



Final Initial Study

Primary Area Improvement Project

Prepared for:

Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92011

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COMMITMENT & INTEGRITY DRIVE RESULTS

**Encina Wastewater
Authority**
August 2018

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Acronym List

BMPs	Best Management Practices
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
CWA	Clean Water Act
dBA	Decibel, a-weighted
EWA	Encina Wastewater Authority
EWPCF	Encina Water Pollution Control Facility
HCP	Habitat Conservation Plan
I-5	Interstate 5
IS	Initial Study
LOS	Level of Service
NPDES	National Pollutant Discharge Elimination System
PM	Particulate Matter
RAQS	Regional Air Quality Standards
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SDAPCD	San Diego County Air Pollution Control District
SCAQMD	South Coast Air Quality Management District
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan

1. INTRODUCTION

1.1 PURPOSE OF THIS DOCUMENT

Encina Wastewater Authority (EWA) is proposing construction and operation of the Primary Area Improvement Project (Project) to rehabilitate and improve the preliminary and primary treatment areas at the Encina Water Pollution Control Facility (EWPCF) in Carlsbad, California. EWA has prepared this Initial Study (IS) to provide the public and Responsible and Trustee Agencies reviewing the Project with information about the potential impacts on the environment. This IS was prepared in compliance with California Environmental Quality Act (CEQA) Guidelines §15063 (as amended) and California Code of Regulations, Title 14, Division 6, Chapter 3. In accordance with §15063, a Lead Agency shall conduct an Initial Study to determine if the project may have a significant effect on the environment. EWA, as the CEQA Lead Agency, has determined that the proposed Project is Categorical Exempt from the provisions of CEQA under §15301 Existing Facilities. The City of Carlsbad, as the CEQA Responsible Agency, will utilize this IS as part of permit reissuance for EWA's Precise Development Plan/Coastal Development Permit for the EWPCF.

EWA, the Lead Agency for the Project, is a Joint Powers Authority (JPA) formed by the City of Carlsbad, City of Vista, City of Encinitas, Leucadia Wastewater District, Vallecitos Water District, and Buena Sanitation District. EWA operates the EWPCF to treat and discharge wastewater flows from its member agencies.

1.2 CEQA PROCESS

In accordance with CEQA Guidelines §15062, this document will accompany the Project application through the approval process. Once the Project has been approved, a Notice of Exemption (NOE) will be filed with the San Diego County Clerk. The City of Carlsbad, as a Responsible Agency, has elected to file the NOE with the San Diego County Clerk. Copies of the NOE shall be available for public inspection and posted within 24 hours of receipt in the office of the San Diego County Clerk. The NOE shall remain posted for a period of 30 days. Thereafter, the County Clerk shall return the notice to the City of Carlsbad with notation of the period it was posted. The City of Carlsbad shall retain the notice for not less than 12 months. The filing of an NOE starts a 35 day statute of limitations period on legal challenges to the Lead Agency's decision that the project is exempt from CEQA.

1.3 IMPACT TERMINOLOGY

The environmental impact analysis for each resource defines the criteria used to judge whether an impact is significant based on the CEQA Initial Study Checklist and regulatory agency standards. Impacts that exceed identified threshold levels are considered significant. In describing the significance of impacts, the following categories of significance are used and are based on the best professional judgment of the preparers of the Initial Study:

No Impact: An effect that would have no impact, or would have a positive impact on the environment, such as reducing an existing environmental problem.

Less than Significant: An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures.

Less than Significant with Mitigation: An impact is potentially significant, but can be reduced to below the threshold level (to less than significant) given reasonable and available mitigation measures.

Potentially Significant: An impact that would cause substantial, or potentially substantial, impacts above the threshold level. Such an impact requires further evaluation and would trigger the preparation of an Environmental Impact Report for the project.

2. PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

Encina Wastewater Authority (EWA) is proposing construction and operation of the Primary Area Improvement Project (Project) to rehabilitate and improve the preliminary and primary treatment areas at the Encina Water Pollution Control Facility (EWPCF) in Carlsbad, California (see **Figure 1**). This Project would be constructed entirely within the EWPCF footprint. The preliminary treatment facilities, commonly called "headworks", serve as a first step in the treatment process removing solids larger than the bar screen openings and extracting grit (including sand, gravel, eggshells, seeds, and other heavy inorganic materials) found in raw municipal wastewater. The primary treatment facilities include removal of floatable and settleable materials in the primary sedimentation basins. The EWPCF uses chemically enhanced primary treatment (CEPT) through addition of polymer and ferric chloride to enhance the performance of the primary clarifiers.

The Project, as proposed, contains the following three main components (**Figure 2**):

- Replacement of screening and grit handling equipment within the Screenings Building, including construction of an annex to the Screenings Building and addition of isolation gates at the grit chambers.
- Repair, rehabilitation, and replacement of aging infrastructure throughout the preliminary and primary areas, including concrete and concrete linings/coatings, and finger baffles and launder trough supports in the primary sedimentation basins.
- Construction of a new parking lot to the east of the primary sedimentation basins.

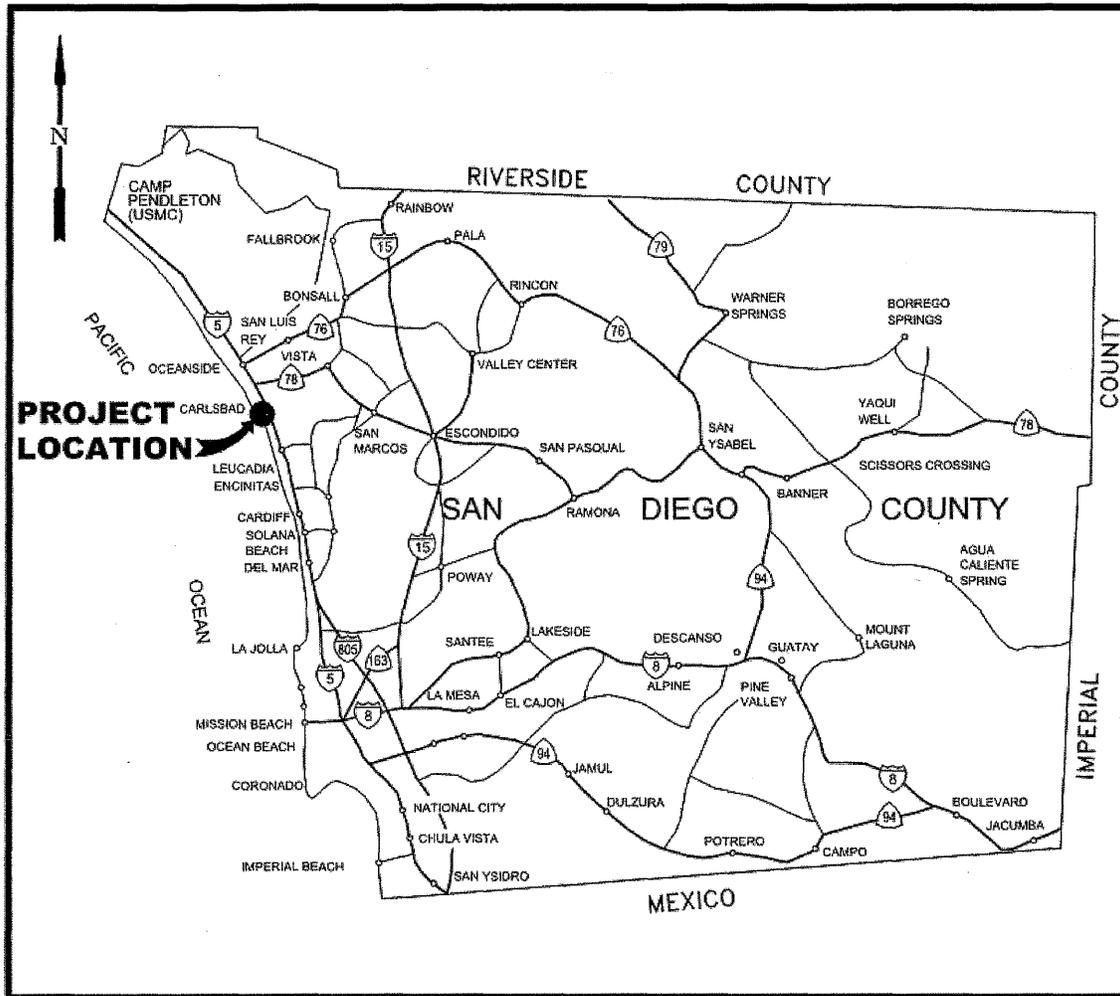
The new Grit Screenings Annex (Annex) would be built adjacent to and southwest of the existing Screenings Building, which is located in the north-central portion of the EWPCF site. Operation of the Annex would enhance the EWPCF's ability to more effectively screen grit by adding another screening step to the existing preliminary screening process. The Annex's permanent footprint would be 1,400 square feet (sq. ft.), and the building would be 35 feet tall. Equipment that would be installed in the Annex building includes:

- wastewater intake equipment to receive wastewater from the existing screening facility
- washer compactor
- roll-off dumpster
- screenings distribution box
- conveyer equipment

Other improvements would include rebalancing of the odor control system to provide treatment to foul air from the preliminary/primary areas (including the new Annex), replacement of electrical gear, and upgrades to the preliminary/primary area instrumentation and control systems including integration into the plant-wide supervisory control and data acquisition (SCADA) network.

In addition to changes to the preliminary/primary treatment facilities, the Project would also include construction of a new parking lot east of the EWPCF Administration Building. This would involve construction of a retaining wall, drainage improvements, several new pedestrian access staircases, and asphalt surface. The permanent footprint of the new parking lot would be 6,600 sq. ft.

Figure 1: Vicinity Map



VICINITY MAP
NO SCALE

Figure 2: Primary Area Improvements



2.2 PURPOSE AND NEED FOR PROJECT

The principal objectives of the proposed Project include the following:

- Rehabilitate and improve the preliminary and primary treatment areas at EWPCF.
- Reduce abrasion and wear of mechanical equipment, grit deposition in pipelines and channels, and accumulation of grit in anaerobic digesters and aeration basins to increase service life and improve operability and reliability.
- Increase level of service for critical EWPCF treatment facilities.
- Improve mitigation of odors by containing them within the Annex screenings facility.
- Replace the screens, replace screenings and grit handling, improve the primary sedimentation basins, and rebalance the odor control system.
- Improve safety and access for EWA staff by providing additional parking spaces near the Administration Building.

2.3 PROJECT LOCATION

The Project would be located at the existing EWPCF, at 6200 Avenida Encinas, Carlsbad, California, 92011. **Figure 1** shows a vicinity map. The EWPCF plant boundary, as shown in **Figure 2**, is a 24-acre parcel bordered by Interstate 5 (I-5) on the east; EWA-owned land to the south, which includes a vacant parcel and the City of Carlsbad Water Recycling Facility; Avenida Encinas and the Amtrak/North County Transit District (NCTD) railroad tracks to the west; and an industrial/commercial area to the north. The Project would be constructed and operated entirely within the existing EWPCF site.

The EWPCF is operated by EWA, which is a joint powers authority owned by six member agencies: City of Vista, City of Carlsbad, Buena Sanitation District, Vallecitos Water District, Leucadia Wastewater District, and City of Encinitas.

Existing Facilities

The EWPCF is a conventional activated sludge wastewater treatment plant with liquid capacity of 40.5 million gallons per day (MGD) and solids capacity of 43.3 MGD. The existing footprint of buildings on the EWPCF site is approximately 367,000 square feet (approximately 8.5 acres). Liquid treatment includes preliminary, primary, and secondary treatment while the solids treatment includes the generation of biosolids pellets through sludge thickening, anaerobic digestion, digested sludge dewatering, and heat drying.

The Screenings Building is a critical facility in the first step of the treatment process (preliminary treatment), which involves removing large debris and inorganic material from the raw influent wastewater. Since the construction of the facility, EWA has shifted its solids treatment goals to creating Class A biosolids pellets using a thermal drying process, rather than Class B biosolids disposal. This has increased the importance of the screenings removal process to improve the quality of the biosolids produced. In addition, a portion of the EWPCF secondary effluent is subsequently treated offsite at the Carlsbad Water Reclamation Facility for non-potable reuse purposes. The improvements to the preliminary process will also protect the quality of the recycled water produced from EWPCF effluent.

In the existing facility, there are four screening channels, each 4-foot wide by 12-foot high with mechanical bar screens which handle the screening loads. Despite a retrofit in 2015 to increase bar screens number (No.) 2 and No. 3 with 3/8-inch spacing, these screens have been unable to keep up with increased screenings loads during peak hourly flows. In these situations, EWA staff must manually switch the screen rake to manual mode (operating "in hand") and run them continuously or bring a third 3/4-inch screen online to avoid overflowing the screen channel bypass weir.

Raw screenings removed from the influent wastewater are deposited on an inclined belt conveyor that deposits the raw screenings into a single duty screening press on the east side of the screening room which dewateres and discharges the screenings into a 2.5 cubic yard tipper bin. The bin is manually emptied and dumped into a rollaway dumpster for hauling to landfill for disposal. If the single (non-redundant) screening press is out of service, raw screenings are deposited directly into the tipper bin without further processing. The screened wastewater slurry flows from the four screening channels to recombine into the grit influent channel and into the grit chambers installed on the mezzanine. Degritted influent from the grit chambers recombines into the common primary influent channel and then into the primary sedimentation basins.

Each of the primary sedimentation basins has two isolation slide gates and a row of finger baffles at the entrance of the basins. Because the baffles in 3 of the 10 basins have already failed, it is likely that the remaining baffles are nearing the end of their useful lives and also need to be replaced. At the end of each primary sedimentation basin are four launder troughs with supports that are deteriorating due to the acidic condensate from the basin cover dripping down and damaging the concrete.

The area where the on-site proposed parking lot would be constructed is currently occupied by non-native landscape trees, shrubs, and groundcover. The existing slope is up to approximately 15%. Of the existing landscaping, there are 7 trees, which range in size from approximately 4 to 16.5 inches in diameter at chest height.

The EWPCF employs 70 full-time equivalent staff. Currently, staff park at on-site surface parking areas, as well as along Avenida Encinas. A small percentage of staff (1 to 2 people daily) utilize public transit for their commutes. There are five surface parking areas located on-site which accommodate up to 92 spaces, including four spaces designated for accessible parking. The largest existing on-site parking area, which accommodates 59 spaces, is located approximately 500 feet south of the EWPCF Administrative Building. The surface lot in the west-central portion of the EWPCF site is designated for visitors and can accommodate up to 15 cars, including two spaces designated for accessible parking. Street parking along northbound and southbound Avenida Encinas adjacent to the Project site is free of charge. Avenida Encinas is classified as a "Neighborhood Connector Street" in the City of Carlsbad General Plan Mobility Element, which are meant to "connect people to different neighborhoods and land uses of the city" (City of Carlsbad 2015). Adjacent to the Project site, Avenida Encinas supports two lanes of vehicle traffic; has no bicycle lanes; and has sidewalks, curbs, and gutters in both the northbound and southbound directions. The designated speed limit is 40 mph. The nearest marked pedestrian crossing is located approximately 0.5 mile north of the Project site at the intersection of Avenida Encinas and Palomar Airport Road. The NCTD BREEZE bus routes 444 and 445 have a stop located on Avenida Encinas adjacent to the Project site, and the NCTD COASTER Poinsettia train station is located approximately 0.5 mile south of the Project site at 6511 Avenida Encinas.

2.4 PROPOSED PROJECT DESCRIPTION

The proposed Primary Area Improvement Project (proposed Project) contains three components: addition of a new annex to the existing Screenings Building, improvements to equipment within the Screenings Building, and construction of a new parking lot east of the Screenings Building. **Figures 2 and 3** depict the location of the proposed facilities and the potential construction footprint of the Project.

The Project is focused within the existing Screenings Building (headworks) which contains the screenings room, screenings and grit dewatering and handling, the primary area motor control centers and control system, and odor reduction facility as depicted in **Figure 4**. To improve screenings and grit handling, grit classifiers would be left in current location and grit and screenings would be conveyed to a bin in a new Annex (see **Figure 5**). The new building would be constructed in an already paved area west of the existing screenings building. The new building would be 33 ft.-4 in. x 40 ft. (slightly less than 1,400 sq. ft.) and 35 feet tall, which is 7.5 feet higher than the existing Screenings Building height of 27.5 feet, but shorter than the tallest building at EWA's facilities (the Heat Dried Product Silos/Loading Station is 51.75 feet tall).

The new facilities would improve grit and screenings handlings by adding new screenings wash/presses and a new grit conveyor. Additionally, there would be updates to the existing Screenings Building where equipment would be demolished and upgraded. In addition to the primary sedimentation bins being improved, the inlet slide gates and finger baffles in the basin would be replaced, and the trough supports in basins 7-10 would be replaced. An odor control system would be installed through ductwork and rehabilitating the biostower spray nozzle. Additionally, the motor control system and flow meter would be replaced. The new process flow diagram for changes to the existing building and addition of the new facility can be seen in **Figure 6**.

To accommodate waste hauling trucks on the Project site and their necessary turning radiuses, the Project would also construct a paved area with a retaining wall north of the proposed Annex (**Figures 2, 3**). This area is currently occupied by pavement, non-native landscaping shrubs and groundcover. The total square footage of the proposed paved area is approximately 2,000 sq. ft.

Construction of a new parking lot is designed to improve employee safety by providing sufficient available parking on-site at EWPCF. A retaining wall, two pedestrian staircases, and 22 parking stalls would be constructed (see **Figure 7**). The parking lot would be approximately 6,600 sq. ft and the retaining wall would vary from 3 to 5 feet above surface grade. The pedestrian staircases would be used to allow workers to safely access the EWPCF facility from the parking lot.

Figure 3: Primary Area Improvements Close-Up

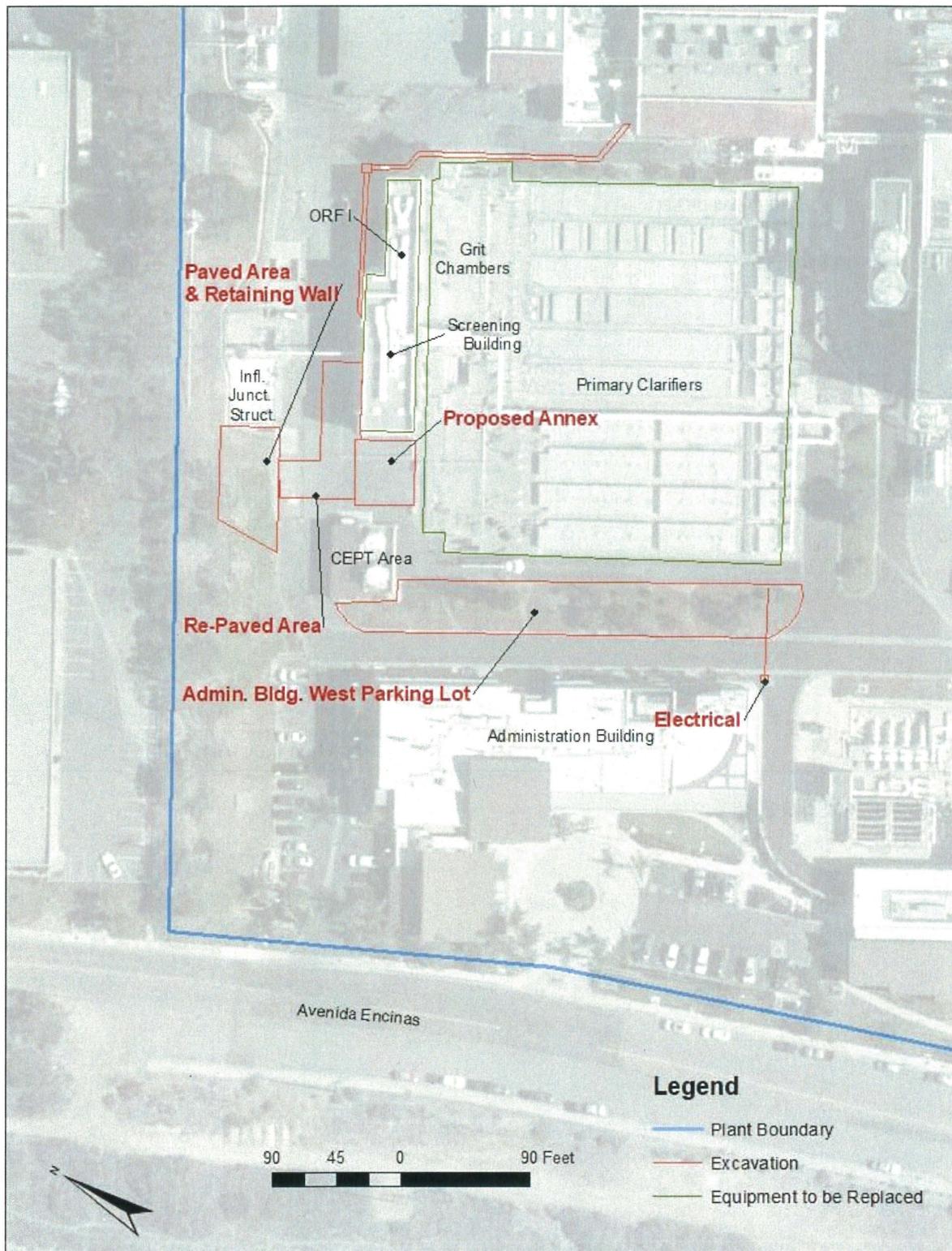
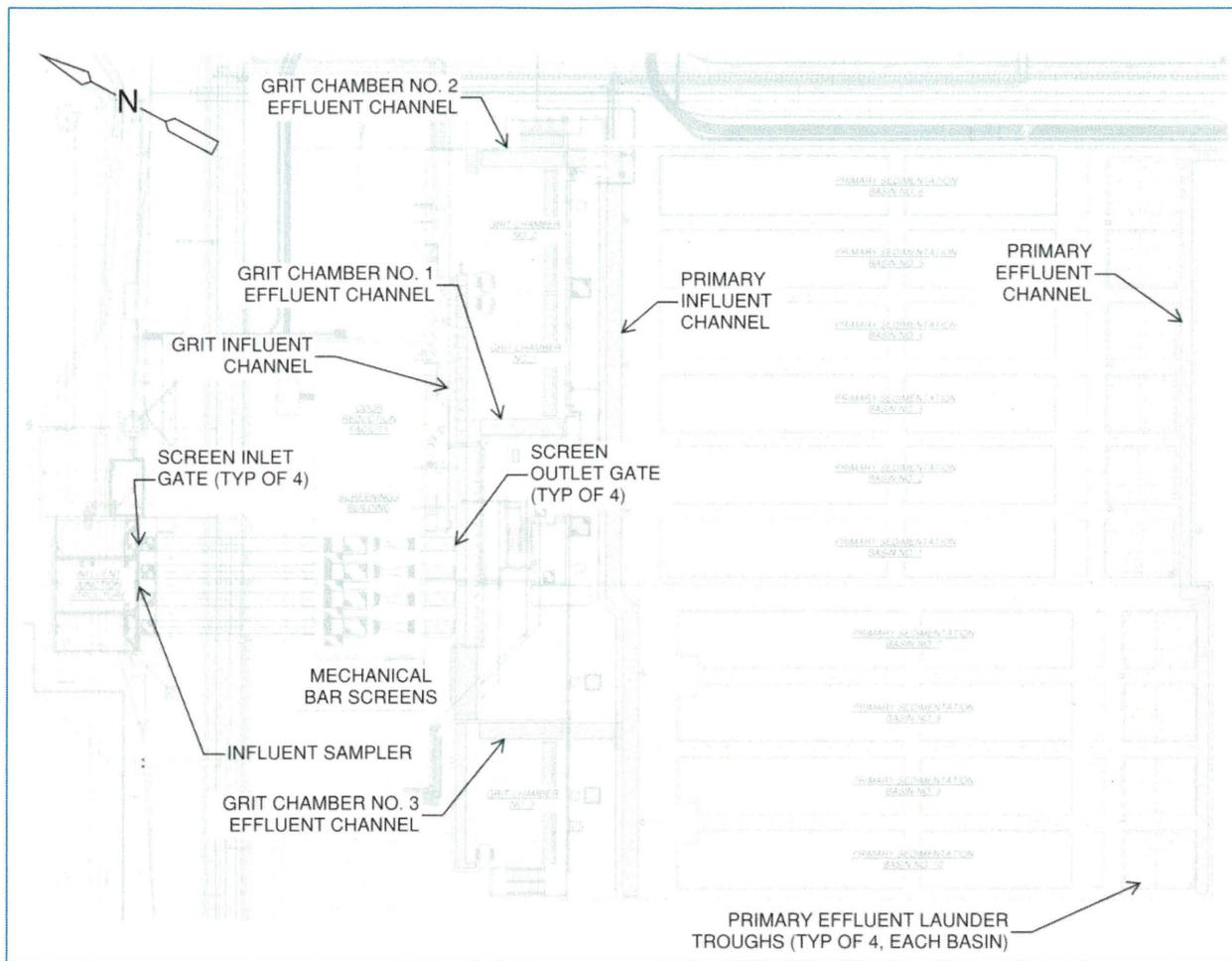
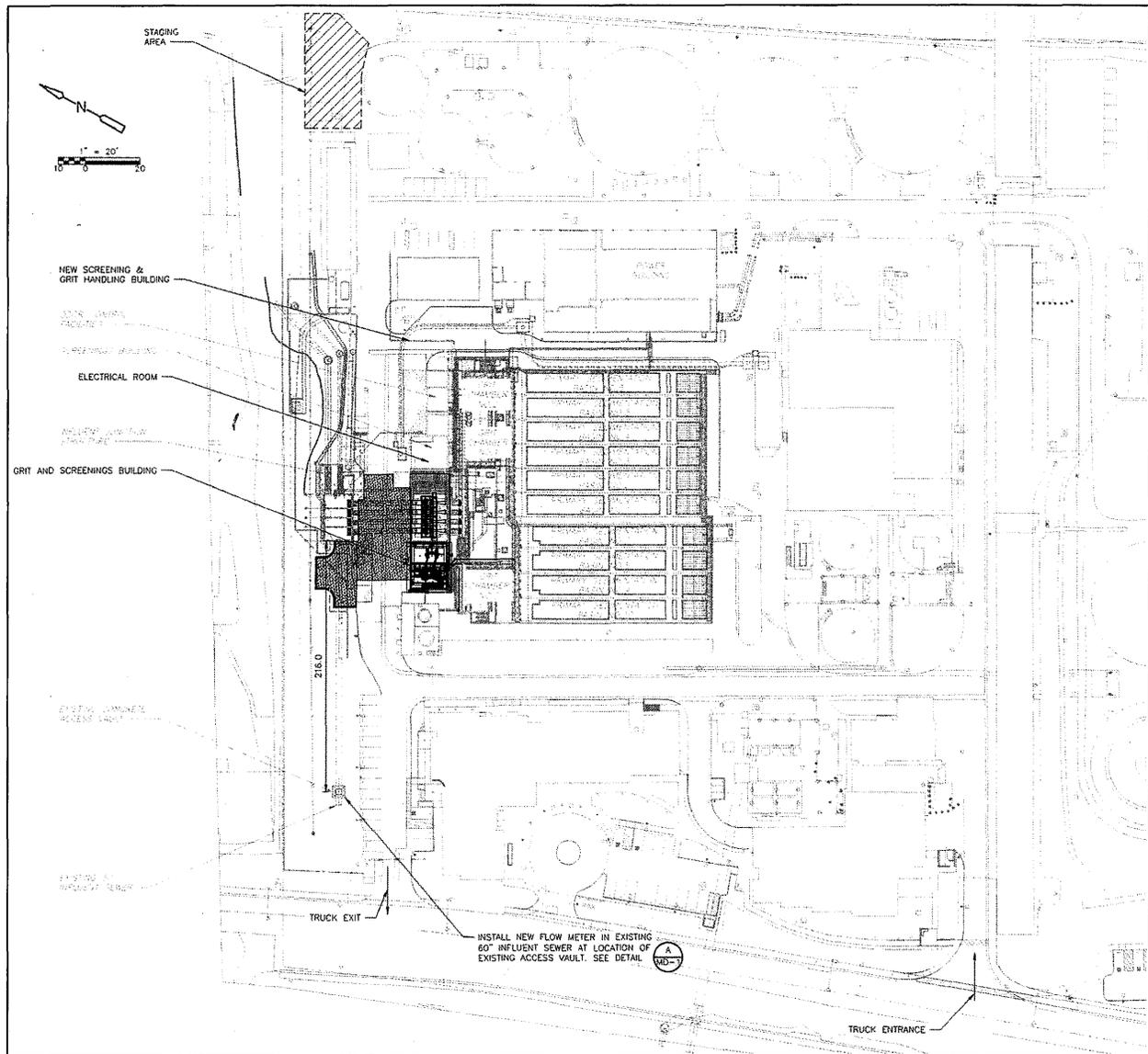


Figure 4: Existing Primary Area Layout



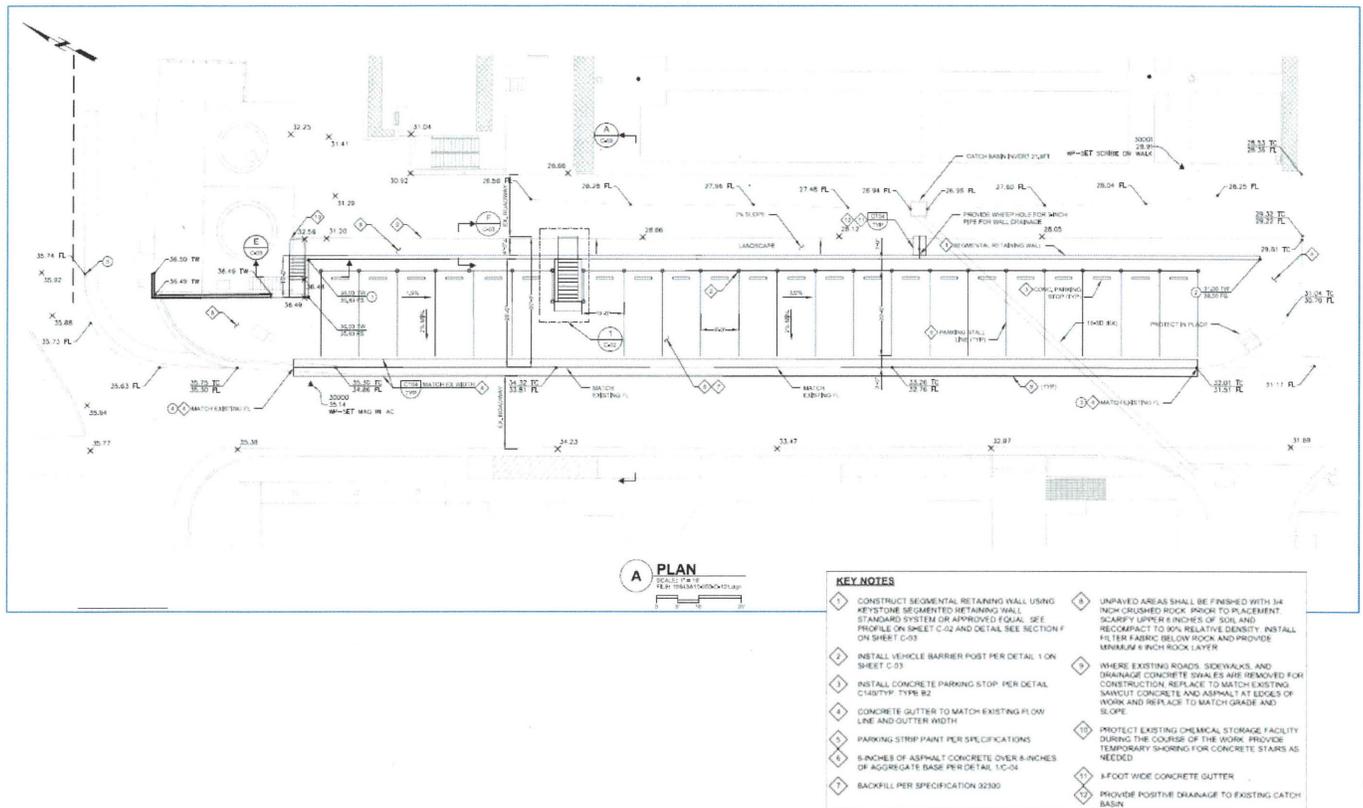
Source: CDM Smith 2016

Figure 5: Proposed Screening and Grit Handling Facility



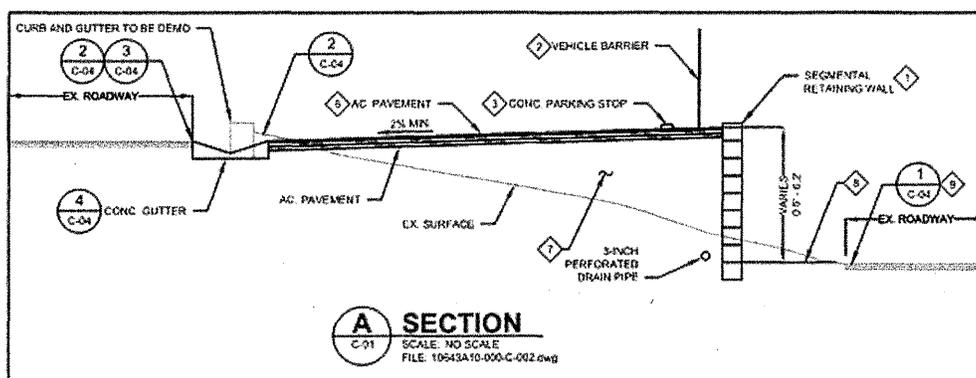
Source: CDM Smith 2018

Figure 7: Proposed Parking Lot



Source: Carollo Engineers 2018

Figure 8: Proposed Parking Lot Profile



Source: Carollo Engineers 2018

Construction Methods and Schedule

The Project's maximum area of disturbance during the construction period would be approximately 2,000 sq. ft. for the new Annex, 6,600 sq. ft. for the parking lot and parking lot retaining wall, and approximately 6,000 sq. ft. for the truck access turn-around.

Headworks Demolition and Construction

The construction schedule for the Headworks and Annex improvements shows a likely construction duration of 18 months. The critical path of construction for the new Annex has been outlined to ensure that minimal operations shutdown occurs during renovation and construction. The full construction sequencing can be found in **Table 1**; the general process would be as follows:

1. Equipment approval and procurement for screens and motor control centers
2. Installation of motor control center and switchover of existing equipment
3. Installation, startup, and commissioning of new Primary Area
4. Phased construction of new screenings facility (the Annex) to maintain minimum duty units online

Construction of the new Annex would require the following equipment:

- All terrain crane, 40 metric tons
- Gradall 534, 10 k telescopic forklift
- Haul cat 320 excavator
- Rear dump truck, 18 cubic yards

Parking Lot Construction

Parking lot construction would consist first of clearing the construction area of natural obstructions such as stumps, brush, and trees. Tree trunks and root material that remain after clearing would be grubbed out below the ground surface and disposed of. The topsoil would be stripped 12 inches, stockpiled, and replaced. Rock and aggregate storage areas would be restored by excavating any soils containing rock or aggregate and backfilling with topsoil. The removed soil would be used for trench backfill above the pipe zone and 3 feet below the finished grade. The parking lot construction is anticipated to last six months, beginning around March 2019.

The parking lot would be constructed of asphalt concrete (AC) pavement and include a vehicle concrete parking stop, a retaining wall, a pedestrian staircase, landscaping, and drainage to an existing catch basin through a concrete gutter. First, the segmental retaining wall would be constructed, which would vary in height from 3 to 5 feet above surface grade. The retaining wall would be installed with geo-grid reinforcement going into drain rock and compacted backfill. Pedestrian stairs would descend 6-feet in elevation from the parking lot to the Facility. The parking lot would be paved on top of the compact backfill. Six inches of asphalt concrete over 8 inches of aggregate base would be used to construct the parking lot. Unpaved areas would be finished with 3/4-inch crushed rock after the upper 6 inches of soil are scarified and recompact. A 3-inch drain pipe and 3-foot wide concrete gutter would be installed in the lot to improve parking lot drainage to an existing catch basin. The conduit trench has a 3-foot, 2-inch minimum size. Construction of the parking lot, retaining wall, and pedestrian stairwells is anticipated to require the following equipment fleet:

- Excavator
- Stream roller
- Cement truck
- Grader
- Dump truck

Table 1 Construction Sequencing

Step	Work Element	Notes
	Preliminary Work, Mobilization, and Procurements <ol style="list-style-type: none"> 1. Shop drawings and submittals 2. Field investigations 3. Construction staging 	<ul style="list-style-type: none"> • Shutdowns will not be allowed until equipment is delivered. • Long-lead time items may govern schedule: screens, electrical equipment, Primary Area-PLC
	Electrical and Control System Improvements – Part 1 <ol style="list-style-type: none"> 1. Install new MCC-F in center of MCC-Room 2. Install conduit and wiring to existing equipment 3. Run new feeder from Main Switchboard to new MCC-F 4. Install new Primary Area-PLC 5. Complete I/O conversion for existing field instruments and route Ethernet I/O from smart MCC to Primary Area-PLC 6. Complete influent flow metering improvements 7. Energize new MCC-F and switchover existing equipment 8. Commission MCC-F and Primary Area-PLC 9. Install, startup, test, and commission new MCC-Room HVAC system 	<ul style="list-style-type: none"> • All existing equipment can be switched over from existing MCC-F to new MCC-F except for screenings equipment that will be replaced with the Project. • Once MCC-F and Primary Area-PLC are operational, screenings equipment replacement can commence. • MCC-Room HVAC system should be early milestone to be completed concurrent with completion of electrical and control system improvements.
	Screenings and Grit Handling Improvements <ol style="list-style-type: none"> 1. Grit Mezzanine Replacement and Re-install existing grit classifiers 2. Demolish existing belt conveyor 3. Install new raw screenings sluice 4. Install new screenings wash/presses 5. Install screenings dumpster 6. Complete ORF1 rehabilitation 	<ul style="list-style-type: none"> • Consider early-completion milestone for mezzanine to mitigate risk of deteriorated structure. • Contractor to provide interim raw screenings handling; existing climber screens can discharge directly to tipper bins which can be handled with forklift to dump in rollaway dumpster, as needed.
	West Side Rehabilitation and Improvements <ol style="list-style-type: none"> 1. Shutdown west-side of primary area: Close screening channel isolation gates for Channels 3 and 4; install bulkhead in grit influent channel; install bulkhead in primary influent channel to isolate PSB #8, #9, #10; dewater and clean channels and Grit Chamber No. 3. 2. Complete channel and GC#3 rehabilitation including grit chamber inlet and outlet slide gates. 3. Demolish SCR-1513 and SCR-1514. 4. Install new multi-rake screens in screen channels 3 and 4; startup, test, and commission equipment. 5. Replace primary sedimentation basin inlet slide gates and launder support beams (PSB #8, #9, and #10). 6. Install odor control ducting to PSB #8, #9, #10 	<ul style="list-style-type: none"> • Plant flow will be routed through screen channels 1 and 2, GC #1 and #2, and PSB(s) #1-#6 and #7. • New screenings equipment (SCR-1513 and SCR-1514) will be fed from new MCC-F.
	Electrical and Control System Improvements – Part 2 <ol style="list-style-type: none"> 1. Demolish existing MCC-F 2. Install new MCC-G in place of old MCC-F 3. Install conduit and wiring to existing equipment 4. Run new feeder from Main Switchboard to MCC-G 5. Complete I/O conversion for existing field instruments and route Ethernet I/O from new smart MCC-G to Primary Area-PLC 6. Energize new MCC-G and switchover existing equipment 7. Commission MCC-G and Primary Area-PLC 	<ul style="list-style-type: none"> • All existing equipment can be switched over from existing MCC-G to new MCC-G except for screenings equipment that will be replaced with the Project. • Once MCC-G and Primary Area-PLC are operational, the second phase of the screenings equipment replacement can commence.

Step	Work Element	Notes
	East Side Rehabilitation and Improvements – Part 1 <ol style="list-style-type: none"> 1. Shutdown east side primary area. Close screening channel isolation gates for channels 1 and 2; Restore flow through screen channels #3 and #4; close GC#2 inlet gate; install bulkhead in primary influent channel to isolate PSB #4 - #6 and GC#2 outlet channel; dewater and clean channels and Grit Chamber No. 2. 2. Complete channel and GC#2 rehabilitation including grit chamber outlet slide gate. 3. Demolish SCR-1511 and SCR-1512. 4. Install new multi-rake screens in screen channel 1 and 2; startup, test, and commission equipment. 5. Replace primary sedimentation basin inlet slide gates on PSB #4 to #6. 6. Install odor control ducting to PSB #4, #5, #6 	<ul style="list-style-type: none"> • Plant flow will be routed through screen channels 3 and 4, GC #3 and #1, and PSB(s) #8 - #10 and #1 - #3 (two grit chambers and six PSBs in service). • New screenings equipment (SCR-1511 and SCR-1512) will be fed from new MCC-G.
	East Side Rehabilitation and Improvements – Part 2 <ol style="list-style-type: none"> 1. Restore flow through screen channels #1 and #2 (all four screen channels will be operational) 2. Remove bulkhead in primary influent channel and restore flow through GC#1 and PSB #4 - #6 3. Close GC#1 inlet gate and install bulkhead in primary influent channel to isolate PSB #1 - #3 and #7; dewater and clean channels and Grit Chamber No. 1. 4. Complete channel and GC#1 rehabilitation including grit chamber outlet slide gate. 5. Replace primary sedimentation basin inlet slide gates on PSB #1 to #3 and #7 and replace launder supports in PSB #7. 6. Install odor control ducting to PSB #1, #2, #3, and #7 	<ul style="list-style-type: none"> • Plant flow will be routed through combination of screen channels 1 to 4, GC #3 and #2, and PSB(s) #8 - #10 and #1 - #3 (two grit chambers and six PSBs in service). • Odor control system balancing can be completed once odor control ducting to PSB(s) is complete
	East Side Rehabilitation and Improvements – Part 3 <ol style="list-style-type: none"> 1. Remove bulkheads in primary influent channel. 2. Install bulkheads in grit chamber influent channel east of screen channel 1. 3. Complete grit chamber influent channel rehabilitation from screen channel 1 to the east. 4. When channel rehabilitation is complete, remove bulkheads. 	<ul style="list-style-type: none"> • Plant flow will be routed through combination of screen channels 1 to 4 and GC #3 and any combination of PSBs - in order to complete channel rehab between screen channel 1 and GC#1, all influent flow must be routed west to GC#3.
	Final Improvements <ol style="list-style-type: none"> 1. Balance odor control system 2. Complete remaining work 3. Final commissioning 4. Punchlist 5. Demobilization. 	<ul style="list-style-type: none"> • All primary process area units will be online.

Source: CDM Smith 2016

Operation and Maintenance

By installing a new Annex, the need for operators to enter the Screenings Building to manually empty the grit and screenings tipper bins will be eliminated. Additionally, it would improve process reliability, redundancy, and level of service. The number of onsite employees is not expected to increase as a result of the Project, as much of the screens cleaning work that is currently being done manually would be mechanized.

The power supply for the Screenings Building and Annex would continue to come from EWPCF's existing mix of energy supplied onsite through its cogeneration plant, and energy supplied by SDG&E. As the Project would replace older equipment with more modern equipment, it is not expected to result in a substantial increase in energy demand. No new pumps are proposed.

3. ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Primary Area Improvement Project

2. **Lead Agency Name and Address:** Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92011

3. **Contact Person and Phone Number:** James Kearns
Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92011
(760)268-8843

4. **Project Location:** Encina Water Pollution Control Facility (EWPCF)
6200 Avenida Encinas
Carlsbad, CA 92011

5. **Project Sponsor's Name and Address:** Encina Wastewater Authority

6. **General Plan Designation:** Public Utilities (U) – City of Carlsbad

7. **Zoning:** Public Utility Zone (PU) – City of Carlsbad

8. **Description of Project:** The Project, as proposed, contains the following three main components: 1) Replacement of screening and grit handling equipment within the Screenings Building, including construction of an annex to the Screenings Building and addition of isolation gates at the grit chambers; 2) Repair, rehabilitation, and replacement of aging infrastructure throughout the preliminary and primary areas, including concrete and concrete linings/coatings, and finger baffles and launder trough supports in the primary sedimentation basins; and 3) Construction of a new parking lot to the west of the primary sedimentation basins.

9. **Surrounding Land Uses and Setting:** The EWPCF site is a 24-acre parcel bordered by Interstate 5 (I-5) on the east; EWA-owned land to the south, which includes a vacant parcel and the City of Carlsbad Water Recycling Facility; Avenida Encinas and the Amtrak/North County Transit District railroad tracks to the west, and an industrial/commercial area to the north.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)** Project implementation would require an amendment to the Precise Development Plan PDP 1-(H) and the Coastal Development Permit (CDP 04-19(A)), as well as an Authority to Construct and Permit to Operate from the San Diego County Air Pollution Control District (SDAPCD). An Industrial General Permit 2014-0057-DWQ from the State Water Resources Control Board is also anticipated.

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- 11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 2180.3.1? If so, has consultation begun?** EWA issued letters on May 25, 2018 to the Native American tribes that had requested consultation pursuant to Public Resources Code section 2180.3.1. EWA received responses from four tribes. One of the tribes responded on June 26, 2018 and requested to initiate AB 52 consultation. EWA responded to the tribe's request and began AB 52 consultation on July 26, 2018. Consultation was completed August 22, 2018. EWA will contract with a Native American Monitor, recommended by the tribe that requested consultation, for each of the days that excavation occurs.

Environmental Factors Potentially Affected

The proposed project could potentially affect ("Potentially Significant Impact" or "Less than Significant Impact with Mitigation Incorporated") the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor and present mitigation measures that would reduce all impacts to less than significant.

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

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

- I find that the proposed project IS EXEMPT from CEQA and a NOTICE OF EXEMPTION will be filed.
- 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, no further environmental documentation is required.

Michael Steinhilft

Signature

9-24-2018

Date

Michael Steinhilft

Printed Name

For

3.1 AESTHETICS

Would the Project:	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a, c) The primary visual resource in the project area is the Pacific Ocean, which is approximately one quarter mile west of the EWPCF site. The proposed Project would be located within the existing EWPCF site. The constructed screenings annex would be approximately 35 feet in height, which is 7.5 feet taller than the immediately surrounding buildings, but shorter than the tallest building on the EWPCF site. The EWPCF is mostly surrounded by transportation corridors and commercial/industrial buildings and the construction of the screenings annex would not significantly change the view from surrounding land uses. Installed facilities would be consistent with the existing visual character of the site. The turnaround zone and parking lot would not be visible to the public from outside of the site. The only public view of the site is from pedestrians and motorists on Avenida Encinas. The screenings annex would be visible from the road, but it is not considered a scenic transportation corridor and the Project would not substantially distract from the visual character of the site. The impact would be less than significant.
- b) Interstate 5 (I-5), which borders the eastern portion of the EWPCF site, is not a designated scenic highway according to the Caltrans Scenic Highway Program (California Department of Transportation 2017). There are no scenic highways in the vicinity of the Project site. The closest designated highway, State Route 75, is over 35 miles from the Project site. There would be no impact.
- d) Parking lots can be considered sources of light and glare because of reflections off car windows, headlamps, and surfaces. However, construction of the parking lot would result in cars that are currently utilizing Avenida Encinas or other on-site parking areas, relocating to the new lot. It would not introduce additional cars and associated glare. The EWPCF has existing lighting features, including nighttime safety lighting, as part of normal operations. In addition, street lights are present along Avenida Encinas adjacent to the Project site. Lighting fixtures added as part of the proposed improvements would not add a new source of substantial light or glare to the site. Impacts would be less than significant.

Mitigation Measures: None required or recommended.

3.2 AGRICULTURE AND FORESTRY RESOURCES

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
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 Resource Code section 12220 (g)), timberland (as defined by Public Resource 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"/>

Discussion

a-e) The proposed Project would not be located on Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Forestland. All construction would take place on a previously developed site that is designated by the Farmland Mapping and Monitoring Program as "Urban and Built Up Land" (California Department of Conservation 2014) and zoned by the City of Carlsbad for public utility use. There would be no conversion of farmland to a non-agricultural use or forest land to a non-forest use. The proposed Project would not involve a change in zoning. There would be no impact.

Mitigation Measures: None required or recommended.

3.3 AIR QUALITY

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
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) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a) Projects at the EWPCF are located in the San Diego Air Basin (SDAB) under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD), subject to the San Diego Regional Air Quality Strategy (RAQS). The RAQS contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. The emission inventories and emission projections in the RAQS reflect the impact of all emission sources and all control measures in the air basin. SDAPCD is responsible for reflecting federal, State, and local measures in a single plan to achieve State ozone standards in San Diego County. The emission inventories and emission projections in the RAQS are based, in part, on projections originating with county and city general plans. Because the Project is consistent with the Carlsbad General Plan, it is considered consistent with the applicable air quality plan, the RAQS. As such, Project-related emissions, which are discussed in greater detail, below, are accounted for in the RAQS, and implementation of the Project would not conflict with or obstruct implementation of the applicable air quality plan. Impacts would be less than significant.
- b-c) All air basins are characterized as to whether the air quality in the basin is in compliance with the National and/or California Ambient Air Quality Standards. Standards for criteria air pollutants are established to ensure protection of human health and public welfare. Table 3 shows San Diego County's federal and State designation for each of the criteria pollutants.

Table 3: San Diego County Air Basin Attainment Status

Criteria Pollutant	Federal Designation	State Designation
Ozone (1-hour)	Attainment	Nonattainment
Ozone (8-hour)	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Attainment
PM ₁₀	Unclassifiable	Nonattainment
PM _{2.5}	Attainment	Nonattainment
Nitrogen Dioxide (NO _x)	Attainment	Attainment
Sulfur Dioxide (SO _x)	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(no federal standard)	Attainment
Hydrogen Sulfate	(no federal standard)	Unclassified
Visibility	(no federal standard)	Unclassified

Source: SDAPCD 2018

The SDAB is currently classified as a nonattainment area for 8-hour and 1-hour ozone, as well as PM₁₀ and PM_{2.5}. The proposed Project would result in small, temporary increases in air pollutant and dust emissions during grading and construction. Fugitive dust particulates PM₁₀ and PM_{2.5} would primarily result from grading and site preparation activities for the new parking lot and Annex building. Emissions of other criteria air pollutants such as oxides of nitrogen (NO_x) and carbon monoxide (CO) would primarily result from construction equipment and vehicles. These emissions would be minimized through standard construction measures and Best Management Practices (BMPs) that would reduce fugitive dust emissions and other criteria pollutants. The proposed Project would be subject to SDAPCD Rule 55, Fugitive Dust Control, which requires that projects take steps to restrict visible emissions of dust beyond property lines. Compliance with Rule 55 would limit fugitive dust during clearing, grading, and construction activities.

The proposed Project is not anticipated to contribute considerable cumulative criteria pollutants in the form of 8-Hour Ozone, 1-Hour Ozone, PM₁₀, or PM_{2.5}. New equipment installed through the proposed Project is expected to be more energy efficient during operation, thus increased emissions via energy consumption is not anticipated. Although more biosolids would be exported from the initial screening process and hauled offsite, it is anticipated that truck trips would decrease at the end of the biosolids removal process, resulting in a negligible net change in total truck trips. The proposed parking lot would accommodate existing employee commute trips and is thus not anticipated to induce a growth in commute traffic.

The energy used for the proposed Project would come from EWPCF's existing mix of energy supplied onsite through its cogeneration plant and energy supplied by SDG&E. It is anticipated that the replacement of old equipment with new and more efficient equipment would not result in a substantial increase in energy demand, and associated air pollutants. The Project would result in less than significant impacts related to air quality standards and criteria pollutants.

- d) SDAPCD defines sensitive receptors as schools, hospitals, day care centers, and convalescent homes (SDAPCD, 1996). There are no schools, hospitals, day care centers or convalescent homes located near the EWPCF. The closest sensitive receptors are in a residential area west of the Amtrak/NCTD railroad tracks, located almost 600 feet from the site of the Project. As noted in b-c above, operational emissions of criteria pollutants would be minimal.

The Project would have to comply with SDAPCD Rule 1200, (*Toxic Air Contaminants – New Source Review*). This Rule identifies standards and procedures for health risk assessments. Cancer risk criteria are based on whether the proposed project elements are considered to be Best Available Control Technology for Toxics (T-BACT). If T-BACT is applied to an emission unit, the maximum incremental cancer risk at every receptor location cannot exceed 10 in 1 million. If T-BACT is not applied, the maximum cancer risk cannot exceed 1 in 1 million. Additionally, the increase in the total acute and chronic non-cancer health hazard index at every receptor cannot be greater than 1 as result of a new project. The only source of Toxic Air Contaminant (TAC) emissions associated with the proposed Project would be exhaust emissions from the existing EWPCF cogeneration engines. The proposed Project is not expected to result in substantial changes to the demand for digester gas because energy efficiency is expected to improve with the new equipment. Thus, there would be no impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

- e) The proposed Project includes the rebalancing of the odor control system to provide treatment to foul air from the preliminary/primary areas including the proposed Annex. The odor control system would be installed through the ductwork and incorporate the rehabilitation of the biostower spray nozzle. Due to the rebalancing of the odor control system, no increase in objectionable odors is anticipated, and thus impacts would be less than significant.

Mitigation Measures: None required or recommended.

3.4 BIOLOGICAL RESOURCES

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and 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 federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a-d) All construction and operational activities would occur within the footprint of the existing EWPCF. Biological resources within the site are extremely limited. The EWPCF contains no suitable habitat for sensitive species, no riparian areas or federally protected wetlands, and no wildlife migratory corridors. There would be no impact.

- e) In order to construct the parking lot on the existing EWPCF, approximately 6,600 sq. ft. of ornamental shrubs, plants, and trees would be removed, and the land would be converted to a parking area to provide 22 parking spaces to improve employee access and safety. Seven trees would be removed including one nonnative conifer, two ornamental trees, and four *Eucalyptus sp.* or *Melaleuca sp.* trees. The seven trees that would be removed range in size from 4 to 16.5 inches diameter at breast height (DBH). Additionally, the proposed truck turnaround zone near the screenings annex would remove approximately 1,000 sq. ft. of landscaping, which consists primarily of iceplant.

The City of Carlsbad has a tree ordinance (NS-545) that reinstates Chapter 11.12 of the Carlsbad Municipal Code relating to trees and shrubs. While the policy encourages new tree planting on public and private property to cultivate a flourishing urban forest, it only enforces policies on trees and vegetation located in the public right-of-way. The seven trees that would be removed are not located within, nor are they visible from, the nearest public right of way. Therefore, there would be no impact.

- f) The EWPCF lies within the North County Multiple Habitat Conservation Program, a subregional plan of the San Diego region (SANDAG 2003). The EWPCF site lies within an area categorized as developed, carrying no habitat or conservation value. Sensitive biological species preservation and protection in the project area are guided by the Habitat Management Plan of the City of Carlsbad (City of Carlsbad 2004), which was developed in cooperation with federal and state wildlife agencies. The EWPCF site is not located within boundaries of the preserve system established through the Habitat Management Plan. The preserve system management unit closest to the project site is the Poinsettia/Aviara management unit, which is separated from the Project site by I-5. The proposed Project would therefore not result in impacts to the MHCP.

Mitigation Measures: None required or recommended.

3.5 CULTURAL RESOURCES

Would the Project:	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Cause a substantial adverse change in the significance of a historical resource as defined in §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 a unique archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a-d) No cultural resources are known to exist within the boundaries of the Project site. A cultural resources records search of the California Historical Resources Information System (CHRIS) was conducted on May 4, 2018. The CHRIS search included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The results indicated that there were 41 previously conducted studies within 0.5-mile radius of the project site, six of which were located within the Project site which did not identify any cultural resources within the Project site (Rincon 2018).

The Project would be located within the existing EWPCF site, which has been previously developed, graded, and compacted. The EWPCF is not identified as a significant historical or cultural resource and is not included in a local, state, or federal register of historical resources. As a result, the proposed Project would not have an effect on California historical resources. In the event that unanticipated cultural resources are identified during construction, they will be treated in accordance with CEQA Guidelines section 15064.5 (f), halting ground disturbance in the immediate area of the find until it can be evaluated by a qualified archaeologist. If human remains are discovered, the Project will comply with applicable California Health and Safety Code and Public Resource Code sections. However, historical, archaeological, and paleontological resources are not known to exist within the Project boundaries, therefore there would be no impact.

Mitigation Measures: None required or recommended.

3.6 GEOLOGY AND SOILS

Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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Would the Project:

a) Expose people or structures to 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 Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 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 type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) The Project is located in southern California, a seismically active region. A review of the most recent Alquist-Priolo Earthquake Fault Zone Map (California Department of Conservation, 2015) found that the proposed project is not located within a USGS quadrangle where Alquist-Priolo fault zones occur, nor is the Project area located within landslide and liquefaction zones. There would thus be no impact associated with surface rupture. While no faults have been identified within the Project area, the Project site is located in a seismically active region. Faults located outside of the area, such as the Rose Canyon, Elsinore, and San Andreas Faults,

may pose a seismic threat to the project site through significant ground shaking. The potential for liquefaction, landslides, and seismic settlement are low. The Project is not expected to expose people or property to a substantial risk of adverse effects from seismic hazards, including ground shaking. Impacts would be less than significant. Liquefaction is the process in which poorly consolidated, sandy soils take on the properties of a liquid when subjected to strong ground shaking. The potential for liquefaction is considered to be negligible; impacts would be less than significant.

The existing EWPCF site is situated on a relatively flat developed parcel, with no source of a landslide in the immediate proximity. According to landslide maps from the California Department of Conservation (1995) the EWPCF site is located within an that is marginally susceptible to landslides. Material is considered unlikely to remobilize under natural conditions. No impact associated with landslides would be expected.

- b) The Screenings Annex would be located on previously developed and paved land. The parking lot would develop and pave an approximately 15% slope in a 6,600 sq. ft. project area. The proposed parking lot would be constructed on currently landscaped area that has alluvial sediment of mostly silty sand, sandy clay, and scattered gravel (Converse Consultants 2017a and 2017b). The amount of landscaping in this area is minimal and loss of topsoil would be less than significant.
- c-d) As noted above in item a), the potential for liquefaction is considered negligible. As noted in b), the Annex would be located on previously developed. The paved land and the parking lot would be developed on alluvial sediment that is not considered expansive soil (Converse Consultants 2017a). There would be no impacts related to unstable or expansive soils.
- e) The proposed Project does not include the use of septic tanks or other onsite subsurface disposal systems not associated with municipal sewer collection and disposal systems. Therefore, no impacts would occur related to soils incapable of adequately supporting septic or other alternative wastewater disposal systems.

Mitigation Measures: None required or recommended.

3.7 GREENHOUSE GAS EMISSIONS

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
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"/>

Discussion

a-b) Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone, and certain hydrofluorocarbons. These gases are known as greenhouse gasses and allow solar radiation into the Earth's atmosphere but prevent it from escaping, thus heating the planet's surface. Emissions of GHGs in excess of natural ambient concentrations enhance the greenhouse effect and contribute to climatic changes. These climatic change impacts are by nature cumulative; direct impacts cannot be evaluated because the impacts themselves are global rather than localized impacts.

California Health and Safety Code Section 38505(g) defines GHGs to include CO₂, CH₄, N₂O, ozone, chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). As individual GHGs have varying heat trapping properties and atmospheric lifetimes, GHG emissions are converted to carbon dioxide equivalent (CO₂e) units for comparison. The CO₂e is a consistent methodology for comparing GHG emissions because it normalizes various GHG emissions to a consistent measure. The most common GHGs related to the Project are those primarily related to energy usage: CO₂, CH₄, and N₂O.

The City of Carlsbad adopted a Climate Action Plan (CAP) as part of its General Plan Environmental Impact Report (EIR) in September 2015 with the intention to reduce the City's GHG emissions and streamline environmental review of future development projects in the city. The CAP includes local GHG emissions inventory, forecasts for future GHG emissions, and a comprehensive set of measures and actions for the City to reduce GHG emissions and combat global climate change through 2035. The CAP is designed to reduce Carlsbad's GHG emissions and streamline environmental review of future development projects in the city in accordance with CEQA. The CAP's GHG emission targets are based on meeting the goals set in Executive Order (EO) S-3-05 and Assembly Bill (AB) 32.

Implementation of the proposed Project would include construction activities. The construction activities, however, are limited to the current EWPCF facility and are associated with planned growth and demands for wastewater treatment in Carlsbad. The Project's construction activities are not associated with unplanned growth. Given the relatively small size of the project and the length of construction (18 months for the Annex and 6 months for the parking lot), GHG emissions from construction are anticipated to be lower than the annual screening criteria of 900 MT CO₂e identified in the City of Carlsbad CAP Consistency Checklist (EWA

2018). Because construction emissions would be temporary and lower than the screening threshold, they are not expected to result in a significant impact.

Operation of the proposed Annex and parking lot are not expected to induce a net increase in vehicle trips to or from the facility in employee commutes or materials transports. Although there would be additional lighting required in the Annex and parking areas, efficiencies through the use of new equipment are expected to reduce the overall energy demand for the equipment and structures. Where lighting is included in the proposed Project, the Project would incorporate light-emitting diode (LED) lighting fixtures, consistent with CAP GHG reduction measure I – Efficient Lighting Standards. Additionally, as indicated in the General Plan EIR Chapter 3.4, Energy, Greenhouse Gases, and Climate Change, implementation of the General Plan policies and associated reduction measures in the CAP would meet all GHG emission targets through 2035 and overall GHG emissions within the city.

As the GHG emissions due to construction activities would be temporary and lower than the applicable threshold, and operational GHG emissions are anticipated to decrease overall due to the installation of updated and more efficient equipment, impacts related to projected-related GHGs would be less than significant.

A CAP Consistency Checklist was prepared for the Project and is included in Attachment A. The proposed Project is not anticipated to increase net operational production of GHGs from the EWPCF facility. Through the installation and use of new and more energy efficient equipment, the facility's net energy consumption, and associated GHG emissions, are expected to decrease overall. Thus, the net increase in annual CO₂e is expected to be less than the City of Carlsbad's established level of significance of 900 MT CO₂e per year as defined in its CAP Consistency Checklist.

Because the Project is exempt from CEQA and would result in annual operational emissions of less than 900 MT CO₂e, it would not conflict with the City's CAP. Because the Project is consistent with the City's CAP, it is also, therefore, consistent with the goals set in EO S-3-05 and AB 32. The Project would not induce an increase in vehicle miles traveled, or a net increase in GHG emissions from non-mobile sources; therefore, it would also be consistent with the goals set out in Senate Bill (SB)-32 and the California Air Resources Board 2017 Climate Change Scoping Plan. Therefore, the proposed Project is consistent with and does not conflict with any existing plan, policy or regulation developed for the purposes of reducing GHG emissions; impacts would be less than significant.

Mitigation Measures: None required or recommended.

3.8 HAZARDS AND HAZARDOUS MATERIALS

Would the Project:	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) This Project would improve the screenings and grit handling process through the construction of an additional screenings facility. During operations, the generated waste in the solids content of the grit and screenings rollaway bin would be classified as non-hazardous. If the grit and screenings material fails to meet the non-

hazardous classification, it would be disposed of at an appropriate landfill such as the Copper Mountain Landfill in Wellton, Arizona rather than the Otay Landfill in San Diego County.

The Project would involve the use of petroleum products, solvents, and lubricating fluids for the fueling and servicing of construction equipment during the construction phase. The use and disposal of hazardous and/or toxic materials would be conducted in accordance with existing laws and regulations to prevent hazardous conditions to the public and the environment. The County of San Diego Department of Environmental Health, Hazardous Materials Division is the designated Certified Unified Program Agency (CUPA) for San Diego County. Construction would be short-term, and the handling of hazardous materials would be regulated through the implementation of CUPA programs, as well as the conformance with other applicable federal, State, and local regulations. Therefore, the Project would have a less than significant impact related to the routine transport, use, or disposal of hazardous materials.

- b) Both during construction and operation at facilities, such as the EWPCF, a potential exists for accidental release of hazardous materials. Such accidental releases of hazardous materials would be controlled to a less than significant level through existing applicable federal, State, and local regulations that control or remediate the material accidentally released. Handling of hazardous materials during construction of the Project would be subject to General Plan Public Safety Policy 6-P.25, which requires proper storage and disposal of hazardous materials to reduce the likelihood of leakage, explosions, or fire, and to properly contain potential spills from leaving the site. Handling of hazardous materials during construction would also be regulated through implementation of CUPA programs. Handling of hazardous materials onsite during operations would be subject to compliance with EWA's plant-specific hazardous materials handling plan. Thus, impacts are considered less than significant.
- c) There is no existing or proposed school located within one quarter mile of the EWPCF site that would be subject to hazardous emissions or exposure to hazardous or acutely hazardous materials, substances, or waste. The closest schools, Halstrom Academy – Carlsbad and Dehesa Charter School, are located 0.4 miles away from the EWPCF at 705 Palomar Airport Road and 6797 Embarcadero Lane, respectively. Operations at EWPCF would not expose them to hazardous materials. There would be no impact.
- d) The EWPCF site is included on the California State Water Resource Control Board GeoTracker LUST Cleanup Sites system compiled pursuant to Government Code Section 65962.5 as the site of a former Leaking Underground Storage Tank (LUST). The leak was reported on July 25, 1990 and the case was closed as of December 21, 1991. Thus, impacts would be less than significant.
- e) The EWPCF is located within approximately 2.25 miles of the nearest public airport McClellan-Palomar Airport Land Use Compatibility Plan (Ricordo & Associates, Inc. 2011). The Project site lies beyond the airport safety zones, but is located within Review Area 2 of the airport influence area. Within this area, the only restrictions on land use are on limits of the heights of structures, particularly in elevated terrain. Related airspace protection policies and overflight notification requirements do not apply to nonresidential development. Notification to the FAA is only required if a building or construction cranes exceed 200 feet above ground level or above the established airport elevation (whichever is higher), according to the California Public Utilities Code, section 21658 and 21659, Part 77, Subpart B. There has been no conflict with the existing EWPCF and the McClellan-Palomar Airport and it is not anticipated that proposed facility improvements would result in related safety hazards for people residing or working in the project area. Thus, impacts would be less than significant.
- f) There are no known private airstrips within the Project vicinity. Therefore, there would be no related hazard impacts.

- g) Major potential evacuation routes are located along major highways and major roads. The proposed Project would be located within the boundaries of the existing EWCPF, which currently does not interfere with road way circulation. The construction of the parking lot would reduce the number of employees parked along Avenida Encinas and thereby decrease congestion for emergency vehicles.

The City of Carlsbad Fire Department provides fire protection and paramedic services to the City of Carlsbad. Potentially heightened traffic during construction is not anticipated to create significant interference to potential emergency road ways. Construction vehicles have the potential to use the same routes as first response vehicles, however this impact would be temporary and the local Fire Department would be notified of construction schedules and access routes prior to construction. Construction and operation of the proposed Project is not anticipated to affect the activities of emergency first response services in the long-term, nor would proposed Project activities and facilities have the potential to permanently impact emergency evacuation or response plans. Thus, impacts would be less than significant.

- h) The City of Carlsbad is considered a medium fire hazard for wildland fires according to the Multi-jurisdictional Hazard Mitigation Plan (San Diego County 2010). The Project site itself does not share an interface with wildlands that could be prone to fires although some vegetation, including landscaping, exists along the perimeter of the facility site. The Project involves the removal of a parcel of trees and vegetation within the EWPCF facility that may pose as a fire risk. Additional parcels of trees and vegetation are separated from the EWPCF by roads and train tracks. Given these site characteristics, Project activities and facilities are not anticipated to increase risk of wildfire. There would be no impact.

Mitigation Measures: None required or recommended.

3.9 HYDROLOGY AND WATER QUALITY

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
Would the Project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or 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"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation of seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a, f) Runoff from the EWPCF is directed either into the treatment plant for further processing or to Encinas Creek. There are no regular non-stormwater discharges from the EWPCF site to Encinas Creek. A Stormwater Pollution Prevention Plan (SWPPP) for the EWPCF site has been developed and implemented in compliance with State Water Resources Control Board Water Quality Order No. 91-13-DWQ; National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001; and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities. Activities related to the Project would comply with these permit requirements; thus, water quality threats related to discharges into the municipal separate storm sewer system (MS4) are not anticipated to be significant.

A Stormwater Quality Management Plan and Drainage Study was prepared for the Project by Woodard & Curran (Woodard & Curran 2018). EWPCF follows stormwater best management practices (BMPs) to reduce or eliminate stormwater pollution from entering Encinas Creek and, indirectly, the Pacific Ocean. The EWPCF stormwater conveyance and collection system is made up of concrete V ditches and storm drains. The V ditches range from shallow ditches adjacent to roadways to two-foot triangular ditches. The majority of stormwater within the treatment facility is collected and transferred to the treatment systems at several points within the system rather than dumping the stormwater directly into Encinas Creek. A portion of the runoff from the roads within the site is conveyed to continuous deflective separation (CDS) units, which act as a first screen of trash, debris, oil and grease, and heavy metals, prior to discharge to Encinas Creek and eventually to the Pacific Ocean. The Project will continue the BMP process of conveying runoff to CDS units, collecting runoff in catch basins, and then pumping that flow to the Project location's treatment plants for treatment (Woodard & Curran 2018).

The existing SWPPP for the site includes the parking lots. The Operational BMP for parking lots is already included in the SWPPP: "Shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing shall be collected to prevent entry into the storm drain system. Washwater containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain." (Woodard & Curran 2018).

The EWPCF discharges treated wastewater via the Encina Ocean Outfall. This discharge is subject to the Waste Discharge Requirements for the Encina Wastewater Authority Order No. R9-2011-0019, NPDES No. CA0107395. The proposed Project would not impact existing ocean discharge. No violations of water quality standards or waste discharge requirements would occur.

- b) This Project does not involve the use of groundwater through groundwater pumping and would not interfere with the level of groundwater recharge. Although the increase in impervious surfaces resulting from construction of the parking lot and turnaround would alter drainage patterns on the project site, the Project would not interfere substantially with groundwater recharge of the local aquifer because the overall amount of runoff from the site to the aquifer would remain unchanged. The Project would have a less than significant impact on groundwater supply.
- c, d, e) While the amount of runoff may increase slightly, the amount of impervious area created or replaced by the Project would comprise only 1.55% of existing impervious area at the EWPCF site. The EWPCF site is currently approximately 79% impervious surface. The change in flow as a result of the Project would be minimal and pumped back to the treatment systems. The table below summarizes the change in onsite drainage flows as a result of the Project.

Table 4: Change in Runoff Volume

DMA	DMA Type	Area (acres)	Impervious Area (acres)	DCV (ft ³)
<i>Existing Conditions</i>				
1	Drains to BMP	2.31	1.81	3,504
2	Drains to BMP	2.47	1.67	3,304
<i>Project Conditions</i>				
1	Drains to BMP	2.47	2.00	3,855
2	Drains to BMP	2.31	1.67	3,271
Percent increase in DCV (existing to Project conditions), DMA 1 = 10.0%				
Percent increase in DCV (existing to Project conditions), DMA 2 = -1.0%				

Notes: DMA = drainage management area. DCV = design control volume.

Source: Woodard & Curran 2018.

The greatest change from pervious to impervious surfaces would result from construction of the parking lot. The proposed parking lot will have a minimum 2% slope that will cause runoff to flow from the northeast end of the parking lot to the southwest end. The proposed parking lot will include 0.03 acres (1,307 sq. ft.) that will remain pervious. Runoff will flow from the northeast end of the parking lot to the southwest end and into a curb and concrete gutter. Water will then flow along valley ditches throughout the facility and be transported to two drainage areas where it can either be pumped into the plant's headworks or released to the flood control channel (Encinas Creek). Encinas Creek then discharges to the Pacific Ocean, which is located roughly 1,000 ft. from the property's boundary.

The capacity of the on-site existing stormwater system is 90.35 cubic feet per second (cfs) and the maximum storm event flows on the site were estimated at 65.73 cfs in the SWPPP (Lee & Ro 2005). Based on a rainfall intensity of 0.2 inches per hour, the estimated off-line BMP volume in DMA 1 is estimated at 0.37 cfs and the volume in DMA 2 is estimated at 0.31 cfs (Woodard & Curran 2018).

The general strategy for structural BMP implementation at the site is to continue operating the BMPs currently in place. Modifications to the areas draining to the BMPs is minimal. A harvest and use BMP is already in place for DMA 1. This BMP consists of a valve in the catch basin at the downstream end of the DMA which is normally closed. Stormwater runoff flowing to the catch basin is pumped back to the EWPCF headworks for treatment. A CDS unit or hydrodynamic separator BMP is already in place at the downstream end of DMA 2. Flow to this BMP would be reduced by the Project from the existing condition. This BMP removes typical stormwater runoff pollutants from the study area, including coarse sediment and trash. Encinas Creek runs through the EWPCF site; however, the Project would not alter its course.

The proposed Project is not expected to have a significant impact on the capacity of existing stormwater systems. Furthermore, the Project is not expected to result in a substantial change to the drainage pattern that could lead to erosion, siltation, or flooding on- or off-site.

- g, h, i) The Project does not include housing, is not located within the 100-year flood plain, based on the FEMA issued Flood Insurance Rate Map (Map number 06073C1030G, effective on 05/2012). The nearest 100-year flood zone is associated with the coastline, which lies approximately one quarter mile from the Project site. The proposed Project is not located in the vicinity of any levees or dams. There would be no impact.

- j) Although the EWPCF is located less than a mile from the coast, past wave heights and run-up elevations from tsunamis have fallen within normal tide ranges, and the EWPCF is located at an average elevation about 30 feet above mean sea level. The Project site is thus not expected to be affected by tsunamis. There are no other nearby water bodies that could subject the site to seiche or mudflows. There would be no impact.

Mitigation Measures: None required or recommended.

3.10 LAND USE AND PLANNING

Would the Project:	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable HCP or NCCP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) The proposed Project would be constructed entirely within the existing EWPCF and would thus not divide an established community. There would be no impact.
- b) The proposed Project is consistent with the Public Utilities land use and zoning designations of the EWPCF. There would be no conflict with an applicable land use plan, policy, or regulation, including the City of Carlsbad General Plan and zoning ordinances. City of Carlsbad Zoning code (Title 21 for P-U zones) does not state height regulations on buildings, however the proposed screening annex would comply with the 35 foot height limit for surrounding zones. This Project would be consistent with Policy 5-2 of the Local Coastal Plan (City of Carlsbad 2017), which states that future sewage treatment demands can be met by enlarging the EWPCF. The proposed project would replace aging infrastructure and improve the primary treatment process, ensuring efficient water treatment in the future. There would be no impact.
- c) As detailed in Section 3.4, Biological Resources, the EWPCF lies within the North County Multiple Habitat Conservation Program, a subregional plan of the San Diego region (SANDAG 2003). The EWPCF site lies within an area categorized as developed, carrying no habitat or conservation value. Sensitive biological species preservation and protection in the Project area are guided by the Habitat Management Plan of the City of Carlsbad (City of Carlsbad 2004), which was developed in cooperation with federal and state wildlife agencies. The EWPCF site is not located within boundaries of the preserve system established through the Habitat Management Plan. The preserve system management unit closest to the Project site is the Poinsettia/Aviara management unit, which is separated from the Project site by I-5. There would be no impact.

Mitigation Measures: None required or recommended.

3.11 MINERAL RESOURCES

Would the Project:	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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"/>

Discussion

a, b) According to the City of Carlsbad General Plan, Open Space and Conservation (City of Carlsbad, 2015), the City has limited Category 2 Open Space for Management Production of Resources (including forestry, agriculture, aquaculture, water management, commercial fisheries, and major mineral resources) located north of Palomar Airport Rd. The EWPCF is not located near a Category 2 designated zone and all changes to the EWPCF would occur at the existing facility. Therefore, the proposed Project would not result in the loss of availability of a known valuable mineral resource or important mineral resource recovery sites. There would be no impact.

Mitigation Measures: None required or recommended.

3.12 NOISE

Would the Project result in:	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, 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"/>

Discussion

a - d) The Noise Guidelines Manual of the City of Carlsbad identifies compatible exterior noise levels for various land use types. Community noise exposure levels at residential land uses are considered normally acceptable

up to 60 dBA¹ CNEL². Planned Industrial uses are considered normally acceptable up to 65 dBA CNEL and conditionally acceptable up to 75 dBA CNEL. Utilities and general industrial land uses are normally acceptable up to 70 dBA CNEL and conditionally acceptable up to 80 dBA CNEL (City of Carlsbad 2013). City of Carlsbad Municipal Code limits construction noise by limiting hours of construction. Construction activities are allowed to occur Monday through Friday between the hours of 7 a.m. to sunset, and on Saturdays from 8 a.m. to sunset. No construction is allowed on Sundays or on legal holidays.

According to a Noise Assessment conducted in 2003 for the EWPCF Phase IV Expansion, ambient noise levels in the vicinity of the EWPCF fluctuate during a 24-hour period, with noise levels generally increasing during the day. The highest noise levels are generated from traffic on I-5. Average sound levels measured adjacent to the existing EWPCF ranged from 58 to 67 dB during the day (Dudek & Associates 2003). In addition to I-5, other sources of ambient noise in the vicinity of the EWPCF are traffic on Avenida Encinas and Palomar Airport Road, aircraft traffic from McClellan-Palomar Airport, and trains along the railway line.

The Project would generate minimal noise during construction. Construction of the new Annex would require the following equipment: All terrain crane, 40 metric tons; Gradall 534, 10 k telescopic forklift; Haul cat 320 excavator; and Rear dump truck, 18 cubic yards. Construction of the parking lot, retaining wall, and pedestrian stairwells is expected to require an equipment fleet that includes: Excavator; Stream roller; Cement truck; Grader; and Dump truck. Each individual piece of equipment in the fleet would generate an L_{max} sound level of between 84 and 85 dBA at a distance of 50 feet (FTA 2006). A doubling of identical sound sources results in an approximately 3 dBA increase (FTA 2006). Not every piece of equipment would be operated at the same time during construction. Assuming a scenario in which 3 pieces of equipment are operating at the same time, the maximum sound level could be around 91 dBA at a distance of 50 feet. None of the pieces of equipment are considered typical sources of substantial groundborne vibration (FTA 2006).

As noted in Section 3.4, Air Quality, the nearest noise sensitive receptors, residences, are located approximately 600 feet from the Project site. For noise sources grouped closely together, such as equipment at a construction site, sound levels typically attenuate at a rate of 6 dBA per doubling of distance (FTA 2006). Thus, noise from heavy-duty construction equipment at the nearest off-site residential receptor is not expected to result in an exceedance of the normally acceptable 60 dBA CNEL threshold for residential areas. In addition, construction would be limited to daytime hours, as permitted by the City of Carlsbad Municipal Code.

In addition to heavy construction equipment, there would be workers and vendors driving to the site during construction. Construction traffic would use Avenida Encinas between the EWPCF and Palomar Airport Road. Traffic along Avenida Encinas is much lighter than traffic on I-5, which generates ambient noise levels up to 67 dB during the day at the EWPCF (Dudek & Associates 2003). For vehicles passing along a roadway, noise divergence with distance is approximately 3 decibels per doubling of distance (FTA 2006). Therefore, noise from construction light-duty vehicle traffic would be expected to be less than the normally acceptable 60 dBA

¹ The decibel scale is used to quantify sound intensity. Because sound can vary in intensity by more than 1 million times within the range of human hearing, a logarithmic loudness scale is used to keep sound intensity numbers at a convenient and manageable level. Because the human ear is not equally sensitive to all sound frequencies within the entire spectrum, human response is factored into sound descriptions in a process called "A-weighting," expressed as "dBA." The dBA, or A-weighted decibel, refers to a scale of noise measurement that approximates the range of sensitivity of the human ear to sounds of different frequencies. On this scale, the normal range of human hearing extends from about 0 dBA to about 140 dBA. A 10-dBA increase in the level of a continuous noise represents a perceived doubling of loudness.

² CNEL, or Community Noise Equivalent Level, is the average A-weighted noise level for a 24-hour period. CNEL adds a 5 dB penalty for noise occurring between 7 p.m. and 10 p.m., and a 10 dB penalty for noise occurring between 10 p.m. and 7 a.m.

CNEL threshold for residential areas at the nearest offsite receptors. Construction noise and vibration impacts are expected to be less than significant.

Operation of the screenings annex is expected to generate very little noise. Because existing noise levels adjacent to the EWPCF range from 58 to 67 dB, the addition of this minor noise source would not result in a perceptible difference in ambient noise level. Operation of the Project is thus not expected to cause a noticeable permanent change in the noise level at nearby receptors. Operational noise and vibration impacts are expected to be less than significant.

- e, f) The EWPCF is located about 2.25 miles west of the McLellan-Palomar Airport, but the proposed Project would not expose the public to airport noise. The Project site is not in the vicinity of a private airstrip. There would be no impacts.

Mitigation Measures: None required or recommended.

3.13 POPULATION AND HOUSING

Would the Project:	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) The proposed Project would not include the construction of new homes or businesses. The Project consists of improving the primary wastewater treatment process to more efficiently handle existing wastewater treatment needs. The Project would not expand wastewater treatment infrastructure in a manner that would induce unplanned growth. The Project also involves building an on-site parking lot to improve employee safety. The proposed parking lot would not result in additional hiring that would indirectly lead to a substantial increase in demand for housing in the surrounding area. The proposed Project would not directly or indirectly induce substantial population growth. There would be no impact.
- b, c) The proposed Project would be constructed and operated within the existing boundaries of the EWPCF and would not displace people or housing or require additional land. There would be no impact.

Mitigation Measures: None required or recommended.

3.14 PUBLIC SERVICES

<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
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Would the Project:

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

Fire protection?	<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"/>

Discussion

- a) The proposed Project would not change existing land uses, increase the number of residential units, cause an increase in population, or otherwise create activities that would increase demand for public services. Because the proposed Project would not induce or accommodate growth, the demand for fire and police protection, schools, parks or other facilities would not be affected.

Project facilities would be required to meet or exceed the minimum standards for the applicable building codes by state law and all local fire ordinances would be followed in design, construction and operation of the proposed Project facilities. No potential for any significant demand for fire protection or police services are identified. The existing EWPCF has safety features, including controlled site access, to prevent illegal trespass on the site. There would be no impacts associated with provision of public services.

Mitigation Measures: None required or recommended.

3.15 RECREATION

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

Discussion

a, b) The proposed Project consists of upgrades to the wastewater treatment facility to improve the primary treatment process. The proposed Project would not increase the use of existing parks or recreational facilities and would not result in demand for construction or expansion of new recreational facilities. There would be no impact on recreation facilities.

Mitigation Measures: None required or recommended.

3.16 TRANSPORTATION/TRAFFIC

Would the Project:	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Conflict with and applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a, b) Access to the EWPCF is provided by I-5, Palomar Airport Road and Avenida Encinas. Existing levels of service (LOS) for intersections and on-ramps in the vicinity of the EWPCF are shown in Table 5. LOS A and B conditions are desired, both of which indicate that traffic is moving in generally free flow conditions, with traffic flow at or above the posted speed limit. LOS C represents traffic at or near free flow conditions but the ability to move between lanes is noticeably restricted. The City considers an LOS of D or better to be acceptable during morning and evening peak periods.

Table 5: Level of Service (LOS) at Nearby Intersections

Location	AM Peak Hour LOS	PM Peak Hour LOS
I-5 Southbound Ramp/Palomar Airport Road	A	A
I-5 Northbound Ramp/Palomar Airport Road	C	C
Palomar Airport Road/Avenida Encinas	A	C
Avenida Encinas/Poinsettia Lane	A	B

Source: City of Carlsbad 2015

Operation of the Project would not result in an increase in vehicle trips per day and would not affect congestion in the area. The proposed parking lot would reduce the number of cars parked along Avenida Encinas, which could reduce congestion along this roadway. Traffic impacts would be less than significant.

- c) The Project would have no impact on air traffic or air traffic patterns.
- d) The local City of Carlsbad Fire Department would be notified of construction schedules and access routes prior to construction of the Project, which would minimize potential hazards associated with construction equipment on surrounding roadways. The Project would not permanently alter existing public roadways or require use of incompatible equipment on roads in the vicinity of the EWPCF. Possible congestion along Avenida Encinas is anticipated to improve due to the construction of the employee parking lot within the EWPCF facility. Impacts would be less than significant.
- e) The Project would not affect emergency access to the EWPCF. There would be no impact.
- f) The Project would not conflict with plans, policies or programs for pedestrian, bicycle or public transit facilities. There would be no impact.

Mitigation Measures: None required or recommended.

3.17 TRIBAL CULTURAL RESOURCES

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
<p>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:</p>				
<p>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a, b) According to a May 2018 search of the California Historical Resources Information System (CHRIS), the Project site is not listed or eligible for listing as defined in Public Resources Code section 5020.1(k). EWA issued letters on May 25, 2018 to the Native American tribes that had requested consultation pursuant to Public Resources Code section 2180.3.1. EWA received responses from four tribes. One of the tribes, the Pala Band of Mission Indians, responded on June 26, 2018 and requested to initiate a preliminary AB 52 consultation. EWA responded to the tribe's request and began AB 52 consultation on July 26, 2018. The Pala Band of Mission Indians recommend the use of a trained Native American cultural monitor during any ground-disturbing activities and EWA has committed to do so. In the event that unanticipated tribal-cultural resources are identified during construction, they would be treated in accordance with CEQA Guidelines section 15064.5 (f), halting ground disturbance in the immediate area of the find until they can be evaluated by a qualified archaeologist and Native American monitor. If human remains are discovered, the Project would comply with applicable California Health and Safety Code and Public Resource Code sections. Impacts are expected to be less than significant.

Mitigation Measures: None required or recommended.

3.18 UTILITIES AND SERVICE SYSTEMS

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
Would the Project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a, b) The Project would improve the primary treatment of wastewater at the EWPCF through the construction of a screenings annex and replacement of outdated equipment. The Project would not generate wastewater and would have no effect on wastewater treatment requirements. The Project would not indirectly induce or accommodate population growth and would thus not require construction of new or expanded water or wastewater treatment facilities. There would be no impact.
- c) As discussed in 3.9 Hydrology and Water Quality, the Project would continue operating the drainage BMPs currently in place. Modifications to the areas draining to the BMPs would be minimal. The proposed Project is

not expected to have a significant impact on the capacity of existing stormwater systems, nor would it require expansion of existing stormwater drainage facilities. Impacts would be less than significant.

- d) The Project would not require use of additional water and would thus not need new or expanded water entitlements. There would be no impact.
- e) EWA is the wastewater treatment provider and would be the owner and operator of the proposed facilities to improve the primary treatment process of wastewater. There would be no impact.
- f, g) The Project would improve the efficiency of the initial screenings process such that additional grit and debris would be screened out in the primary treatment step. The Project is expected to result in an increase in up to one additional waste truck hauling trip per day from the initial screenings process. However, there is expected to be an equivalent decrease in truck hauling trips at the end of the biosolids removal process. The waste would be disposed of at the Otay Landfill which has a permitted capacity of 6,700 tons per day and an average daily intake of approximately 5,900 tons per day. EWA has been conducting a pilot project with the proposed smaller screen rakes and the increase in waste as a result of the pilot project has been accounted for in its solid waste generation for the past year. EWA currently recycles 99% of biosolids produced at the EWPCF as fertilizer, soil amendment, or biofuel. This Project would improve solids handling by screening out more undesirable content in the screenings annex to create a higher-grade biofuel. The Project would have a less than significant impact in relation to solid waste generation.

Excavation for the parking lot and truck turnaround would generate minimal construction waste. Any construction waste would be disposed of in accordance with applicable federal, State and local regulations. Disposal would occur at permitted landfills, and the construction contractor would be encouraged to recycle construction materials, to the extent feasible. The impacts would be less than significant.

Mitigation Measures: None required or recommended.

3.19 MANDATORY FINDINGS OF SIGNIFICANCE

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Does the Project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the Project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a) The Project does not have the potential to degrade the quality of the environment. The site has very limited habitat resources for fish or wildlife species. No cultural resources are known to exist within the boundaries of the Project site. Through compliance with existing regulations, the Project would have a less than significant impact on paleontological, archeological, cultural, and historical resources.
- b) Implementation of the Project would not result in individually limited, but cumulatively considerable significant impacts. All resource topics associated with the Project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts or less than significant impacts. The scale of the Project is small, would accommodate planned growth, and would not be cumulatively considerable.
- c) Construction of the project would result in minor changes in ambient noise and traffic conditions. However, compliance with existing regulations would result in less than significant impacts. Consequently, the Project would not result in any environmental effects that would cause substantial adverse effects on man being directly or indirectly.

4. REPORT PREPARATION

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4.2 REFERENCES

- California Department of Conservation. 2014. *Farmland Mapping and Monitoring Program*. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/sdg14_w.pdf, Accessed on May 21, 2018
- California Department of Transportation. 2013. *Officially Designated State Scenic Highways*, updated July 18, 2017. Available at: <http://www.dot.ca.gov/design/lap/livability/scenic-highways/index.html>, Accessed on May 18, 2018.
- Carollo. 2018. *Encina Water Pollution Control Facility Administration Building West Parking Lot 100% Submittal*. January.
- CDM Smith. 2017. *Encina Wastewater Authority 50% Submittal Drawings and Technical Specifications for Encina Water Pollution Control Facility Primary Area Improvement Project*. December.
- CDM Smith. 2018. *Encina Wastewater Authority 90% Submittal Drawings and Technical Specifications for Encina Water Pollution Control Facility Primary Area Improvement Project*. June.
- City of Carlsbad. November 2004. *Habitat Management Plan for Natural Communities of the City of Carlsbad*. Available at: http://www.sandag.org/uploads/publicationid/publicationid_149_579.pdf, Accessed May 22, 2018
- City of Carlsbad. 2013. *Noise Guidelines Manual*.
- City of Carlsbad. 2015. *Traffic Monitoring Program: City of Carlsbad Growth Management Plan Final Report*.
- City of Carlsbad. 2015. *General Plan*.
- City of Carlsbad. 2015. *Climate Action Plan*.
- City of Carlsbad. 2016. *Engineering Standards Volume 5 Carlsbad BMP Design Manual (Post Construction Treatment BMPs)*. February 16.
- Converse Consultants. 2017a. *Geotechnical Investigation Report, Encina Phase V Wastewater Expansion – New Parking Lot*. May 24.
- Converse Consultants. 2017b. *Geotechnical Investigation Report, 1,400 Square Foot Building Encina Phase V Wastewater Expansion*. August 30.
- Dudek & Associates. 2003. *Encina Pollution Control Facility Phase V Expansion – Environmental Noise Assessment*.
- Encina Wastewater Authority. 2013. *Initial Study/Mitigated Negative Declaration for Encina Wastewater Authority Energy and Emissions Strategic Plan Projects*. May 2013.
- Encina Wastewater Authority. 2014. *Initial Study/Mitigated Negative Declaration for Encina Wastewater Authority Pyrolysis Demonstration Project*. June 2014.

- Encina Wastewater Authority. 2018. *City of Carlsbad Climate Action Plan Consistency Checklist*. June.
- Federal Highway Administration. 2006. *Construction Noise Handbook*. Available at: https://www.fhwa.dot.gov/ENVIRONMENT/noise/construction_noise/handbook/handbook09.cfm. Accessed May 24, 2018.
- Federal Transit Administration. 2006. *Transit Noise and Vibration Impact Assessment*. Available at: https://www.transit.dot.gov/sites/fta.dot/gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf, Accessed May 24, 2018.
- Lee & Ro. 2005. *Drainage Report for Operations and Maintenance Facilities*. February (Revised May).
- Ricondo & Associates, Inc. 2011. *McClellan-Palomar Airport Land Use Compatibility Plan*. Prepared for San Diego County Regional Airport Authority.
- SANDAG. 2003. *Multiple Habitat Conservation Program*. Available at: <http://www.sandag.org/?projectid=97&fuseaction=projects.detail>
- San Diego County Air Pollution Control District. 1996. *Regulation XII, Rule 1210 Toxic Air Contaminant Public Health Risks – Public Notification and Risk Reduction*. June 12.
- San Diego County Air Pollution Control District. 2018. *Attainment Status*. Available at: <https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html>, <http://www.sdapcd.org/info/info.html>, Accessed May 31, 2018.
- San Diego County. 2010. *Multi-jurisdictional Hazard Mitigation Plan*. Available at: https://www.sandiegocounty.gov/oes/emergency_management/oes_jl_mitplan.html, Accessed May 24, 2018.
- Woodard & Curran. 2018. *Priority Development Project Storm Water Quality Management Plan (SWQMP) for Encina Water Pollution Control Facility Primary Treatment Area Improvements*. August 6.