay it.

Similarly, the Coastal Campus section of the alignment is under extensive development by the Navy including clearing of vegetation. It adjoins a beach dune complex, which overlooks the beach below, and crosses portions of a former antenna field that had been previously graded. At the northern end of the Coastal Campus segment the alignment passes near coastal dune habitat (but does not encroach upon it).

The predominant character of the Project alignment reflects its urban, recreational, and military development context in a peninsular position between the Pacific Ocean coastal strand and the estuarine resources of San Diego Bay.

METHODS

Document and Record Review

NBC Coronado Coastal Campus EIS and Section 7 Consultations

NBC Coronado is currently constructing a Coastal Campus facility which will include 24 projects constructed over a 10-year period providing nearly 1.5 million square feet of facilities for administrative, operations, logistics, community support, and training (indoor and physical training). The EIS and Section 7 consultation documents for the Coastal Campus project (USDON 2015; USFWS 2014, 2016) provided useful background on this portion of the Project alignment by providing baseline observations on sensitive species occurrences before construction began. These documents also established conservation measures to help protect sensitive resources from impacts by the Coastal Campus construction. These measures were evaluated to assess their applicability to the sewer alignment construction.

City of Coronado Local Coastal Program Land Use Plan

The City of Coronado adopted a Local Coastal Program (LCP) Land Use Plan (Plan) in 1980 to implement and enforce the requirements of the California Coastal Act of 1976 (City of Coronado 1980). The LCP Plan included policies covering a wide range of topics, such as shoreline access, recreation facilities, and water and marine resources including three resource types designated as environmentally sensitive.

1. An Environmentally Sensitive Habitat Area is defined as any area where rare or important plants or animals, or their habitats, occur. These are identified in this LCP Plan as areas of undisturbed coastal dunes such as those along the Coastal Campus, a known stand of coast barrel cactus (*Ferocactus viridescens*), and the vernal pools of the Coastal Campus. Policy is to protect against any significant disruption of habitat values in environmentally sensitive habitat areas; and encourage mitigation of adverse environmental impacts resultant within such areas from permitted development. Efforts improving the quality of such habitat shall be encouraged. Buffer areas near environmentally sensitive habitat areas are encouraged. Development in areas adjacent to environmentally sensitive habitat areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

2. Wetlands are defined as lands within the coastal zone which may be covered, periodically or permanently, with shallow water and include saltwater and freshwater marshes, swamps, mudflats, and fens. The Coronado LCP Plan designates as Wetlands those lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, swamps, mudflats and fens that occur in its jurisdiction, and lists several policies for protection of wetlands.
3. A Wildlife Preserve Modifying Zone as shown in the LCP's Figure 7, coinciding with the southern shoreline of the Coronado Cays residential development and crossing CA-75 at that point.

Multiple Species Conservation Program

The City enrolled in the Multiple Species Conservation Program (MSCP), the local Natural Community Conservation Plan (NCCP) but has not pursued a Subarea Plan for implementation. The Multi-Habitat Planning Area (MHPA) that was identified in the MSCP Plan (City of San Diego 1998) for Coronado is all west of CA-75 along Silver Strand and subject to multi-agency protection. The Project would not conflict with the MSCP as the City has not adopted an NCCP Subarea Plan, and because no MHPA occurs east of CA-75 and military lands are excluded from MHPA's and are planned separately.

City of Coronado Street Tree Master Plan

The Street Tree Master Plan (City of Coronado 2016) provides a detailed plan for the management of the City's diverse urban forest, which includes over 9,000 trees and more than 140 species located in City parks, on street parkways, and the Municipal Golf Course. The plan addresses how the City's urban forest is to be managed through the combined efforts of the Department of Public Services & Engineering and the Street Tree Committee, a standing committee of the Coronado City Council.

The proposed work for this project may include the temporary removal of one Mexican fan palm (*Washingtonia robusta*) near the entrance to Coronado Cays. The tree will be extracted and set aside during construction and replaced when construction is completed.

CNDDB and USFWS Record Search

Before performing the field surveys, CNDDB and USFWS databases were searched for records of sensitive flora and fauna known to occur in the vicinity. All records occurring within a one-mile radius of the footprint were used to develop a list of species to focus searches for within or close to the project footprint, and to evaluate the habitat potential for sensitive species when they were not directly observed in the field.

Field Surveys

TDI Biologists Scott Snover and Elizabeth Kellogg visited the property on February 21, 2019 and spent approximately six hours (9:00 AM-3:00 PM) identifying vegetation communities, noting all plant and wildlife. The weather conditions were clear, cool (low 60s degrees Fahrenheit), and calm. To best cover the area in question and make allowances for possible shifts in the final sewer alignment, a 25-meter buffer along the currently proposed alignment on the NBC Coastal Campus was surveyed, as was the entire width of area between CA-75 and the wall of the Coronado Cays residential complex. Because pipeline installation beneath the Silver Strand State Beach land would not result in surface disturbance and this area is federally-designated Critical Habitat for the Western Snowy Plover with known nesting sites, a reconnaissance survey was not performed on this portion of the Proposed Project. Photographs of the Coronado Cays portion of the Project area were taken to document existing conditions (photography was not allowed on the NBC Coastal Campus). The field team used maps with high resolution aerial photographs on which to draw vegetation boundaries and note locations of sensitive resources. Where necessary, a global positioning system (GPS) unit was used to record coordinates of observations that could

not be accurately placed on the field maps. Nomenclature for the vegetation mapping was consistent with the Holland Vegetation Classification System (Holland 1986)) as amended (Oberbauer et al. 2008). Plant species nomenclature was consistent with the Jepson Manual 2nd Edition (Baldwin et al. 2012).

When the project plans were later revised, a small (175 meter) section of the new alignment was outside of the area surveyed in February. A second field visit took place with TDI Biologist Scott Snover visiting the added area on April 24, 2019 and spending approximately one half hour (9:00 AM-9:30 AM) identifying vegetation communities and noting all plant and wildlife species observed.

RESULTS

Document and Record Review

NBC Coronado Coastal Campus EIS and Section 7 Consultations

Sensitive Species

The EIS and Section 7 documents identify several sensitive species as occurring within or adjacent to the Coastal Campus property (Table 1). One of the species, Nuttall's acmispon (*Acmispon prostrates*) was observed within the project footprint during the February survey and would be expected to be subject to direct impacts from project activities. A second species Coast woollyheads (*Nemacaulis denudata* var. *denudata*) was observed north of the Coastal Campus during the April survey, but are not within the direct footprint of the project and are protected by the Naval facility fencing.

Table 1. Sensitive plant and wildlife species known to occur at the Coastal Campus as identified by the EIS and Section 7 documents (USDON 2015; USFWS 2014, 2016).

Common Name	Species Name	Status	Proximity to Project Area
<i>Sensitive Plant Species Known to Occur at SSTC-South</i>			
California boxthorn	<i>Lycium californicum</i>	CRPR 4.2	Several individuals occur in scattered locations at the Coastal Campus. One occurs in the vicinity of the sewer alignment, but lies on the outside of the perimeter fencing and would not be impacted by the project. Several individuals occur east of the bicycle path in the Maritime Succulent Scrub that are unlikely to be impacted by the project.
Coast woolly heads	<i>Nemacaulis denudata</i> var. <i>denudata</i>	CRPR 1B.2	Occurs on the coastal dunes west and north of the Coastal Campus. While a some of the locations indicated by the EIS are in fairly close proximity to the project (<50 m), none were observed during the February 2019 survey. This may have been due to seasonal timing of the survey, as this plant is opportunistic and annual in its life history. The presence of Nuttall's acmispon, which has similar habitat needs, may indicate a high probability of the coast woolly-heads being present as well, but they may not be visible until later in the year. Numerous plants occur on the dune habitat north of the Coastal Campus, outside fo the facilty fencing.
Nuttall's acmispon	<i>Acmispon prostrates</i>	CRPR 1B.1	Occurs within project footprint. Many plants observed in the disturbed habitat between the dirt road and ice plant mats. Direct impacts to these plants would be expected to occur through excavation of the sewer alignment.
Orcutt's pincushion	<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	CRPR 1B.1	EIS identifies several locations which appear to be within or adjacent the project footprint. None were observed during the February 2019 survey. No impacts from project activities.
Palmer's frankenia	<i>Frankenia palmeri</i>	CRPR 2.1	Occurs at southern end of the Coastal Campus, well away from the project footprint. No impacts from project activities. Observed on the east side of CA-75 in close proximity to the project alignment.

Common Name	Species Name	Status	Proximity to Project Area
Red sand verberna	<i>Abronia maritima</i>	CRPR 4.2	Occurs on dunes along the west side of the Coastal Campus. Potential to occur in the project area is high, but none were observed. No impacts from project activities.
Salt marsh bird's beak	<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	FE, SE	Occurs at the south end of the Coastal Campus. No impacts from project activities.
San Diego barrel cactus	<i>Ferocactus viridescens</i>	CRPP 2.1	Occurs western portion of the Coastal Campus well away from the project footprint. No impacts from project activities.
Southwestern spiny rush	<i>Juncus acutus</i> var. <i>leopoldii</i>	CRPR 4.2	Occurs at southern end of the Coastal Campus, with the northernmost individual approximately 50 meters west of the project footprint (this individual was not noted during the 2019 survey). A second patch of spiny rush occurs at the north end of the Coastal Campus, but no ground disturbances are anticipated in that location. No impacts from project activities.
<i>Sensitive Wildlife Species Known to Occur at the Coastal Campus</i>			
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	FE	Occurs at the south end of the Coastal Campus. No direct impacts from project activities are anticipated, however conservation measures for avoiding indirect impacts are recommended, due to proximity of an occupied pool at the southern end of the project footprint. Critical Habitat for the species occurs at the Coastal Campus but lies south of the project footprint and would not be impacted by the project.
Light-footed Ridgway's rail	<i>Rallus obsoletus levipes</i>	FE	Occurs on opposite side of property. No impacts from project activities.
Western snowy plover	<i>Charadrius nivosus nivosus</i>	FT	Nests on the Silver Strand beaches and dunes west of the Coastal Campus. Locations indicated in the EIS are at least 50 meters west of the project alignment and the Coastal Campus perimeter fence lies in between. The project would not directly impact the plover nesting areas, but conservation measures for avoiding indirect impacts are recommended. Critical Habitat for the species occurs on the Silver Strand State Beach to the north of the Coastal Campus but would not be impacted by the project.

Conservation Measures

Of the 38 conservation measures set forth in the EIS and 38 measures in Section 7 documents (many of the measures in both sets of measures are identical), 24 appear to apply to the pump station and sewer alignment construction (see Table A-1 in Appendix A). The other measures not shown in the table do not appear to directly relate to the current project. For instance, several apply specifically to construction of the buildings and other infrastructure of the NBC Coastal Campus.

City of Coronado Local Coastal Program Land Use Plan

This LCP Plan adopted environmentally sensitive habitat areas which appear to lie within or in close proximity to the project footprint. The largest is a Wildlife Preserve Modifying Zone which encompasses all of the dunes, vernal pool and scrub areas of NBC Coastal Campus and a small piece of land at the southern end of the Coronado Cays which may or may not be part of the footprint (the maps in the Plan are not sufficiently detailed to enable a positive determination). The intent of this zone is to protect and preserve valuable and unique resources within its boundaries. The second area is a smaller Resource Protection Modifying Zone, which appears to include the same area at the south end of the Coronado Cays. This zone provides a buffer surrounding public beaches, parks, and natural areas for the purpose of ensuring that private development surrounding the zone do not adversely impact it.

Additionally, the southern terminus of the proposed sewer line avoids a drainage which meets the definition of a Wetland as described in the LCP Plan, and is described below.

CNDDDB and USFWS Record Search

Tables B-1 and B-2 in Appendix B present an assessment of sensitive plant and animal species known to occur within one mile of the project footprint and their potential to occur within the footprint. Most of the species are unlikely to occur within project footprint or be impacted by it in any way due to the highly modified and degraded habitat conditions that exist. Many of the records represent historic observations and/or vague geographic descriptions such that polygons in the databases encompass most or all of the Coronado peninsula rather than specific, verified locations.

Results of Field Survey

A total of 40 plant species were observed during the survey (Table C-1 in Appendix C), nearly half of which are non-native and several are listed on the California Invasive Plant Council (Cal-IPC) list of invasive plants. Some of the native species (e.g. beach bur [*Ambrosia chamissonis*]) are represented by one or few individuals in openings in the otherwise dominant non-native sea fig (*Carpobrotus chilensis*).

Few wildlife species were observed, primarily side-blotch lizards (*Uta stansburiana*) and birds flying overhead such as seagulls and crows.

Vegetation Communities

The Coronado Cays section of the project is almost entirely developed for roads, an asphalt bicycle path, residential housing, or landscaping with non-native horticultural species (Photo 1; Figures 2 and 3). The project may include the temporary removal of one Mexican fan palm near the entrance to Coronado Cays. Ice plant mats cover much of the undeveloped areas at both the Coastal Campus and Coronado Cays where the vegetation is a near monoculture of sea fig with a few other, mostly non-native species, in low numbers. As a result, there is little area for native species to occur, primarily in gaps in the ice plant mats or between the bicycle path and CA-75 which supports some native shrubs (primarily coastal goldenbush [*Isocoma menziesii* var. *vernonioides*]).

Two areas of predominantly native vegetation were identified at the Coronado Cays section of the project footprint. The first occurs at the southern end of the Coronado Cays where there is a narrow drainage feature that supports Southern Coastal Salt Marsh (Photo 2) including pickleweed (*Salicornia bigelovii*), alkali heath (*Frankenia salina*), and saltwort (*Batis maritima*). The feature is approximately 3 meters (9 feet) wide and 90 meters (295 feet) long. The project alignment runs along the bicycle path above and to the west of the feature but does not impact it.



Photo 1. (Left) Landscaping and bicycle path at the Coronado Cays area. (Right) Ice plant mats.



Photo 2. Pickleweed and alkali heath (Southern Coastal Salt Marsh) in saline feature at south end of Coronado Cays, (left) looking south from north end and (right) looking north from middle.

The second area of native vegetation lies south of the marsh area where a narrow strip of Maritime Succulent Scrub occurs between the bicycle path and the intertidal flats along the shoreline (Photo 4). This area is raised up from the intertidal beaches and mudflats of the shoreline and is dominated by coastal goldenbush, bush sunflower (*Encelia californica*), and coastal cholla (*Cylindropuntia prolifera*). The project alignment abuts but avoids this area.



Photo 3. Maritime Succulent Scrub between the public bicycle path and San Diego Bay shore.

At the Coastal Campus, the project area is predominantly developed or under construction by the U.S. Navy (Figures 4 and 5). What little vegetation remains is almost entirely comprised of ice plant mats. A narrow strip of disturbed soils between the dirt road on the east edge of the site and the ice plant mats is the only area where native plants occur sparsely among a variety of non-native weeds. At the northern end of the Coastal Campus section, a small area of Southern Foredune habitat occurs (Photo 5), which is dominated by coastal goldenbush and the non-native European searocket (*Cakile maritima*). Numerous individuals of coast woolly heads occur in the area, separated from the actual work area by chain link fencing.



Photo 4. Southern Foredune area at the northern end of the Coastal Campus.

Table B-3 in Appendix B presents a list of all plant species observed during the field survey.

Sensitive Plant Species Observed

Three sensitive plant species were detected during the February survey:

- Nuttall's acmispon (*Acmispon prostratus*)
- Coast woolly heads (*Nemacaulis denudata* var. *denudata*)
- Palmer's frankenia (*Frankenia palmeri*)
- Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*)
- Red sand verbena (*Abronia maritima*)
- California boxthorn (*Lycium californicum*)

Nuttall's acmispon, which carries a California Rare Plant Rank (CRPR) sensitivity status of 1B.1, occurs in many areas on the Coastal Campus in the disturbed soils between the dirt road and ice plant mats (Figures 4 and 5). The plants ranged from as small as a few centimeters in diameter to up to a meter and at least 200-300 plants were estimated to be present. Many of these plants lie within or in close proximity to the proposed footprint. An additional occurrence of four plants was found at the Coronado Cays area between the bicycle path and CA-75 (Figure 2).

Coast woolly heads, which carries a CRPR sensitivity status of 1B.2, occurs in the Southern Foredunes at the northern end of the Coastal Campus. Several dozen individuals were observed through the chain link fence which runs along two sides of the area (Photo 6). Only the basal leaves were evident during the April survey; no plants were flowering at the time. This area is unlikely to be impacted by the project.



Photo 5. Coast woolly heads in dune habitat north of the Coastal Campus (the black circle is highlighting three plants; many more are visible in the photo).

Palmer's frankenia was observed in the Maritime Succulent Scrub vegetation on the east side CA-75 between the bicycle path and the San Diego Bay shoreline (Photo 7). Approximately 25 individuals were observed and more may be present as the density of shrub growth limited the surveyor's ability to thoroughly search the area without trampling and damaging the vegetation. While the project alignment abuts this area, sensitive plants adjacent to the bicycle path are avoidable with routine measures such as flagging or temporary construction fencing.



Photo 6. Palmer's frankenia on the east side of CA-75.

Southwestern spiny rush, a CRPR 4.2 sensitive species, is also present at both sites. At the Coastal Campus, there is a large patch of spiny rush at the northern end of the property which contains at least several dozen plants (Figure 4). An exact count could not be made since the area is outside of the perimeter fencing and inaccessible. At the Coronado Cays, a total of 11 spiny rush plants occur scattered from the north to south ends (Photo 8; Figure 2 and 3). Most of these plants occur against the wall which separates the residential community from the highway and are outside of any impacts from the proposed project alignment.



Photo 7. Southwestern spiny rush at north end of Coronado Cays area.

Two individuals of red sand verbena, a CRPR 4.2 sensitive species, were found between the bicycle path and CA-75 in the Coronado Cays area (Photo 9; Figure 2). These plants are within the proposed footprint.

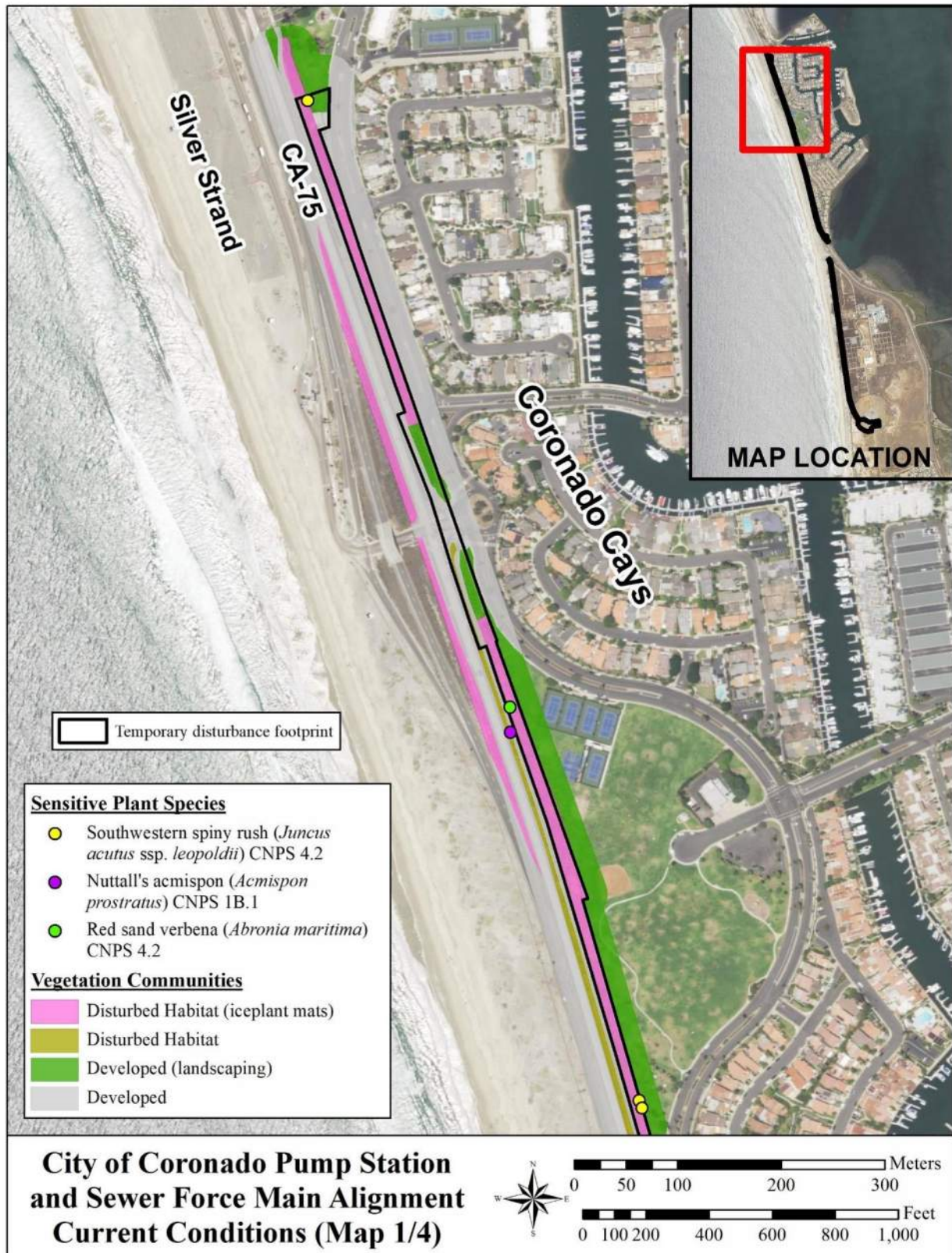


Figure 2. Vegetation Communities and Sensitive Resources: Coronado Cays, northern end.

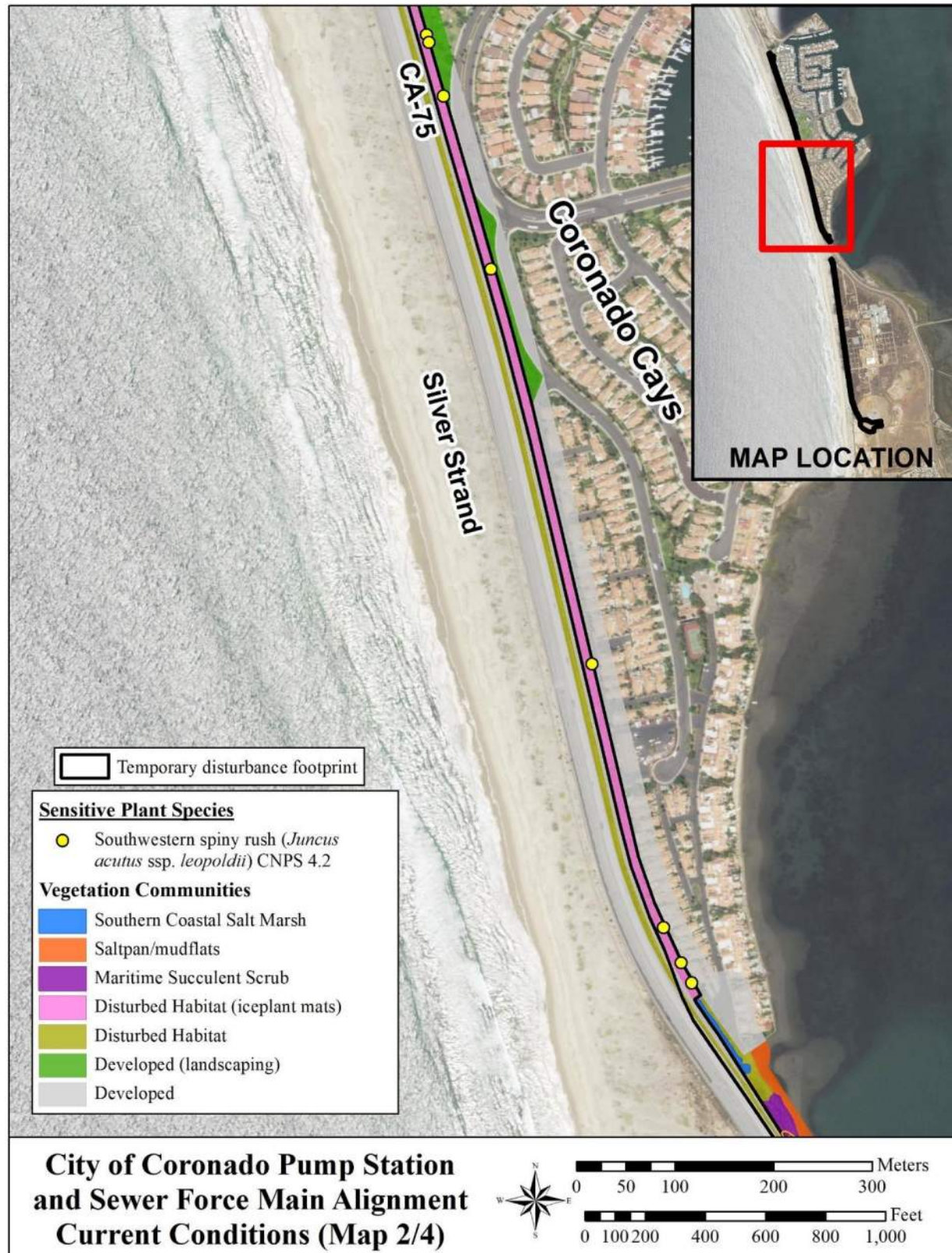


Figure 3. Vegetation Communities and Sensitive Resources: Coronado Cays, southern end.

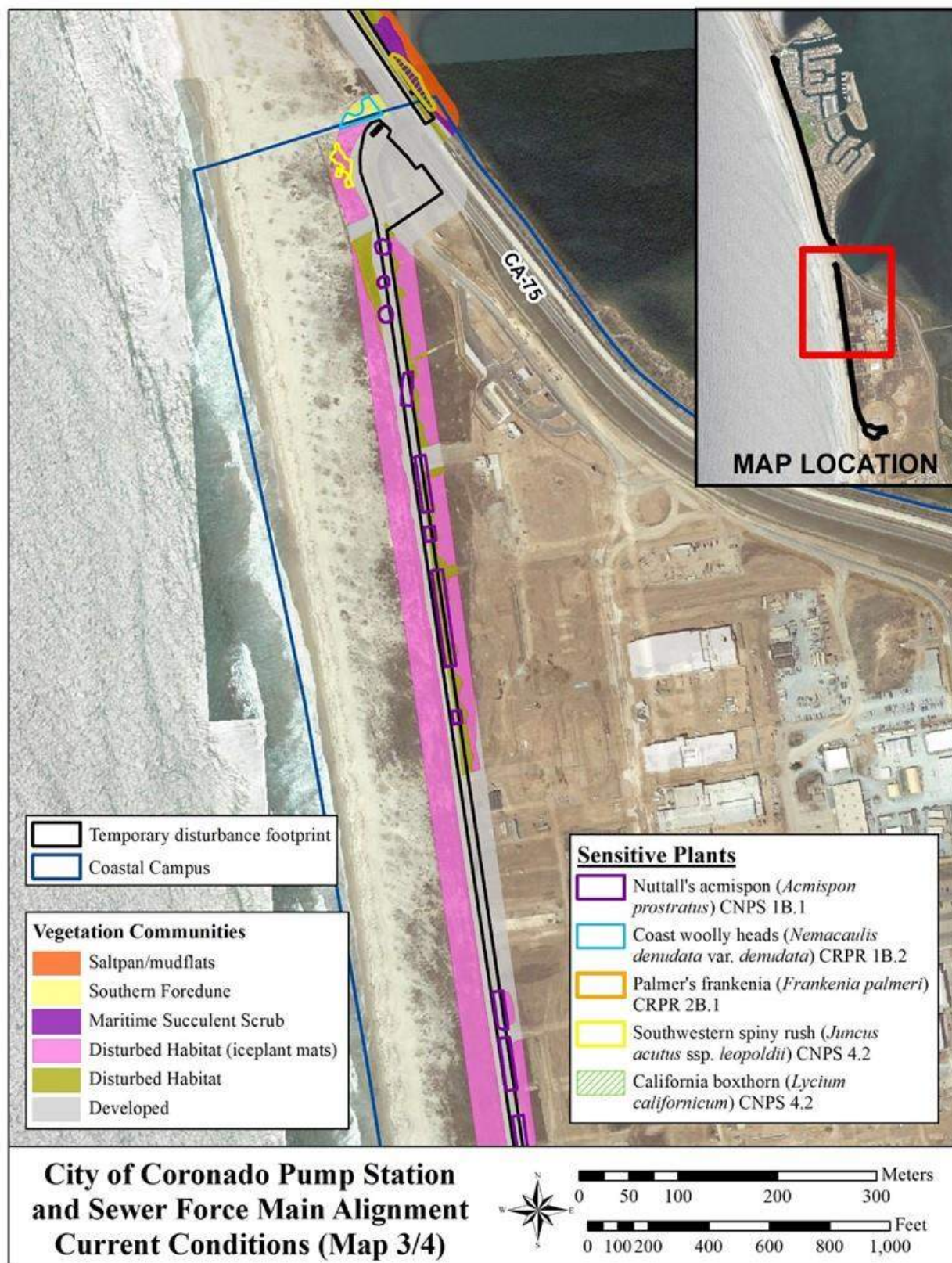


Figure 4. Vegetation Communities and Sensitive Resources: Coastal Campus, northern end.

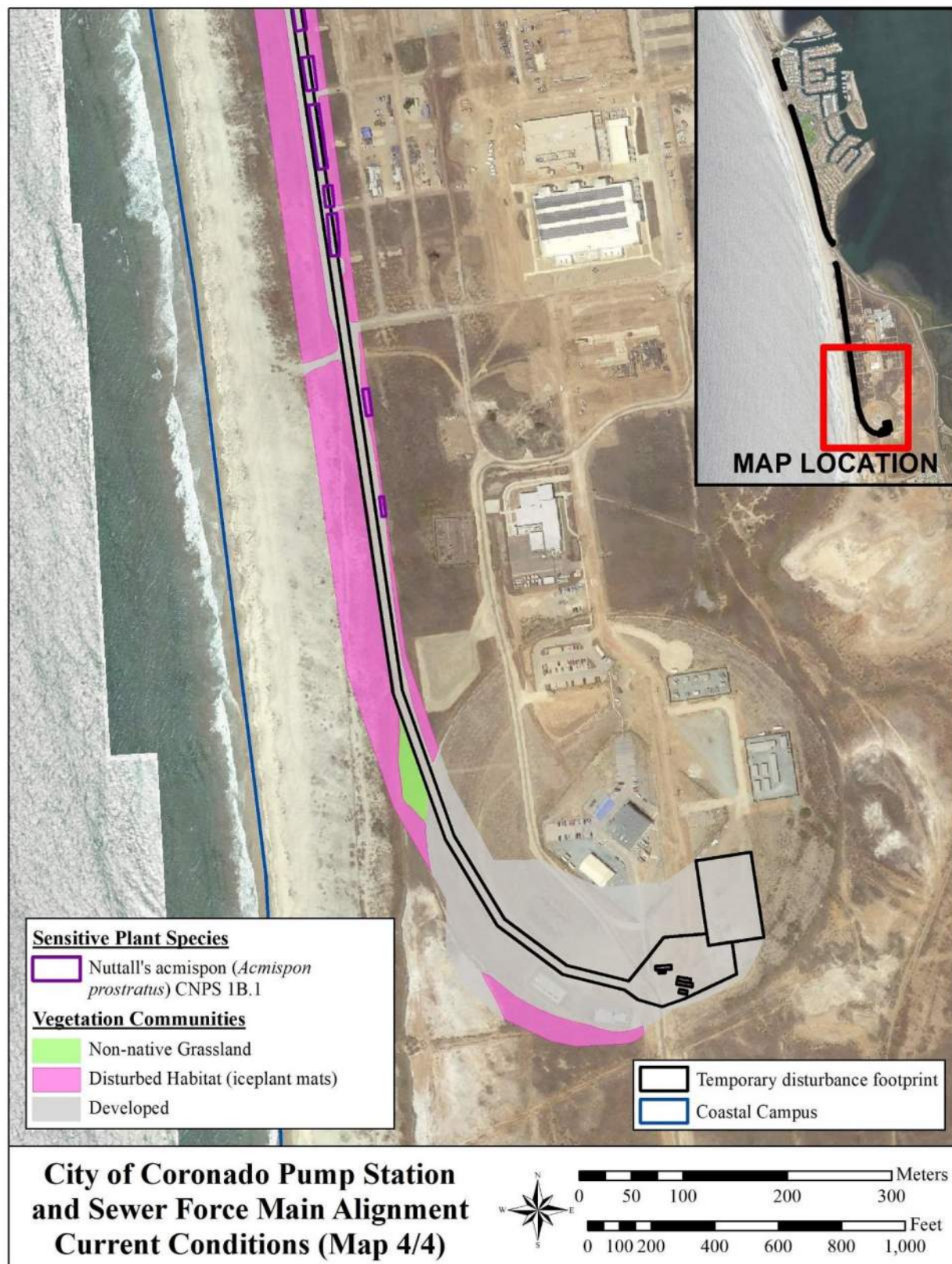


Figure 5. Vegetation Communities and Sensitive Resources: the Coastal Campus, southern end.



Photo 8. Red sand verbena at the Coronado Cays section of the project alignment.

Approximately 5-10 individuals of California boxthorn, a CRPR 4.2 sensitive species, were found between the bicycle path and the San Diego Bay shoreline in the Coronado Cays area (Figure 2). Although these plants are not within the proposed footprint, some of the plants were directly on the edge of the bicycle path and thus could potentially be in close proximity to work areas.

Sensitive Wildlife Species Habitat Assessment

Table 3 in Appendix B provides a habitat assessment for sensitive wildlife species known to occur in the vicinity. No sensitive wildlife species were detected during the survey. Given the degraded nature of much the project footprint, and the predominance of dense ice plant mats, the potential for sensitive wildlife within the project footprint is extremely low. At most the project area may serve for occasional foraging for birds such as peregrine falcons or by bat species, but long-term residence is unlikely.

CONCLUSION

Appendix G Section IV of the California Environmental Quality Act Guidelines, identifies six thresholds of significance for proposed projects:

- a. Have a substantial adverse effect, either directly or through habitat modifications, on any candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the USFWS or California Department of Fish and Wildlife (CDFW);
- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by USFWS or CDFW;
- c. Have a substantial adverse effect on federally protected wetlands as defined by Clean Water Act (CWA) Section 404;
- d. Interfere substantially with movement of any native resident, migratory fish or wildlife species, or established native resident or migratory wildlife corridors; or impede use of native wildlife nursery sites;
- e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- f. Conflict with the provisions of an adopted Habitat Conservation Plan, NCCP, or other approved local, regional, or state conservation plan.

Since the project alignment crosses little native vegetation, the overall impacts to natural resources resulting from the project are expected to be minimal; for instance, temporary measures could be taken to demarcate the edges of the work area that abut the Maritime Succulent Scrub age to help avoid inadvertent encroachment during construction. One exception to this would be to the Nuttall's acmispon which occurs in the Coastal Campus portion of the project footprint (the four Nuttall's acmispon plants seen at the Coronado Cays portion are on the opposite side of the bicycle path from the footprint and thus are unlikely to be affected). Potential impacts to Nuttall's acmispon plants would not be substantial and no other listed, candidate, sensitive, or special status species are likely to be affected. However, two plant species recognized to be of limited distribution could be affected. Two individual red sand verbena plants lie within the footprint and would likely be impacted. Most of the southwestern spiny rush plants seen along the Coronado Cays are positioned against the wall along the western edge of the residential housing area and would not likely be affected. However, three to four of the plants are further out from the wall and may be impacted.

On the Coastal Campus portion of the work, avoidance of the breeding season of the western snowy plover prevents impacts to that species. On the Coronado Cays portion, where construction is allowed during the breeding season, the planned temporary fencing (six-foot high, chain link) could provide temporary supplemental perches for birds of prey and predatory birds near habitat associated with the western snowy plover. This could be an indirect effect by increasing opportunity for predation of western snowy plover nests and young; however, Critical Habitat for the species is separated by CA-75, and there is little to no line-of-sight visibility for predatory birds to see vulnerable eggs or chicks. Therefore, no impact is expected.

Some larger shrubs and palm trees in the Coronado Cays portion could provide nesting habitat for birds. Direct impacts to nesting birds during the bird breeding season (February 15 through September 15) would be in violation of the federal Migratory Bird Treaty Act and Sections 3503, 3503.5, 3505, and 3513 of the California Fish and Game (CFG) Code unless avoided. Under the CFG Code, it is unlawful to take, possess, or needlessly destroy the active nest or eggs of any bird. The CFG Code defines "take" as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill. Besides the small shrubs and palm trees, nesting birds are associated with overhanging ornamental shrubs and trees from residences, openings in the ice plant patches, and small patches of other low vegetation. Species include bushtit (*Psaltirparus minimus*), house finch (*Haemorhous mexicanus*), savannah sparrow (*Passerculus sandwichensis*), hooded oriole (in the palm trees) (*Icterus cucullatus*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), and killdeer (*Charadrius vociferus*). No work would occur during the breeding season on the Coastal Campus portion of the Project. On the Coronado Cays portion of the Proposed Project nest disturbance is not expected because no large shrubs, only ice plant mats, and due to the ambient background condition of the project environment being in a highway right of way with high noise levels, as well as pedestrian, bicycle, and highway traffic. Work that may temporarily uproot the Mexican fan palm would not occur during the migratory bird breeding season.

Although the Southern Coastal Salt Marsh may be a protected wetland pursuant to Section 404 of the CWA, CFG Code 1602, and the City of Coronado LCP Plan, the project alignment avoids impacts to this area by following the bike path northward to safely bypass the salt marsh area without altering the vegetation, elevation, or hydrology of the potential jurisdictional drainage. No U.S. Army Corps of Engineers (USACE) notification or permit is expected to be needed for the work to proceed.

A plan is recommended to take certain measures to prevent any unintended impacts, such as temporary construction fencing to prevent accidental encroachment or measures to prevent deposition of soil into the drainage feature. In no case would soil stabilization be delayed until the project is completed.

The project would not interfere with any wildlife corridors being adjacent to a bike path and CA-75 or any nursery sites as few animals use the Project alignment area. Compliance with the LCP Plan would avoid conflicts with local policies, and as the City has not adopted an NCCP Subarea Plan, and because no MHPA occurs east of CA-75, and military lands excluded from MHPA's are planned separately, no conflicts would occur.

In accordance with the City's Street Tree Master Plan, the temporary removal of a Mexican fan palm at the entrance to Coronado Cays would be undertaken in coordination with the City Council of Coronado's Street Tree Committee.

The City may be required to incorporate additional measures to comply with the National Environmental Policy Act, permitting, and/or Navy licensing requirements, which would further reduce any environmental impacts to biological resources during the implementation of the Proposed Project.

If you have any questions, please contact Elizabeth Kellogg at liz@tierradata.com or by phone at (760) 749-2247.

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APPENDIX A

The following Conservation Measures are described in the 2014 and 2016 Section 7 Consultations and the 2015 EIS. (USFWS 2014, 2016; USDON 2015).

Table A-1. Conservation Measures.

EIS 2015	Section 7 2014, 2016	Conservation Measure ¹
General Conservation Measures		
-	CM 3	All construction will take place within the project footprint defined in the BA contractor(s) will be informed that construction activity must be confined within established limits.
B-4	-	Impact avoidance and minimization planning measures adopted as part of the Proposed Action include worker environmental protection briefings, signs, markers, protective fencing, exclusion fencing, biological monitoring, erosion and sedimentation prevention, noise baffling, and restoration of native plant community and cover type areas temporarily affected.
B-5	CM-5	A qualified project biologist contracted by the Navy and approved by NBC NRO will oversee the avoidance and minimization measures, including any required surveys and monitoring activities.
B-6	CM-7	The project biologist will monitor construction activities to ensure compliance with required impact avoidance and minimization measures, and will keep the project manager and NBC NRO informed about construction activities that may threaten sensitive biological resources.
B-7	CM-8	All construction and maintenance personnel will receive environmental training from 1 the project biologist of NBC NRO before commencing work.
B-8	CM-9	The project will have a designated footprint and the project biologist will ensure that all construction personnel remain within the limits of the project footprint for the duration of project activities.
B-9	CM-10	Where adjacent to native plant communities and determined necessary by NBC NRO, construction fencing will be installed around the outer perimeter of the project limits to reduce human disturbance of these adjacent natural habitats.
B-10	CM-6	Standard BMPs to control dust, such as watering the site during construction, covering truckloads and stockpiles, and applying soil stabilizers on unpaved access roads will be implemented during construction.
B-11	CM-5	The project has a goal of zero storm water discharge (capture 100 percent of the discharge). However, if this goal cannot be achieved, runoff during construction and postconstruction operations will be minimized and treated through measures that include, but are not limited to, preparing a SWPPP; lying soil stabilizers or other measures for erosion control on unpaved access roads; and implementing LID features.
B-13	-	Construction work will generally take place during the daytime. In the event that nighttime construction work is required, prior approval will be required by NBC NRO. Any artificial lighting required will be shielded away from native vegetation communities, beaches, and CA-75.
B-17	-	If it is determined that a listed species is harmed, the action and condition of the individual plants or animals affected will be reported immediately to NBC NRO and any necessary follow-up steps will be implemented (such as taking the injured animal to an approved wildlife rehabilitation facility, and NBC NRO will notify USFWS).
B-18	CM-13	To comply with EO 13112, National Invasive Species Act, Federal Noxious Weed Act, and Noxious Plant Control Act, construction contractors will ensure that all equipment and/or vehicles will be clean and free of mud, dirt, and weeds before entering the Coastal Campus .

¹ The full text of these measures can be viewed in the original source documents.

EIS 2015	Section 7 2014, 2016	Conservation Measure¹
B-19	-	All proposed planting palettes, landscape designs, and installation of trees will be submitted for review and approval by NBC NRO and Navy Landscape Architect and will use native, drought- tolerant plants appropriate for Coastal Campus, NAB Coronado, and NASNI.
<i>San Diego Fairy Shrimp Conservation Measures</i>		
B-23	CM-16	Avoidance and minimization of indirect impacts to San Diego fairy shrimp-occupied habitat adjacent to the Proposed Action will occur through BMPs for dust and erosion control.
B-24	CM-17	To avoid impacts to San Diego fairy shrimp-occupied habitat, known occurrences within 500 feet of project boundaries will be identified on project demolition and construction plans and, if determined necessary by NBC NRO or the project biologist, occupied habitat will be clearly indicated in the field with markers or exclusion fencing.
B-25	CM-18	To avoid impacts to vernal pools resulting from unauthorized trespass during construction, operation, and maintenance activities, signs and/or gates will be installed at all locations that
-	CM 34	Exclusionary fencing and appropriate BMPs will be installed between the work area and the portion of Pool 20 that will be avoided to prevent additional impacts to the pool.
<i>Western Snowy Plover Conservation Measures</i>		
B-26	CM-19	The Navy will distribute educational materials and/or install interpretive panels to inform military and civilian personnel of the sensitive species on the Coastal Campus and Mitigation Measures and Impact Avoidance and Minimization Measures to avoid impacts (e.g., no recreational use of the beach meaning activities not associated with approved training, is permitted).
B-27	CM-20	Construction during the breeding season within 300 feet of Western Snowy Plover nesting locations will be avoided to the maximum extent feasible. The nesting season occurs from approximately 1 March through 15 September, but varies depending on species and environmental conditions for each year.
B-28	CM-21	In the event that nighttime construction work is required, prior approval will be required by NBC NRO. Any artificial lighting required will be shielded away from native vegetation communities, beaches, and CA-75.
B-30	CM-24	During construction, equipment (such as cranes) that could provide temporary supplemental perches for birds of prey and predatory birds will be staged and stored when not in use at least 500 feet away (inside the Proposed Action footprint) from habitat occupied by Western Snowy Plover.
-	CM 37	For construction projects that will occur within areas of potential use by plovers (within the southern part of the Coastal Campus , including P911, P915, P920, P949, P950, P951, P967, and utility work), silt fencing (or other similar fine-mesh or exclusion material) will be installed along the perimeter construction fencing in order to deter plover adults and prevent chicks from entering the construction site.
-	CM 38	For construction that will occur within areas of potential use by plovers (see CM 37), the project biologist will monitor for plovers inside the fenceline of the Coastal Campus within 500 feet of active construction at least once a week.
<i>Migratory Bird Conservation Measures</i>		
B-38	-	All vegetation clearing required by a project will occur outside of the nesting season for migratory bird species (15 February through 31 August). If avoiding the nesting season is not possible, pre-clearance nesting surveys will be conducted by the project biologist to determine whether any active nests are located within the area and to ensure that work will avoid impacting active nests.

APPENDIX B

Table B-1. Sensitive plant species present within 1-mile of the project footprint (Data source: CNDDDB) and their potential to occur within the project footprint.

Common Name	Species Name	Status	Potential to Occur
Asteraceae			
Beach goldenaster	<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>	1B.1	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Chaparral ragwort	<i>Senecio aphanactis</i>	2B.2	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Decumbent goldenbush	<i>Isocoma menziesii</i> var. <i>decumbens</i>	1B.2	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Orcutt's pincushion	<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	1B.1	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Boraginaceae			
Brand's star phacelia	<i>Phacelia stellaris</i>	1B.1	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Cactaceae			
San Diego barrel cactus	<i>Ferocactus viridescens</i>	2B.1	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Snake cholla	<i>Cylindropuntia californica</i> var. <i>californica</i>	1B.1	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Chenopodiaceae			
Aphanisma	<i>Aphanisma blitoides</i>	1B.2	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Coulter's saltbush	<i>Atriplex coulteri</i>	1B.2	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Estuary seablite	<i>Suaeda esteroa</i>	1B.2	Moderate. Small area of coastal salt marsh at south end of Coronado Cays. No plants observed.

Common Name	Species Name	Status	Potential to Occur
Crassulaceae			
Blochman's dudleya	<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	1B.1	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Variegated dudleya	<i>Dudleya variegata</i>	1B.2	Low. Minimal scrub habitat occurs between the bike path and CA-75. Habitat is highly disturbed. No plants observed.
Fabaceae			
Nuttall's acmispon	<i>Acmispon prostratus</i>	1B.1	Presence confirmed at the Coastal Campus and Coronado Cays.
Juncaceae			
Southwestern spiny rush	<i>Juncus acutus</i> ssp. <i>leopoldii</i>	4.2	Presence confirmed at the Coastal Campus and Coronado Cays.
Nyctaginaceae			
Red sand verbena	<i>Abronia maritima</i>	4.2	Presence confirmed at the Coastal Campus.
Orobanchaceae			
Salt marsh bird's-beak	<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	FE, SE, 1B.2	Known to occur at the Coastal Campus, but well south of the project area. No habitat within project footprint.
Short-lobed broomrape	<i>Orobanche parishii</i> ssp. <i>brachyloba</i>	4.2	Low. Minimal habitat present, but host plant is present along CA-75. Area is highly disturbed. No plants observed.
Polygonaceae			
Coast woolly-heads	<i>Nemacaulis denudata</i> var. <i>denudata</i>	1B.2	Moderate. No dune habitat present within project footprint. However, species tends to favor similar habitats as Nuttall's acmispon, which does occur in the footprint. No plants were observed, but seasonal timing of survey may be a factor.

Table B-2. Sensitive animal species present within one mile of the project footprint (Data source: CNDDB) and their potential to occur within the project footprint.

Common Name	Species Name	Status	Potential to Occur
Invertebrates			
Globose dune beetle	<i>Coelus globosus</i>	G1G2 S1S2, IUCN-VU	Low. Known to occur on the dunes of Silver Strand State Beach. No dune habitat within project footprint.
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	FE	Low. Known to occur at the Coastal Campus, south of project footprint. No vernal pools within project area.
Sandy beach tiger beetle	<i>Cicindela hirticollis gravida</i>	G5S2	None. Known to occur on the beaches on the west side of the Coastal Campus. No habitat present within project footprint.

Common Name	Species Name	Status	Potential to Occur
Western beach tiger beetle	<i>Cicindela latesignata</i>	G2G4S1	None. Known to occur on the beaches on the west side of the Coastal Campus. No habitat present within project footprint.
Western tidal-flat tiger beetle	<i>Cicindela gabbii</i>	G2G4 S1	None. No tidal flats present within the project footprint.
Birds			
American peregrine falcon	<i>Falco peregrinus anatum</i>	BCC	Low. Observed foraging in the vicinity, but no nesting habitat present within project footprint.
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	SE	Low. Small area of salt marsh habitat present at south end of Coronado Cays, but minimal nesting habitat present. No birds observed.
California least tern	<i>Sternula antillarum browni</i>	FE, SE	None. Known to nest on Silver Strand State Beach but not at the Coastal Campus. No nesting habitat at Coronado Cays. May be an occasional flyover, but no open water foraging areas within project area.
Light-footed Ridgway's rail	<i>Rallus longirostris levipes</i>	FE, SE	None. No cordgrass habitat within project footprint.
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT	Low. Known to nest on the beaches on the west side of the Coastal Campus, but not within the project footprint.
Mammals			
Hoary bat	<i>Lasiurus cinereus</i>	SSC, G5 S4	Low. No roosting structures within project area. May be used for occasional foraging.
Mexican long-tongued bat	<i>Choeronycteris mexicana</i>	SSC, IUCN-NT, G4 S1	Low. No roosting structures within project area. May be used for occasional foraging.

STATUS CODES

FE: FEDERALLY ENDANGERED,

FT: FEDERALLY THREATENED

SE: STATE ENDANGERED

BCC: BIRDS OF CONSERVATION CONCERN

SSC: SPECIES OF SPECIAL CONCERN

IUCN RED LIST CATEGORIES

NT: NEAR THREATENED

VU: VULNERABLE

Global/State Rankings

G: Global, S: State

1: Critically Imperiled, 2: Imperiled, 3: Vulnerable, 4:

Apparently Secure. 5: Secure

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APPENDIX C

Table C-1. Plant species seen during February 2019 field surveys.

Family	Species Name	Common Name	Status	Coastal Campus	Coronado Cays
MONOCOTS					
Araceae	<i>Washingtonia robusta</i>	Mexican fan palm			x
Juncaceae	<i>Juncus acutus</i> ssp. <i>leopoldii</i>	Southwestern spiny rush	CRPR 4.2	x	x
Poaceae	<i>Bromus</i> sp. (<i>diandrus</i> , <i>madritensis</i>)	Brome grasses	CalIPC-H/M	x	x
Poaceae	<i>Distichlis littoralis</i>	Shore grass			x
Poaceae	<i>Distichlis spicata</i>	Salt grass		x	x
Poaceae	<i>Hordeum murinum</i>	Foxtail barley			x
DICOTS					
Aizoaceae	<i>Carpobrotus chilensis</i>	Sea fig	CalIPC-M	x	x
Aizoaceae	<i>Malephora crocea</i>	Coppery mesembryanthemum	CalIPC-W		x
Aizoaceae	<i>Mesembryanthemum crystallinum</i>	Crystalline ice plant	CalIPC-M	x	x
Anacardiaceae	<i>Rhus integrifolia</i>	Lemonade berry			x
Asteraceae	<i>Ambrosia chamissonis</i>	Beach bur			x
Asteraceae	<i>Cotula coronopifolia</i>	Brass buttons	CalIPC-L		x
Asteraceae	<i>Encelia californica</i>	Bush sunflower		x	x
Asteraceae	<i>Isocoma menziesii</i> var. <i>vernonioides</i>	Coastal goldenbush		x	x
Asteraceae	<i>Sonchus oleraceus</i>	Common sow thistle			x
Bataceae	<i>Batis maritima</i>	Saltwort			x
Boraginaceae	<i>Cryptantha</i> sp.	Cryptantha		x	
Boraginaceae	<i>Heliotropium curassavicum</i>	Chinese parsley		x	
Brassicaceae	<i>Cakile maritima</i>	European searocket	CalIPC-L	x	x
Cactaceae	<i>Cylindropuntia prolifera</i>	Coastal cholla			x
Caryophyllaceae	<i>Cardionema ramosissimum</i>	Sand mat		x	
Chenopodiaceae	<i>Atriplex watsonii</i>	Watson's saltbush			x
Chenopodiaceae	<i>Salicornia bigelovii</i>	Bigelow's pickleweed			x
Chenopodiaceae	<i>Salsola tragus</i>	Prickly Russian thistle	CalIPC-L	x	x
Fabaceae	<i>Acmispon glaber</i>	Deerweed		x	
Fabaceae	<i>Acmispon prostratus</i>	Nuttall's acmispon	CRPR 1B.1	x	x
Fabaceae	<i>Medicago polymorpha</i>	Bur clover	CalIPC-L		x
Frankeniaceae	<i>Frankenia palmeri</i>	Palmer's frankenia	CNPS 2B.1		x
Frankeniaceae	<i>Frankenia salina</i>	Alkali heath			x
Geraniaceae	<i>Erodium cicutarium</i>	Red stemmed filaree	CalIPC-L	x	x
Malvaceae	<i>Malva parviflora</i>	Cheeseweed mallow			x
Myrsinaceae	<i>Lysimachia arvensis</i>	Scarlet pimpernel		x	x
Nyctaginaceae	<i>Abronia maritima</i>	Red sand verbena	CRPR 4.2		x
Onagraceae	<i>Camissoniopsis cheiranthifolia</i>	Beach evening primrose		x	x

Family	Species Name	Common Name	Status	Coastal Campus	Coronado Cays
Oxalidaceae	<i>Oxalis pes-caprae</i>	Bermuda buttercup	CalIPC-M		x
Plumbaginaceae	<i>Limonium perezii</i>	Perez's sea lavender		x	x
Polygonaceae	<i>Emex spinosa</i>	Devil's thorn	CalIPC-M		x
Polygonaceae	<i>Nemacaulis denudata</i> var. <i>denudata</i>	Coast woolly heads	CRPR 1B.2	x	
Rosaceae	<i>Heteromeles arbutifolia</i>	Toyon			x
Scrophulariaceae	<i>Myoporum</i> sp.	Myoporum			x
Solanaceae	<i>Lycium californicum</i>	California boxthorn	CRPR 4.2		x

Status Codes:

CRPR (California Rare Plant Rank)

CRPR 1B.1: Rare, threatened, or endangered in CA and elsewhere.

CRPR 4.2: Limited distribution.

CalIPC (California Invasive Plant Council) Rating

CalIPC-W: These species have been assessed as posing a high risk of becoming invasive in the future in California.

CalIPC-L: Limited. These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score.

CalIPC-M: Moderate. These species have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure.

APPENDIX B

Cultural Resources Memorandum



May 14, 2019

Ms. Natalie Smith
Senior Environmental Planner
Kleinfelder
550 West C Street, Suite 1200
San Diego, California 92101

**RE: Archaeological Survey for the City of Coronado's Sewer Force Main Project,
Coronado, San Diego County, California (PanGIS Project 2019-01)**

Ms. Smith:

This letter report provides a summary of the cultural resources survey for the City of Coronado's Sewer Force Main Project that PanGIS, Inc. (PanGIS) provided for the City of Coronado, San Diego County, California (Figure 1). The survey consisted of 10- meter [m] spaced transects across the 1.4-mile long project. The project is within the right-of way of State Route (SR) 75, privately-owned land (surveyed herein), as well as the Silver Strand Training Complex (Navy) in the City of Coronado. Importantly, only the northern portion of the project required survey, as the Navy has already conducted survey of those portions of the project on their land (U.S. Navy 2015). For the portion of the project within the SR-75 right-of-way and private land within the City of Coronado, the purpose of this survey was to provide constraints information to assist the City of Coronado in its compliance with the California Environmental Quality Act (CEQA).

Description of Activity

As part of the construction of the Naval Base Coronado (NBC) Coastal Campus, a series of upgrades to the Navy's utility lines are necessary, including improvements to wastewater service. Because the NBC Coastal Campus is located entirely within the corporate limits of Coronado and its municipal service area, the City proposes to provide wastewater services in order to maximize the beneficial public use of its wastewater collection services.

The City of Coronado proposes to construct approximately 14,500 linear feet (LF) of 8-inch high-density polyethylene (HDPE) sewer force main and pump station modifications to include an odor control system in order to extend City sewer services to the approved Naval Base Coronado (NBC) Coastal Campus currently under construction at the existing Silver Strand Training Complex South (SSTC-South).

The conveyance system will be installed within the city limits of Coronado. The northern portion will parallel SR-75 and is shown on the POINT LOMA and IMPERIAL BEACH USGS 7.5' Quadrangles (Figure 2).

Reason for Review

PanGIS conducted a record search with the South Coastal Information Center (SCIC). Current site and previous project information available in the California Historical Resources Information System (CHRIS) Geographical Information System (GIS) inventory were also examined for known and recorded sites and previously-surveyed areas within the project vicinity. The SCIC record search identified nine sites within the project vicinity, two of which intersected the boundaries of the project Area of Potential Effect (APE) (Figure 3a - Confidential):

P-37-000058 / CA-SDI-58: This prehistoric campsite was first recorded and described by N.C. Nelson in 1967 as containing a hearth feature, several pieces of fire-affected rock (FAR), many pottery fragments, and some shell (Nelson 1967).

P-37-13073: This resource is the historic Coronado Railroad grade, which was first recorded by Don Laylander in 1993. The railroad was constructed in the late 1880s and has been labeled as the Coronado Belt Line, Coronado Railroad, San Diego Southern, San Diego & Southeastern, San Diego and Arizona – Southern Pacific Lines, and A T. & S. F. – San Diego and Arizona Eastern (Garcia-Herbst 2016).

A Sacred Lands File (SLF) search was conducted through the Native American Heritage Commission (NAHC) by the City of Coronado and U.S. Department of the Navy-NEPA. The SLF results were positive and the Lead Agencies were directed to contact the Kumeyaay Cultural Repatriation Committee for more information (NAHC 2018). PanGIS Senior Archaeologist Doug Mengers contacted Clint Linton, Director of Cultural Resources of the Kumeyaay Cultural Repatriation Committee, by phone on February 28, 2018. Mr. Linton indicated that there were no specific areas of concern within the project area, though the KCRC is concerned with the general area due to the presence of known human remains.

To prevent the unintentional disturbance of these resources, as well as any previously unknown cultural resources, PanGIS conducted an intensive pedestrian survey of the project area (Figure 3).

Fieldwork Results

PanGIS archaeologists Brenton E. Willhite and Benjamin Rolland conducted the intensive pedestrian survey on March 1, 2019. PanGIS Senior Archaeologist Douglas Mengers conducted follow-up survey on May 14, 2019, due to APE revisions. The APE parallels the Bayshore Bikeway and is framed by Silver Strand Boulevard to the west and Coronado Cays Boulevard to the east (Plate 1; Plate 2). Most of the surveyed area has been significantly impacted by modern landscaping, and ice plant (*Delosperma sp.*) covered vast portions of the area.

Visibility was remarkably low, as only small patches of soil were visible through the *Delosperma* plants (Plate 3). These small patches of soil were rife with stone cobbles, gravel, and non-archaeological shell. Other portions of the surveyed area included public

parks and roads.

The previously documented sites were not encountered during the pedestrian survey. However, two historic isolates were located within the project APE (COR-ISO-1, COR-ISO-2), and one historic isolate was recorded just outside the APE (COR-ISO-3):

COR-ISO-1: COR-ISO-1 is one colorless glass bottle fragment. The fragment is a thick neck / finish piece. It has a continuous thread closure, which came to prominence in the early 20th century.

COR-ISO-2: COR-ISO-2 is one aqua glass bottle fragment. The fragment is an Owens-Illinois bottle base. While the portion signifying the date and plant code is missing, an embossed “14 – a” next to the makers mark suggests that the bottle was for Pepsi, likely from the mid to late 1950s.

COR-ISO-3: Resource COR-ISO-3 consists of one colorless glass bottle fragment. The fragment is a Foster-Forbes bottle base. While embossing was heavily eroded and difficult to read, the maker’s mark was a stylized and encircled FF, which is that of Foster-Forbes. This style was common from 1942-1983.

Recommendations

As isolates, the resources recorded during the current survey (COR-ISO-1, COR-ISO-2, and COR-ISO-3) are not eligible for listing on the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), or the City of Coronado Historic Preservation Ordinance, and therefore do not qualify as historic resources under CEQA guidelines. In addition, no evidence of previously recorded resources in the survey area (P-37-000058 / CA-SDI-58 and P-37-13073) was observed during the survey.

No cultural resources or human remains are known to exist within the APE; however, there is a possibility of discovering unanticipated cultural resources or human remains during ground disturbance. This impact would be potentially significant. With implementation of Mitigation Measures CUL-1 and CUL-2, any impacts associated with discovery of cultural resources or human remains would reduce the level of impact to less than significant.

Mitigation Measure CUL-1: Halt Ground-Disturbing Construction Activities if Cultural Materials Are Discovered

The following measures shall be implemented to avoid or minimize potential impacts on cultural materials:

Where ground disturbing activities occur within the City right-of-way in native soils, where there is no evidence of extensive past ground disturbances, or where there is evidence that suggests materials of importance to tribal entities, a Native American tribal monitor and a qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists (36 CFR 61) will monitor ground-disturbing activities and/or the handling and placement of the material. Interested Native American

Tribes will be provided at least seven days' notice prior to the initiation of ground disturbing activities. The determination for initiating or ending monitoring disturbance will be made based on coordination between the qualified archaeologist and Native American tribal monitor, with a final determination made by the City.

If evidence of any prehistoric subsurface archaeological features or deposits (e.g., midden soils or unusual amounts of shell, animal bone, flaked stone, bottle glass, ceramics) are discovered during project construction, ground disturbance in the immediate vicinity of the find shall be halted immediately. A qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists shall determine whether the resource is potentially significant as per the CRHR and a Native American representative shall determine the significance as a tribal cultural resource and identify appropriate management steps needed to protect and secure identified resources consistent with Native American tribal values.

Timing: During construction

Responsibility: City of Coronado or its consultant

Mitigation Measure CUL-2: Halt Construction Activities if Any Human Remains Are Discovered

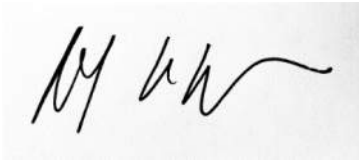
If human remains are uncovered during ground-disturbing activities, such activities that may affect the remains will be halted within 100 feet, and the City of Coronado or its designated representative will be notified. The City or designated representative immediately will notify the County coroner and a qualified professional archaeologist. If the coroner determines that the remains are those of a Native American, the coroner will contact the NAHC by telephone within 24 hours of making that determination in accordance with California Health and Safety Code, Section 7050.5[c]. The City or its appointed representative, and the qualified professional archaeologist will consult with a Most Likely Descendant (MLD), determined by the NAHC, regarding the removal or preservation and avoidance of the remains, and will determine whether additional burials could be present in the vicinity in accordance with California Public Resources Code Section 5097.9. No ground-disturbing work will occur in the location of the remains until consultation between the NAHC and MLD has been completed, and notification by the City that construction activities may resume.

Timing: During construction.

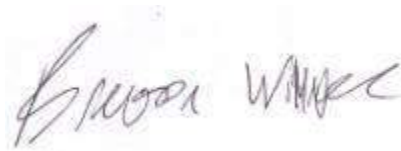
Responsibility: City of Coronado or its consultant

If you have any questions or require any additional clarification of any of the above information in this letter report, please do not hesitate to contact me at (760) 683-8335 or at dmengers@pangis.com.

Regards,



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Attachments:

Figure 1: Project Vicinity Map

Figure 2: Project Location Map

Figure 3: Survey Area Map

Plate 1: Overview of the survey area from the south, facing north

Plate 2: Overview of the survey area from the north, facing south

Plate 3: Exposed soil patch among *Delosperma*.

Confidential Attachments:

Figure 3a: Survey Area Map with Cultural Resources

COR-ISO-1: Isolate Form

COR-ISO-2: Isolate Form

COR-ISO-3: Isolate Form

P-37-000058: Site Update

P-37-013073: Site Update

References

Garcia-Herbst, Arleen (2016) *Cultural Resources Inventory for the Dog Park Project, City of Imperial Beach, County of San Diego, California*. Report on file with the City of Imperial Beach, CA.

Native American Heritage Commission (NAHC) (2018) *Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Navy Coastal Campus Sewer Force Main Project, San Diego County*. Letter on file with City of Coronado and U.S. Department of the Navy-NEPA.

Nelson, N.C. (1967) *DPR Form 523: P-37-000058/CA-SDI-58*. On file with the SCIC.

U.S. Department of the Navy (2015) *Naval Base Coronado Coastal Campus: Environmental Impact Statement*. Commander, Naval Special Warfare Command and Commanding Officer Naval Base Coronado.



Figure 1: Project Vicinity Map



Figure 2: Project Location Map



Figure 3: Survey Area Map

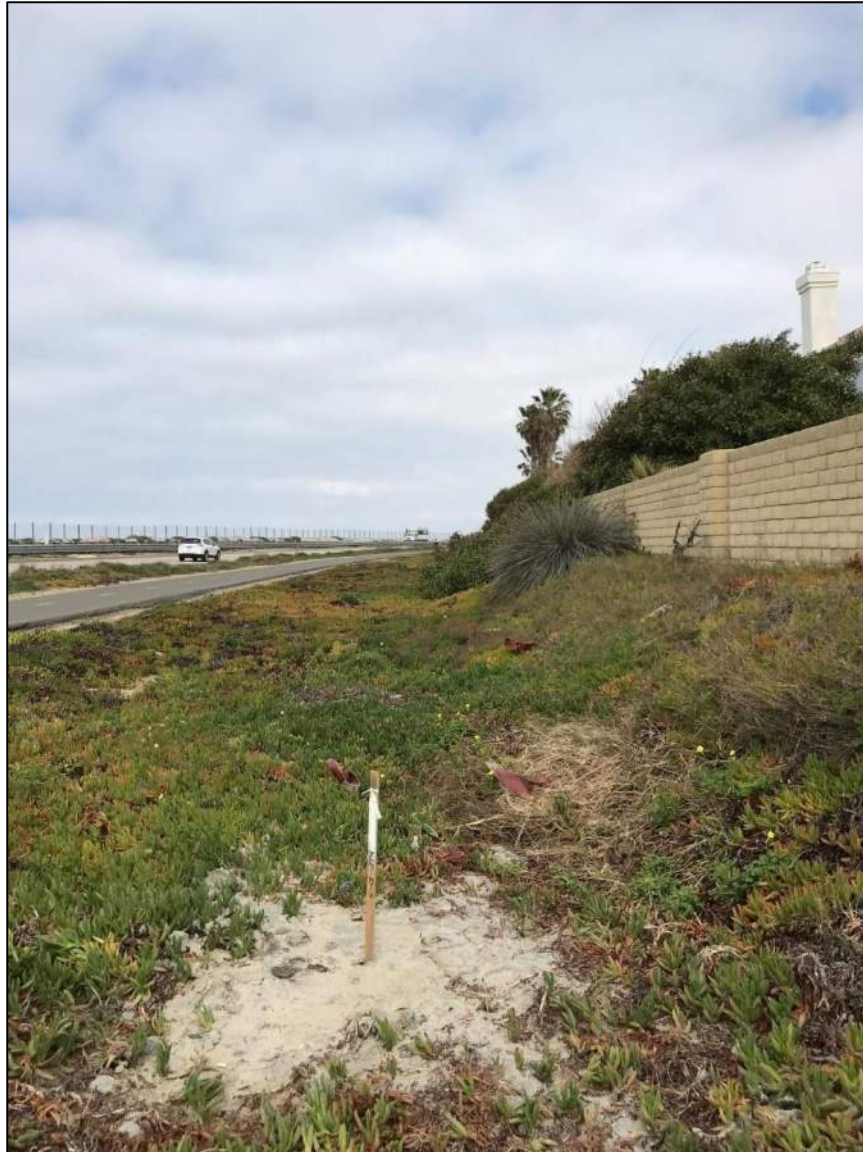


Plate 1: Overview of the survey area from the south, facing north



Plate 2: Overview of the survey area from the north, facing south



Plate 3: Exposed soil patch among *Delosperma*