CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA 7575 METROPOLITAN DRIVE, SUITE 103 SAN DIEGO, CA 92108-4402 (619) 767-2370



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F20a

Addendum

January 6, 2017

To: Commissioners and Interested Persons

From: California Coastal Commission

San Diego Staff

Subject: Addendum to **Item F20a**, Coastal Commission Permit Application No.

6-16-0099 (San Elijo Joint Powers Authority), for the Commission

Meeting of Friday, January 13, 2017.

The purpose of this addendum is to add clarifying language to Special Condition 1. Staff recommends the following changes be made to the above-referenced staff report. Deletions shall be marked by a strikethrough and additions shall be underlined:

1. On page 5 of the staff report, Special Condition 1, Submittal of Final Plans, shall be modified as follows:

Submittal of Final Plans. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, two full-size sets of final plans that substantially conform with the plans submitted to the Commission, titled "Project Plans – Permit Submittal" dated August 2016, except they shall be revised to reflect the following:

(a) The existing pipeline Any segment of the existing pipeline that is located under an existing or approved engineered structure including, but not limited to, roads, railbeds, engineered fill, shoreline protective devices, levees, parking lots, and the San Elijo Lagoon Nature Center, shall be backfilled.

The permittee shall undertake development in conformance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA 7575 METROPOLITAN DRIVE, SUITE 103 SAN DIEGO, CA 92108-4421 (619) 767-2370



F20a

Filed: 9/30/16 180th Day: 3/29/17 Staff: M. Lasiter -SD Staff Report: 12/22/16 Hearing Date: 1/13/17

STAFF REPORT: REGULAR CALENDAR

6-16-0099 **Application No.:**

San Elijo Joint Powers Authority **Applicant:**

Agent: Kennedy/Jenks Consultants

Location: 2695 Manchester Avenue, southwest under the San

Elijo Lagoon to Cardiff State Beach, Encinitas, San

Diego County

Project Description: Abandonment of existing pipeline, installation of

new 2,900 ft., 30 in. diameter pipeline

approximately 30-75 ft. under the lagoon using horizontal directional drilling, and connection of the

new pipeline to existing ocean outfall pipeline

Staff Recommendation: Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

The proposed project would replace an existing pipeline that delivers wastewater treated at the San Elijo Water Reclamation Facility (SEWRF) under the San Elijo Lagoon to an existing ocean outfall at Cardiff State Beach. Originally built in 1965, the existing pipeline is nearing the end of its useful life. In addition, three major projects within or adjacent to the San Elijo Lagoon have been approved by the Commission and the existing pipeline project has been coordinated with the construction of those projects. Those projects include: 1) replacement of the rail bridge and double-tracking the rail corridor through San Elijo Lagoon (Consistency Certification No. CC-0004-15), 2) replacement of the Interstate-5 bridge over San Elijo Lagoon (CDP No. 6-15-2092), and 3) restoration of the San Elijo Lagoon (CDP No. 6-16-0248). While no work will take place in lagoon waters, a 250 ft. by 100 ft. fenced construction area will be necessary at Cardiff State Beach and in proximity to the lagoon.

The primary issues raised by this project are potential impacts to water quality and biological resources during construction, protection of coastal resources at the work site and protection of the site from wave action and run-up, and temporary impacts to public access and recreation at Cardiff State Beach and Coast Highway 101 during construction. Because there is a potential for accidental spill of drilling fluids during horizontal directional drilling (HDD), Special Condition No. 2 requires a Drilling Fluid Release Monitoring and Contingency Plan be implemented during construction to avoid the inadvertent release of drilling fluid and to ensure prompt clean-up and restoration if a spill occurs. The project will result in a temporary loss of parking along Coast Highway 101, a weeklong closure of one southbound lane of Coast Highway 101, and restriction of a portion of Cardiff State Beach during the 4-month construction period. Special Condition No. 3 requires the applicant to submit a final Public Access Plan to ensure public access is maintained along the coast throughout construction. Special Condition No. 3 also prohibits development activity from Memorial Day weekend through Labor Day to alleviate impacts to public access and recreation during the busy summer months. Finally, because construction will occur in close proximity to coastal waters, **Special** Condition No. 4 requires the applicant to implement Best Management Practices to ensure protection from coastal hazards, erosion and sedimentation impacts, and prevent spillage or runoff of construction materials, sediment, or contaminants associated with construction activity. Special Condition No. 9 requires that the applicant submit a Final Storage and Staging Plan to ensure that storage and staging has the least impact on public access and marine resources. To minimize impacts to the lagoon and Cardiff State Beach ecosystem during construction Special Condition No. 10 requires the applicant to submit a Final Construction Schedule and Integration Plan that describes coordination with other projects that will be constructed concurrently within the same lagoon system. Other conditions include the submission of final plans, an assumption of risk, sensitive species monitoring, agreement that no future protective devices may be constructed if the development is threatened by coastal hazards, and compliance with mitigation, monitoring, and reporting described in the San Elijo Joint Powers Authority-approved Mitigated Negative Declaration.

Commission staff recommends **approval** of coastal development permit application 6-16-0099 as conditioned.

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APPENDICES

Appendix A – Substantive File Documents

EXHIBITS

Exhibit 1 – Vicinity Map Exhibit 2 – Site Map

Exhibit 3 – Project Plans

Exhibit 4 – CDP Consolidation Letter

Exhibit 5 – Public Access Plans

Exhibit 6 – Site Photos

I. MOTION AND RESOLUTION

Motion:

I move that the Commission approve Coastal Development Permit Application No. 6-16-0099 subject to the conditions set forth in the staff recommendation.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves coastal development permit 6-16-0099 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

- 1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

- 4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

- 1. **Submittal of Final Plans.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, two full-size sets of final plans that substantially conform with the plans submitted to the Commission, titled "Project Plans Permit Submittal" dated August 2016, except they shall be revised to reflect the following:
- (a) The existing pipeline shall be backfilled.

The permittee shall undertake development in conformance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

- 2. **Drilling Fluid Release Monitoring and Contingency Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, a Drilling Fluid Release Monitoring and Contingency Plan. The plan shall include, at a minimum, the following components:
 - (a) The Drilling Fluid Release Monitoring and Contingency Plan shall provide for the timely detection of inadvertent returns (frac-outs) associated with horizontal directional drilling (HDD) activities and ensure an organized, timely, and minimum impact response in the event of an inadvertent return or any release of drilling lubricant (i.e., bentonite). This plan, as a minimum, requires:
 - i. A full-time drilling engineer Monitor, who shall monitor all drilling to look for inadvertent return conditions to the ground surface, ensure a maximum drilling fluid density of 11 pounds per gallon, and report loss of returns as indicated by lowered pressure readings on drilling equipment.
 - ii. Use of lower down-hole pressure and nontoxic leak sealants in substrates where inadvertent returns are more likely to occur. Lower pressure shall be maintained by not exceeding a drilling fluid density of 11 pounds per gallon.
 - iii. If inadvertent returns are identified, all work shall stop, including the recycling of drilling lubricant. In the event of inadvertent returns into water,

adequate pressure of the water above the tunnel shall be maintained to prevent excess mud from escaping through the fracture. The location and extent of the inadvertent returns shall be determined and the inadvertent returns shall be monitored for at least four (4) hours to determine whether the drilling lubricant, such as betonite, congeals.

- iv. If the drilling lubricant congeals, no efforts may be taken to remove the congealed drilling fluid that would introduce risk of suspending sediments in the water.
- v. Inadvertent surface releases of bentonite shall be allowed to harden and then shall be removed.
- vi. Additional measures to be taken to contain or remove the drilling lubricant if it does not congeal.
- vii. Notification procedures, including immediate notification of the Coastal Commission and other resource agencies as required, in the event of inadvertent returns to ground surface.
- (b) The Drilling Fluid Release Monitoring and Contingency Plan shall establish monitoring and response criteria that will minimize the potential for environmental effects from the HDD operation, specifically:
 - i. Minimize the possibility of inadvertent surface returns of drilling fluids (commonly referred to as "frac-out") from the underground borehole into the lagoon.
 - ii. Minimize the possibility of drilling fluid seepage from the entry and exit sites (i.e., bore and receiving pits) of the directional drills.
- iii. Avoid and minimize adverse effects if inadvertent surface returns should occur.

The permittee shall undertake development in conformance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

- 3. **Final Public Access Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, a Final Public Access Plan that substantially conforms with the preliminary plans titled "Revised Beach Side Plans for Phase 1 and 2 Permit Submittal" dated August 2016. The plan shall include, at a minimum, the following components:
 - (a) No overnight storage of equipment or materials shall occur outside the designated work area.

- (b) Continuous public access around the construction site on Cardiff State Beach must be maintained at all times for the duration of construction.
- (c) Access corridors shall be located in a manner that has the least impact on public access to and along the shoreline of the project site.
- (d) No work shall occur on the beach from Memorial Day weekend through Labor Day of any year, except with written approval of the Executive Director.
- (e) Signage shall be installed directing pedestrians at the beach to the temporary pedestrian walkway.
- (f) The applicant shall submit evidence that the approved public access plan has been incorporated into construction bid documents. The staging site shall be removed and restored immediately following completion of the development.

The permittee shall undertake development in accordance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

- 4. **Construction Best Management Practices Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, a Construction Best Management Practices Plan for the project site, prepared by a licensed professional, and shall incorporate erosion, sediment, and chemical control Best Management Practices (BMPs) designed to minimize to the maximum extent practicable the adverse impacts to receiving waters associated with construction. The applicant shall implement the approved Construction Best Management Practices Plan on the project site prior to and concurrent with the project staging, demolition and construction operations. The BMPs shall be maintained throughout the development process.
 - (a) Said plan shall include the following requirements:
 - i. No construction materials, debris, or waste may be placed or stored in a manner where materials may be subject to erosion or dispersion by waves, wind, rain, or tides. Work over, under, or adjacent to coastal waters shall be conducted when predicted weather and ocean conditions will allow effective control and full containment of construction materials.
 - ii. Temporary protection of the project site on Cardiff State Beach shall be provided by working above the beach, through the use of elevated platforms or a raised work area, to the extent feasible. Interlocking sheet piling and sand berms may also be used; however, sand berms must be constructed from native sand on Cardiff State Beach, provided that the use of the sand does not create vulnerabilities to other portions of Cardiff State Beach. Sand bags along the perimeter of the work area may be used for erosion protection or as part of Best Management Practices (see Special Condition 4.B.), provided that the bagged sand is similar in composition to the native sand on Cardiff State Beach, daily monitoring occurs and any damaged sandbag is repaired or

- replaced immediately. No other protection may be used without written approval of the Executive Director.
- iii. Any and all refuse and debris, including residual bentonite and recovered spoils, resulting from construction and demolition activities shall be removed from the project site within 72 hours of completion of demolition and construction. Construction and demolition debris and sediment shall be removed from or contained and secured within work areas each day that construction or demolition occurs to prevent the accumulation of sediment and other debris that could be discharged into coastal waters. All demolition/construction debris and other waste materials removed from the project site shall be disposed of or recycled in compliance with all local, state, and federal regulations. No debris or other waste materials may be placed in coastal waters or be allowed to move into coastal waters. If a disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal may take place.
- iv. Erosion control/sedimentation Best Management Practices (BMPs) shall be used to control dust and sedimentation impacts to coastal waters during construction and demolition activities. BMPs shall include, but are not limited to, placement of sand bags around drainage inlets to prevent runoff/sediment transport into the storm drain system and coastal waters.
- v. All construction materials, excluding lumber, shall be covered and enclosed on all sides, and kept as far away from a storm drain inlet and receiving waters as feasible.
- vi. Use of temporary erosion and sediment control products (such as fiber rolls, erosion control blankets, mulch control netting, and silt fences) that incorporate plastic netting (such as polypropylene, nylon, polyethylene, polyester, or other synthetic fibers), may not be used in order to prevent wildlife entanglement and plastic debris pollution.
- vii. BMPs to minimize land disturbance, protect vegetation, and avoid unnecessary soil compaction.
- (b) The required Construction Best Management Practices Plan for the project site shall also include the following BMPs designed to prevent spillage and runoff of construction and demolition-related materials, sediment, or contaminants associated with construction activity. The applicant shall:
 - i. Develop and implement spill prevention and control measures and ensure the proper handling, storage, and application of petroleum products and other construction materials. These measures shall include a designated fueling and vehicle maintenance area, with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products and contact with runoff. The fueling and maintenance area shall be located as far away from

- the receiving waters and storm drain inlets as feasible and shall not be located on the beach.
- ii. Maintain and wash equipment and machinery in confined areas specifically designed to control runoff. Thinners or solvents may not be discharged into sanitary or storm sewer systems. Washout from concrete trucks shall be disposed of at a controlled location not subject to runoff into coastal waters, and at least fifty feet away from a storm drain, open ditch, and surface waters.
- iii. Provide and maintain adequate disposal facilities for solid waste, including excess concrete, produced during construction.
- iv. Provide and maintain temporary sediment basins (including debris basins, desilting basins or silt traps), temporary drains and swales, sand bag barriers, wind barriers such as solid board fence or hay bales, and silt fencing.
- v. Stabilize any stockpiled fill with geofabric covers or other appropriate cover, and close and stabilize open trenches as soon as possible.
- vi. Ensure that no gasoline, lubricant, or other petroleum-based product was deposited on the beach or at any beach facility. If such residues are discovered, the residues and all contaminated sand shall be reported to the Executive Director in order to determine if the removal and disposal of the contaminated matter shall require a permit amendment pursuant to the requirements of the Coastal Act or the California Code of Regulations.

The Construction Best Management Practices Plan approved by the Executive Director pursuant to this condition shall be attached to all final construction plans. The permittee shall undertake development in accordance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

5. **Mitigation and Monitoring Requirements.** By acceptance of this permit, the applicant agrees to comply with and implement all of the conditions, recommendations, and project features included in the Mitigated Negative Declaration (MND) dated February 2016, approved by the San Elijo Joint Powers Authority.

6. Assumption of Risk, Waiver of Liability, and Indemnity.

(a) By acceptance of this permit, the permittee acknowledges and agrees (i) that the site may be subject to hazards, including but not limited to waves, storms, and flooding, many of which will worsen with future sea level rise; (ii) to assume the risks to the permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury of damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project

- against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.
- (b) PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of subsection A of this condition.
- Sensitive Species Monitoring. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES during bird nesting season (February 15th through September 15th), a qualified biologist shall conduct a site survey for active nests no more than 72 hours prior to any development. If an active nest of a special-status species or species protected by the federal Migratory Bird Treaty Act (MBTA) or the California Fish and Game Code 3503 is located, then a qualified biologist shall monitor the nest daily until project activities are no longer occurring within a distance feet of the nest appropriate to the sensitivity of the species and determined in consultation with the California Department of Fish and Wildlife (typically 300 feet for most species, up to 500 feet for raptors), or until the young have fledged and are independent of the adults or the nest is otherwise abandoned. Limits of construction around active nests shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The monitoring biologist shall halt construction activities if he or she determines that the construction activities may be disturbing or disrupting the nesting activities. The monitoring biologist shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the active nests or birds. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in other areas until the young have fledged, and (3) utilizing alternative construction methods and technologies to reduce the noise of construction machinery. The monitoring biologist shall review and verify compliance with these avoidance boundaries and shall verify that the nesting effort has finished in a written report. Unrestricted construction activities may resume when the biologist confirms no active nests are found. The results of the site survey and any follow-up construction avoidance measures shall be documented by the monitoring biologist and submitted to the San Diego office of the California Coastal Commission.
- 8. **Coastal Hazards Response.** By acceptance of this Coastal Development Permit (CDP), the permittee acknowledges and agrees, on behalf of itself and all successors and assigns, that:
 - (a) **Coastal Hazards**. The site is subject to coastal hazards including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunami, tidal scour, coastal flooding, and their interaction.
 - (b) **Permit Intent**. The intent of this CDP is to allow for the approved project to be constructed and used consistently with the terms and conditions of this CDP for

- only as long as the development remains safe for use, without additional substantive measures or protective devices.
- (c) **Future Removal of Development**. The applicant shall remove or relocate, in part or in whole, the development authorized by this CDP, including, but not limited to the outfall pipeline and other development authorized under this CDP when the development becomes threatened by coastal hazards, such that the development presents a risk to life and property. Development associated with removal of authorized development shall require an amendment to this CDP, unless the Executive Director determines that no permit is required. In the event that portions of the development fall to the water or ground before they are removed, the applicant shall remove all recoverable debris associated with the development from the ocean, intertidal areas, and wetlands and lawfully dispose of the material in an approved disposal site.
- 9. **Final Storage and Staging Area Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for review and written approval of the Executive Director, two full-size sets of a Final Storage and Staging Area Plan. Said plan shall conform to the following requirements:
 - (a) All storage and staging shall be located outside of sensitive habitat areas.
 - (b) Storage/staging at Cardiff State Beach shall be the minimum area necessary to accommodate project activities that must take place on the beach and in no case shall be greater than 100 feet x 250 feet.

The permittee shall undertake development in accordance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

- 10. **Final Construction Schedule and Integration Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, a Final Construction Schedule and Integration Plan. The plan shall include, at a minimum, the following components:
 - (a) A construction schedule for all aspects of the project, and
 - (b) An integration plan that describes coordination with the other projects at San Elijo Lagoon, including the Interstate-5 improvements (CDP No. 6-15-2092 and NOID No. NCC-NOID-0005-15), the San Elijo Lagoon Double Track Project (Consistency Certification No. CC-0004-15), and the San Elijo Lagoon Restoration Project (CDP No. 6-16-0275).

The permittee shall undertake development in accordance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

The proposed project is the installation of an approximately 2,900-foot long, 30-inch diameter pipeline that will convey treated wastewater from the San Elijo Water Reclamation Facility (SEWRF) in Encinitas, southwest approximately 30- to 75-feet underneath the San Elijo Lagoon, to Cardiff State Beach where it will connect to an existing ocean outfall pipe (**Exhibit 1**). The project is necessary to replace an existing 2,500-foot long, 30-inch diameter, asbestos, cement pipeline, approximately 3 ½- to 18-feet underneath the San Elijo Lagoon. The pipeline was constructed in 1965 and has exceeded its useful life. In addition, three projects, the San Elijo Lagoon restoration, the Interstate-5 bridge replacement, and the rail corridor double-tracking, are planned to commence construction in the near term and are directly tied to the proposed project, due to their locations along the existing and proposed alignments.

Construction staging will be conducted at two locations, including within the SEWRF property and on Cardiff State Beach (**Exhibit 2**). The SEWRF site will include the staging of materials, equipment and personnel, and parking for all construction personnel. The secondary staging area on Cardiff State Beach is located just south of the existing restaurants on the west side of South Coast Highway 101. A designated work area of 100 feet by 250 feet will be established just west of Coast Highway 101 on the beach. This staging area will include equipment such as a drill rig, mud pumps, spoils separation plant, drill rod trailer, crane, baker tanks and a control cab.

While a portion of the 2,900-foot long pipe will be installed within open trenches, the majority of the pipe installation avoids trenches and will involve approximately 2,500 linear feet of horizontal directional drilling (HDD), and result in a curvilinear alignment different from the current alignment (**Exhibit 3**). The process will start with the installation of a 100-foot long, 60-inch casing pipe under Coast Highway 101 from Cardiff State Beach. The HDD would then be accomplished in three stages:

- 1. A small pilot hole would be drilled along the designated directional path from an entry point at Cardiff State Beach.
- 2. From the SEWRF, a back reamer would be passed back through to enlarge the pilot hole to a diameter suitable for installation of the pipeline.
- 3. Finally, the pre-fabricated pipeline would be pulled back into the enlarged hole from SEWRF to Cardiff State Beach.

From the SEWRF, the pipe would extend west approximately 80 linear feet from the connection point within the existing SEWRF access road, under the access road, and across an existing flood control channel. Construction of this segment of the pipe would occur within an open trench and may require removal of up to an approximately 30-foot section of the existing non-vegetated concrete-lined flood control channel. Following

installation of the pipe, the affected portion of the channel would be replaced in kind or an existing triple box culvert would be extended to the north approximately 30 feet.

Other pipeline work would occur within the trench in this area, including replacement of the existing Cardiff Pump Station Force Main with two 10-inch diameter ductile iron (DI) pipes that would extend generally parallel to the proposed regulator structure pipeline to connect with the existing 14-inch Olivenhain Pump Station sewer pipelines; installation of a 10-inch diameter DI pipe that would extend generally parallel to the proposed regulator structure pipeline, under the open channel, to connect with an existing above grade DI pipe; and removal of an existing 200-foot long, 10-inch diameter DI pipe mounted on the inside wall of the existing box culvert. Finally, a new connection to the existing Escondido Creek outfall regulator structure would be installed within the driveway to the San Elijo Lagoon Visitor Center.

At Cardiff State Beach, the new pipe would tie into the existing ocean outfall pipe located approximately 15 feet below ground level. The connection would be constructed in an excavated area approximately 50- by 50-feet and 20-feet deep. This area would be dewatered prior to connection of the new pipe with the existing outfall pipe, in accordance with the Regional Water Quality Control Board's permit. The excavated sand would be used to construct temporary berms over the existing riprap to be used as ramps for emergency vehicles and pedestrian access around the site. No construction work is proposed west of the pipeline connection within the ocean. Once the new pipeline is connected to the outfall and is operational, the existing pipeline would be dewatered, ends capped, and abandoned in place.

COMMISSION JURISDICTION AND PERMIT CONSOLIDATION

The proposed project includes components that are located within the City of Encinitas' Local Coastal Program (LCP) jurisdiction as well as components within the Commission's retained jurisdiction. The City would typically issue a coastal permit for the portion of the project within its LCP jurisdiction. However, Section 30601.3 of the Coastal Act authorizes the Commission to process a consolidated coastal development permit (CDP) application, when its criteria are satisfied, for both aspects of a proposed project that would otherwise require a CDP from both a local government with a certified LCP and from the Commission. In this case, the City of Encinitas, in a letter to Commission staff dated September 16, 2016, requested that the Commission issue a consolidated CDP for all components of the proposed project (Exhibit 4).

Therefore, the standard of review for the project is the Chapter 3 policies of the Coastal Act with the policies of the City of Encinitas LCP serving as guidance. As conditioned, the proposed project will be consistent with the applicable policies of the Coastal Act and the City's LCP.

B. BIOLOGICAL RESOURCES AND WATER QUALITY

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30240(b) of the Coastal Act states:

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

In addition, the following City of Encinitas LUP policies relate specifically to protection of coastal waters and biological resources:

RM Goal 10:

The City will preserve the integrity, function, productivity, and long term viability of environmentally sensitive habitats throughout the City, including kelp-beds, ocean recreational areas, coastal water, beaches, lagoons and their up-lands, riparian areas, coastal strand areas, coastal sage scrub and coastal mixed chaparral habitats. (Coastal Act/30230/30231/30240)

RM Policy 2.3:

To minimize harmful pollutants from entering the ocean environment from lagoons, streams, storm drains and other waterways containing potential contaminants, the

City shall mandate the reduction or elimination of contaminants entering all such waterways...

RM Policy 10.9:

The City will encourage the function of San Elijo Lagoon and Batiquitos Lagoon and their adjacent uplands as viable wetlands, ecosystems and habitat for resident and migratory wildlife, by prohibiting actions (subject to the detailed provisions of RM policy 10.6) which:

- -involve wetland fill or increased sedimentation into wetlands;
- -Adversely decrease stream flow into the wetlands;
- -Reduce tidal interchange;
- -Reduce internal water circulation; or
- -Adversely affect existing wildlife habitats. (Coastal Act/30231)

The proposed pipe will be located under the San Elijo Lagoon, an environmentally sensitive habitat area. The lagoon provides habitat for six federally threatened and endangered birds, and contains one federally listed plant species, one state-listed plant species, and 20 additional special status plants. As such, potential adverse impacts on sensitive resources as a result of activity in the lagoon could be significant.

As cited above, the Coastal Act requires that environmentally sensitive habitat areas be protected from the adverse impacts associated with new development. In this case, the proposed project has been designed to avoid all direct impacts to environmentally sensitive habitat areas in San Elijo Lagoon by using HDD to install the new pipe underneath the lagoon and by restricting all construction staging and workspaces to areas outside of the lagoon. In addition, the existing pipe is proposed to be abandoned in place to avoid the potential adverse impacts to the lagoon associated with removal of the pipe. Specifically, removal of the existing pipeline would require one or more open trenches across the San Elijo Lagoon, which would result in substantial impacts to wetlands, other sensitive habitat, and potentially sensitive species.

While not qualifying as ESHA, some work will be conducted within a sensitive natural area. The temporary excavation and staging associated with the project's HDD launch site on Cardiff State Beach comprises a temporary impact area of 0.53 acre. The launch site supports unvegetated beach habitat that is directly adjacent to Coast Highway 101 and is subject to ongoing disturbances by beachgoers. Excavation of a temporary open trench is necessary in order to connect the new pipe to the existing belowground ocean outfall pipe and would not result in permanent impacts to this beach habitat. Temporarily excavated sand would be stockpiled and returned to the excavated area following completion of work. **Special Condition No. 1** requires that the applicant submit final

plans and undertake development in conformance with the approved plans that avoid construction within the lagoon.

The project's Mitigated Negative Declaration (MND) contains mitigation measures to avoid or minimize all impacts to coastal waters and sensitive vegetation communities in and near the construction zones, including requiring a qualified biologist to monitor any clearing or grubbing activities to ensure that the approved limits of disturbance are not exceeded, installing temporary fencing around the perimeter of the work area, and implementing construction best management practices (BMPs). Required BMPs include maintaining the construction zone free of trash and debris; employing appropriate standard spill prevention practices and clean-up materials; installing and maintaining sediment and erosion control measures; maintaining effective control of fugitive dust; and properly storing, handling, and disposing of all toxins and pollutants including waste materials. Special Condition No. 5 requires that the applicant comply with all of the mitigation measures contained in the MND. Special Condition No. 4 further requires the applicant to submit and implement a Construction Best Management Practices Plan to prevent fuel leaks from sewer pumps, the drill rig, and other equipment, and to prevent other pollutants from discharging onto adjacent streets, into the storm drain system, and into habitat in and beyond the project area, including the San Elijo Lagoon and the Pacific Ocean.

With regard to the HDD, the purpose is to drill deep underground, well below the vegetation and waters of the lagoon, thereby avoiding impacts to the lagoon. However, HDD can pose a risk to biological resources as a result of hydrofracture and returns ("frac-outs") of drilling fluid and cuttings during construction. HDD utilizes a drilling fluid typically comprised of 97% water and 3% bentonite, a naturally occurring, nontoxic clay mineral approved by the National Sanitation Foundation for use in food products. This drilling fluid carries cuttings (drilled spoil) out of the hole, seals the formation, stabilizes the borehole, and acts as a lubricant for the downhole tools and product pipe. According to the California Department of Fish and Wildlife (CDFW), which has issued Streambed Alteration Agreements for similar HDD projects within the San Elijo Lagoon (e.g., Solana Beach Forcemain Replacement CDP 6-06-038), the discharge of bentonite during the HDD operation may produce a coating on aquatic invertebrates, aquatic plants, and other features of the lagoon, potentially smothering organisms (causing direct mortality), and embedding the interstitial spaces in gravel and filling potential rearing pools, both of which may decrease available habitat upon which fish depend.

The HDD design calls for the drill hole and new pipe to be at a depth of up to 70 feet below ground surface, which greatly reduces the risk of hydrofracture and fluids mitigating to the surface. The applicant is required to monitor the drilling fluid pressure during drilling to ensure that maximum allowable drilling pressures are not exceeded (which can lead to fluid migration beyond the drill hole and if continued, could eventually lead to a hydrofracture event). San Elijo Joint Powers Authority proposes to provide construction observation for the entire duration of the HDD construction, with an experienced drilling engineer expert in the HDD process present in the field at all times

during the drilling process to ensure appropriate drilling techniques are used. The on-site engineer will compare the measured down-hole pressures to the maximum allowable pressures and minimum required pressures calculated from a hydrofracture risk evaluation prior to commencement of the bore. If actual downhole pressures approach maximum allowable values, the drilling engineer will advise the contractor or other appropriate construction personnel. The contractor can use this information to modify drilling practices well in advance of a hydrofracture event.

Lastly, the applicant has stated that the project contractor will be required to prepare and submit a Drilling Fluid Release Monitoring and Contingency Plan. **Special Condition No. 2** requires that this plan be submitted to the Executive Director for review and written approval and that it be designed to: minimize the possibility of frac-outs from the underground borehole into the lagoon and the possibility of drilling fluid seepage from the entry and exit sites; provide for the timely detection of frac-outs; and ensure an organized, minimum impact response in the event of a frac-out. Moreover, **Special Condition No. 4** requires that residual bentonite and recovered spoils be disposed of at an appropriate, legally permissible, off-site location.

According to the applicant, one of the project goals is to perform the majority of construction activities outside of the bird breeding season. While no direct impacts to sensitive species are anticipated, the project may extend into the beginning of nesting season. Special status avian species, including the Coastal California gnatcatcher, Least Bell's vireo, Light-footed clapper rail, western snowy plover, and California least tern could be affected by temporary construction noise or grading and vegetation removal activities at the SEWRF, if the birds are nesting near the construction area. Special Condition No. 5 requires the applicant to comply with and implement all of the conditions, recommendations, and project features included in the MND, which includes a pre-construction survey to identify any active nests. If occupied nests are present within 500 feet of the construction area, the MND further requires the establishment of appropriate buffer areas and halting construction or constructing a temporary noise barrier or berm that would reduce the noise levels to below 60 dBA to mitigate for the construction noise. If nests are found during grading and vegetation removal activities, the MND requires that no impacts occur until the nest is confirmed by the biologist to no longer be active. **Special Condition No. 7** further requires that the pre-construction survey is conducted no more than 72 hours prior to commencement of any development, that the applicant consult with CDFW, and that the results of the survey and any followup avoidance measures are documented.

While the applicant hoped that the proposed project to would be completed prior to construction of the I-5 improvements at San Elijo Lagoon, the San Elijo Lagoon Double Track Project, and the San Elijo Lagoon Restoration Project to avoid impacts to the existing pipe, those projects have been permitted and are scheduled to begin January, 2017 at earliest. Therefore, it is likely that the proposed project will occur concurrently with the three projects and coordination will be necessary to minimize impacts to the lagoon ecosystem and to Cardiff State Beach where nourishment activities will occur as a part of the San Elijo Lagoon Restoration project. **Special Condition No. 10** requires the applicant to submit a final construction schedule and integration plan that describes

coordination with this project and the other projects in the same lagoon system and on Cardiff State Beach.

In conclusion, the project has been designed and conditioned to avoid ESHA, coordinated with concurrent projects, and to implement construction BMPs, a Drilling Fluid Release Monitoring and Contingency Plan, and mitigation measures identified in the final MND that would avoid or minimize potential adverse impacts, including accidental spills from construction equipment, inadvertent release of bentonite drilling fluid, and impacts to nesting birds from construction noise or grading and vegetation removal. Therefore, the Commission finds the proposed development as conditioned is consistent with Sections 30230, 30231, and 30240 of the Coastal Act, as well as the applicable policies from the City of Encinitas's LCP.

C. WETLANDS

Coastal Act Section 30233 states:

- (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following: [...]
- (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines. [...]
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation....
- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division. [...]

The following City of Encinitas LUP policies relate specifically to the filling of coastal waters:

Resource Management (RM) Policy 10.6:

The City shall preserve and protect wetlands within the City's planning area. "Wetlands" shall be defined and delineated consistent with the definitions of the U.S.

Fish and Wildlife Service, U.S. Army Corps of Engineers, the Coastal Act and the Coastal Commission Regulations, as applicable, and shall include, but not be limited to, all lands which are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water.

There shall be no net loss of wetland acreage or resource value as a result of land use or development, and the City's goal is to realize a net gain in acreage and value whenever possible.

Within the Coastal Zone, the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following newly permitted uses and activities:

- a. Incidental public service projects.
- b. Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
- c. Restoration purposes.
- d. Nature study, aquaculture, or other similar resource dependent activities.

Identification of wetland acreage and resource value shall precede any consideration of use or development on-sites where wetlands are present or suspected. With the exception of development for the primary purpose of the improvement of wetland resource value, all public and private use and development proposals which would intrude into, reduce the area of, or reduce the resource value of wetlands shall be subject to alternatives and mitigation analyses consistent with Federal E.P.A. [Clean Water Act section] 404(b)(1) findings and procedures under the U.S. Army Corps permit process. Practicable project and site development alternatives which involve no wetland intrusion or impact shall be preferred over alternatives which involve intrusion or impact. Wetland mitigation, replacement or compensation shall not be used to offset impacts or intrusion avoidable through other practicable project or site development alternatives.

The City shall also control use and development in surrounding area of influence to wetlands with the application of buffer zones. At a minimum, 100-foot wide buffers shall be provided upland of salt-water wetlands, and 50-foot wide buffers shall be provided upland of riparian wetlands. Unless otherwise specified in this plan, use and development within buffer areas shall be limited to minor passive recreational uses with fencing, desiltation or erosion control facilities, or other improvements deemed necessary to protect the habitat, to be located in the upper (upland) half of the buffer area when feasible.

All wetlands and buffers identified and resulting from development and use approval shall be permanently conserved or protected through the application of an open space easement or other suitable device.

(Coastal Act/30231)

RM Policy 10.9:

The City will encourage the function of San Elijo Lagoon and Batiquitos Lagoon and their adjacent uplands as viable wetlands, ecosystems and habitat for resident and migratory wildlife, by prohibiting actions (subject to the detailed provisions of RM policy 10.6) which:

- -involve wetland fill or increased sedimentation into wetlands;
- -Adversely decrease stream flow into the wetlands;
- -Reduce tidal interchange;
- -Reduce internal water circulation; or
- -Adversely affect existing wildlife habitats. (Coastal Act/30231)

Section 30.34.040:

 $[\ldots]$

- 2. <u>Floodplain</u>. Within the 100-year floodplain, permanent structures and/or fill for permanent structures, roads and other public improvements consistent with the Land Use Element will only be allowed if the applicant can demonstrate the following:[...]
- b. Existing environmentally sensitive habitat areas will not be significantly adversely affected.
- *3. Wetlands*[...]

All buildings or other improvements proposed to be placed or erected, and all grading activities proposed to be undertaken adjacent to a wetland shall be located so as not to contribute to increased sediment loading of the wetland, cause disturbance to its habitat values, or otherwise impair the functional capacity of the wetland. [Emphasis added.]

Section 30233 of the Coastal Act prohibits diking, filling or dredging of open coastal waters, wetland or estuaries unless it is one of seven permitted uses, including incidental public service purposes. Section 30233 further limits the purposes of any alteration of certain wetlands identified by the California Department of Fish and Wildlife (formerly

the Department of Fish and Game), including San Elijo Lagoon, to very minor incidental public facilities, restorative measures, and nature study.

The project does not propose to dike, dredge or fill wetlands as described in Section 30233 of the Coastal Act. However, in this particular case, the proposed development meets the purposes limited by Section 30233. The proposed project involves the installation of a replacement outfall pipeline. The existing pipeline that crosses under San Elijo Lagoon is over 50 years old and is at risk of failing which could result in thousands of gallons of reclaimed water entering the lagoon. Thus, the proposed new pipeline is considered maintenance of an existing outfall pipeline consistent with Section 30233(a)(4) of the Coastal Act, which allows for fill of coastal waters and wetlands for an incidental public service purpose. The project is also consistent with the purposes allowed in certain wetlands by Section 30233(c), as the outfall pipe is a very minor incidental public service facility. By avoiding the lagoon and buffer, the project will maintain the functional capacity of the wetland as required by the Coastal Act and the LCP.

Section 30233(a) of the Coastal Act requires that the project be the least environmentally damaging alternative and to minimize any adverse environmental effects. The applicant has provided an alternatives analysis that considered alternative forms of drilling, and relocation of the pipeline outside of the lagoon. In order to relocate the pipeline outside of the lagoon, the pipe would need to be buried under existing roads. This would require 8,000 linear feet of pipeline (versus the 2,900 linear feet proposed), major traffic impacts to Manchester Avenue and Coast Highway 101 caused by the elimination of lane(s) during construction, and the construction of a new pump station in order to pump water uphill along Manchester Avenue. According to the applicant, the existing SEWRF does not have the land area necessary to accommodate an additional pump station, and the project costs would substantially increase to an amount that would make the project infeasible. Alternative construction techniques were also considered, however, the proposed HDD technique was determined to be the least impactful because it limits trenching to locations outside of the lagoon and there are no direct impacts to the lagoon habitat, buffers, or waters.

Section 30233(b) of the Coastal Act requires that the disposal of spoils avoid disruption to marine and wildlife habitat and water circulation. To ensure that spoils from drilling and construction activities are not discharged into coastal waters, **Special Condition No.**4 requires the applicant to remove or contain spoils each day that construction occurs, and remove any spoils from the project site within 72 hours of completion of construction activities.

In summary, the applicant has identified that the proposed development is a necessary outfall pipeline replacement project, which has been designed to avoid adverse impacts to wetlands and buffers. Therefore, the Commission finds that the proposed development is an allowable use under Section 30233. In addition, by drilling under wetlands and avoiding all wetland impacts, the proposed project is the least environmentally damaging alternative. As conditioned, feasible mitigation is required to avoid and minimize all significant adverse impacts. Therefore, the Commission finds the proposed development,

as conditioned, is consistent with Section 30233 of the Coastal Act, as well as the applicable policies from the City of Encinitas's LCP.

D. PUBLIC ACCESS AND RECREATION

Section 30210 of the Coastal Act states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30212 of the Coastal Act states:

- (a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:
- (l) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,
- (2) adequate access exists nearby...

In addition, the following Recreation Policies of the City's LUP relate to the proposed development:

RE Policy 5. 1:

The City recognizes Cardiff Beach State Park, San Elijo Beach State Park, South Carlsbad Beach State Park and Moonlight Beach (future City) State Park, as the major visitor destination beaches in the Encinitas area ...

RE Policy 5. 5:

[...] the City shall assure that existing public parking lots for public beach access points are maintained and that no reduction in the number of existing public parking spaces shall be permitted.

The Coastal Act requires that public access to and along the coast is protected and provided. While the project will not result in permanent adverse impacts to public access, construction will cause temporary impacts at Cardiff State Beach and to Coast Highway 101, including restriction of public access along a portion of the beach where the construction area is proposed to be located, removal of on-street parking, and removal of one southbound lane of Coast Highway 101 (Exhibit 5). Public access may also be restricted at the San Elijo Lagoon Nature Center during a portion of construction.

Approximately 100 feet of the westernmost southbound lane of Coast Highway 101 would be closed for approximately one week in order to perform the work necessary to connect the new pipe to the existing outfall pipe. Coast Highway 101 is a major coastal access route and any closures could impact the public's ability to get to the beach or travel along the coast. In this case, however, the closure has been minimized to the extent necessary to complete this portion of the project and the other southbound lane of Coast Highway 101 will remain open to maintain access. The closure will be temporary, limited to one week, and access to the lane will be restored following the tie-in. As such, the minimal and temporary public access impacts associated with the closure of one southbound Coast Highway 101 lane can be found consistent with Section 30212 of the Coastal Act.

In order to connect the new pipe to the existing belowground ocean outfall pipe section, excavation of a temporary trench is required at the HDD launch site. The HDD launch site, or staging area, would be an approximately 100-foot wide by 250-foot long area on Cardiff State Beach. While the staging area is only a small fraction of the approximately 27-acre state park (Exhibit 2), the staging area will impact the public's ability to use the beach in that area. To ensure that the staging area on Cardiff State Beach is only used to accommodate activities that must take place on the beach, and minimizes impacts to public access, Special Condition No. 9 requires that the applicant submit a Final Staging and Storage Plan for Executive Director review and approval. During construction, which is anticipated to take approximately five months, the public will not be able to access this area of the beach due to safety concerns. However, the stretch of beach to the north and south of the site will remain open and the public will be able to walk seaward of the project during low tides. To provide a connection around the project site, the applicant proposes to construct a temporary pedestrian walkway east of the staging area along Coast Highway 101 (Exhibit 5). Ramps will be constructed with sand from the work area to provide a walkway from the beach to the north and south of the project site over the existing riprap. Special Condition No. 3 requires that the applicant also provide signage that clearly identifies and directs pedestrians to the walkway to ensure public access along the beach is maintained throughout construction.

Approximately 14 on-street parallel parking spaces along the west side of Coast Highway 101 would be temporarily displaced for the five-month construction period to accommodate construction vehicles, emergency access, and the pedestrian walkway. However, there are approximately 100 public parking spaces nearby at the Cardiff Reef parking lot to the north and 385 spaces at the Seaside parking lot to the south. Although the project will have a temporary impact on public parking, it has been designed to reduce the impact on coastal access and recreation by providing a pedestrian pathway around the project and by avoiding construction during the busy summer months. To ensure that public access is maintained around the project site at Cardiff State Beach, **Special Condition No. 3** requires the applicant to provide a public access plan that demonstrates that alternative public access will be maintained throughout construction, that construction will not occur from Memorial Day weekend through Labor Day, and evidence that this plan has been included into construction bid documents.

The applicant anticipates that work in the driveway of the San Elijo Lagoon Nature Center may result in closure or partial closure of the driveway for one week to facilitate the pipe tie-in to the Escondido Creek outfall regulator structure. The work would involve a trench that would be covered with a steel plate when work is not occurring to allow access across the trench by vehicles. In addition, while full closure of the driveway would restrict access during times when construction is occurring, pedestrians and bicyclists would still be able to access the San Elijo Lagoon Nature Center at any time by going around the driveway.

Therefore, the Commission finds the proposed development, as conditioned, is consistent with Sections 30210 and 30212 of the Coastal Act, as well as the applicable policies from the City of Encinitas's LCP.

E. COASTAL HAZARDS AND SEA LEVEL RISE

Coastal Act Section 30253 states:

New development shall...: (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs [...]

In addition, Section 30.34.040(B)(2) of the City of Encinitas's Implementation Plan (IP) states that within the 100-year floodplain, public improvements will only be allowed if the applicant can demonstrate the following:

a. The development is capable of withstanding periodic flooding, and does not require the construction of flood protective works, including but not limited to, artificial flood channels, revetments, and levees.

The Coastal Act requires that development minimize risks in areas of high flood hazard. In regards to the proposed project, the principal concerns related to coastal hazards are the risk to the construction staging site on Cardiff State Beach from wave action and high tides, and the risk to the outfall pipe itself from sea level rise. Normally, the Commission would require that construction staging be located off of the public beach. However, in this case the staging area is required for activities that must be conducted on Cardiff State Beach due to the location of the existing ocean outfall pipe.

The proposed project staging area will be located on Cardiff State Beach for a period of five months. During that time, the site will likely be subject to wave action and flooding. Further, should the project be constructed in the winter season, winter storm conditions could significantly reduce the beach width due to high tides and wave erosion. The applicant has proposed to allow protection of the project site through the use of sand bags, sand berms, sheet piling, elevated platforms, or stilts. Following construction, all

temporary protective devices would be removed, and the work area would be restored to pre-project conditions.

While the use of interlocking sheet piling, sand bags and sand berms may be appropriate to protect the staging area, the most protective measure with the least amount of impacts would allow the work to be conducted over the beach to avoid the water and sand entirely. **Special Condition No. 4** requires the applicant to work above water, using elevated platforms or stilts to the extent practical.

The use of sand bags to protect the project site could result in complications, should the sand bags be damaged by energetic wave action. If the sand within the sand bags is non-native, the result could be the migration of that sand onto the beach which could potentially adversely impact native biological communities. If sand bags are used, **Special Condition No. 4** requires that sand bags contain sand similar in composition (e.g., grain size) to the native sand on Cardiff State Beach and that sand bags are monitored daily, and replaced or repaired if damaged.

If the sand is excavated from the surrounding beach to construct sand berms as temporary protection, the removal of the sand could reduce the width and protection of other portions of the beach. **Special Condition No. 4** allows sand berms to be constructed from native beach sand, provided that the use of the sand does not create vulnerabilities at other portions of Cardiff Beach.

Finally, if sheet pile protection is used to protect the work area, the sheet piles could impact the beach ecosystem by blocking natural coastal processes such as the movement of sand. However, compared to sand bags and berms, sheet piles would provide the site with a higher level of protection from wave action during the winter months and a smaller footprint. The sheet piling would be removed immediately following the five month construction period.

The applicant proposes to conduct project staging on Cardiff State Beach in an area not to exceed 100 by 250 feet, and has provided plans for this area depicting equipment and space that is necessary to perform construction on the beach. The Commission's staff coastal engineer, Lesley Ewing, and staff geologist, Mark Johnsson, have reviewed the proposed staging area and plans and agree that the 100 by 250 feet staging area is reasonable. **Special Condition No. 9** requires the applicant to submit a Staging and Storage Plan for Executive Director approval to ensure that the staging area does not exceed 100 by 250 feet and that only those activities and equipment that must be located on the beach to complete the project are located within the proposed staging area on Cardiff State Beach.

Even with protection of the project site, there remains an inherent risk when constructing and staging so close to the sea. In order to ensure that no shoreline protection will be required to protect the structure in the future, **Special Condition No. 8** requires the applicant to acknowledge that the site is subject to coastal hazards and agree to remove the proposed development when it is threatened in such a way that would present a risk to

life and property. In addition, **Special Condition No. 6** requires the applicant to assume all risks for developing in a location that is subject to waves, storms, and flooding.

Future sea level rise could also potentially impact the new pipe once it is installed if not designed to avoid impacts, including increased inflow through the system and possible infiltration of the pipes from increased groundwater levels. While the proposed pipe is designed to be gravity-fed during low flow conditions, the system has been designed to withstand worst-case scenario impacts by including a pump station in the outfall system, located at the SWERF, to overcome the head pressure under high flow conditions. The applicant has submitted an analysis documenting that the available head from the pump station is sufficient to meet the outfall flow requirements under current and projected sea levels for the next 100 years. In the case of impacts due to the infiltration of the pipes, the new pipe will be built below the ground water table along its entire alignment and the pipe joints are fusion welded to prevent groundwater infiltration.

Finally, Coastal Act Section 30253 requires that new development minimize risks to property in areas of high geologic hazard, and neither create nor contribute significantly to geologic instability. Following the connection of the new pipeline to the ocean outfall, the applicant proposes to dewater and cap the ends of the existing pipeline prior to abandoning it in place. However, Commission staff, including coastal engineer, Dr. Lesley Ewing, and water quality specialist, Michael Sandecki, has reviewed the project and recommend that the pipeline be backfilled to prevent an eventual collapse of the pipeline that could affect the structures above including Coast Highway 101 and the San Elijo Lagoon Visitor Center. Thus, Special Condition No. 1 requires that the applicant submit Final Plans that include backfilling the existing pipeline prior to abandonment.

In conclusion, the project has been conditioned to mitigate against coastal hazards during construction, and designed to protect against sea level rise and geologic instability during operation. Therefore, the Commission finds the proposed development is consistent with Section 30253 of the Coastal Act, as well as the applicable policies from the City of Encinitas's LCP.

F. ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES

Section 30244 of the Coastal Act states:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

In addition, the following Cultural Resources policies of the City's LUP relate to the proposed development:

RM Goal 7:

The City will make every effort to ensure significant scientific and cultural resources in the Planning Area are preserved for future generations. (Coastal Act/30250)

RM Policy 7. 1:

Require that paleontological, historical and archaeological resources in the planning area are documented, preserved or salvaged if threatened by new development. (Coastal Act/30250)

Section 30244 of the Coastal Act requires that archaeological and paleontological resources in the Coastal Zone be protected from adverse impacts by applying reasonable mitigation measures.

Within a 0.05-mile radius of the project site, 36 cultural resource sites have been previously recorded. One of these sites is located along the project alignment and consists of a prehistoric archaeological site. This site is situated between the San Elijo Lagoon and Manchester Avenue and contains the San Elijo Visitor Center facility. When originally recorded, it was observed that the construction of Manchester Avenue had removed a substantial portion of the archaeological site, and currently much of the site is paved or otherwise developed. According to the archaeological report prepared for the MND, while it seems probable that the construction of the Visitor Center destroyed much of what remained of the archaeological site, the possibility still exists that some buried remnants remain within any intact portions of the original landform. In addition, a number of cultural resources are recorded in the vicinity of the project.

To avoid a potential encounter of buried cultural resources during construction, the San Elijo Joint Powers Authority-approved MND requires that the applicant retain a qualified archaeologist and Native American monitor, and conduct an archaeological monitoring program. The archaeologist and the Native American monitor will have authority to temporarily halt or redirect grading and other ground-disturbing activity should cultural material be encountered. For significant resources, a recovery program shall be prepared and implemented to mitigate impacts before ground disturbing activities in the area of discovery are resumed.

Project construction has the potential to also impact paleontological resources when drilling. According to the MND, the project area is underlain by paralic estuarine deposits, Delmar Formation, and Torrey Sandstone, which have a moderate to high paleontological resource sensitivity rating. Given the depth of HDD for pipe installation, construction activities would likely encroach into these formations. To mitigate any possible impacts to paleontological resources, the MND requires that the contractor retain the services of a paleontologist to implement a paleontological monitoring and recovery program. The paleontologist or paleontological monitor shall be on site during original cutting of previously undisturbed portions of the Del Mar Formation and terrace deposits. In the event that fossils are discovered, the project paleontologist will have the authority to temporarily halt or redirect construction activities in the area of discovery to allow recovery in a timely manner. Any collected fossil remains will be cleaned, sorted, catalogued, and deposited in an appropriate scientific institution.

Special Condition No. 5 requires the applicant to comply with and implement all of the conditions, recommendations, and project features included in the MND to ensure that measures are implemented to mitigate any accidental disturbance of paleontological or archaeological resources. Therefore, as conditioned, the Commission finds that the project is consistent with Section 30244 of the Coastal Ac, as well as the applicable policies from the City of Encinitas's LCP.

G. VISUAL RESOURCES

Section 30251 of the Coastal Act states, in part:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas...

In addition, the following Visual Resource policies of the City's LUP relate to the proposed development:

RM GOAL 4:

The City, with the assistance of the State, Federal and Regional Agencies, shall provide the maximum visual access to coastal and inland views through the acquisition and development of a system of coastal and inland vista points. (Coastal Act/30251)

RM Policy 4.4:

The system of Vista Points will provide for the differing needs of automobile, bicycle, and pedestrian users, and will recognize as a recreational resource, the function of Vista Points as facilities for the passive, and occasionally remote enjoyment of the coastal and inland view. (Coastal Act/30251/30212.5/30210)

RM Policy 4.6:

The City will maintain and enhance the scenic highway/visual corridor viewsheds (Coastal Act/30251)

RM policy 4.7:

The City will designate the following view corridors as scenic highway/visual corridor viewsheds:[...]

- Manchester Ave. from San Elijo Ave. to Encinitas Blvd.

- Interstate 5, crossing San Elijo Lagoon (Coastal Act/30251/30253)

RM Policy 4.8:

The City will designate Scenic/Visual Corridor Overlay and scenic highway viewshed areas as illustrated on the Visual Resource Sensitivity Map (Figure 3). (Coastal Act/30251).

Section 30251 of the Coastal Act requires that development is sited to protect visual qualities of coastal areas. The proposed project is located underground and will not obstruct ocean views or permanently introduce new structures that would be visible from designated scenic view corridors, viewsheds, or vista points once installed. However, temporary visual impacts during the five-month construction period will occur and be visible from several public vantage points around the project site, including Coast Highway 101, Cardiff State Beach, and Manchester Avenue. Visual impacts would be minimized by the trenchless construction method proposed for the majority of the pipe installation. Portions of the construction would involve open trenching; however, these areas would be returned to pre-existing condition and would not be noticeable from public vantage points following construction. Therefore, the Commission finds that the project as conditioned is consistent with Section 30251 of the Coastal Act, as well as the applicable policies from the City of Encinitas's LCP.

H. LOCAL COASTAL PLANNING

Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding can be made.

The project area spans the jurisdiction of the City of Encinitas and the Commission's original coastal permit jurisdiction. As conditioned, the project can be found consistent with the Chapter 3 policies of the Coastal Act, as well as the goals and standards contained in the City's certified Local Coastal Program (LCP). Therefore, approval of the proposed development, as conditioned, will not prejudice the ability of the City of Encinitas to continue to implement its certified LCP.

I. CALIFORNIA ENVIRONMENTAL QUALITY ACT

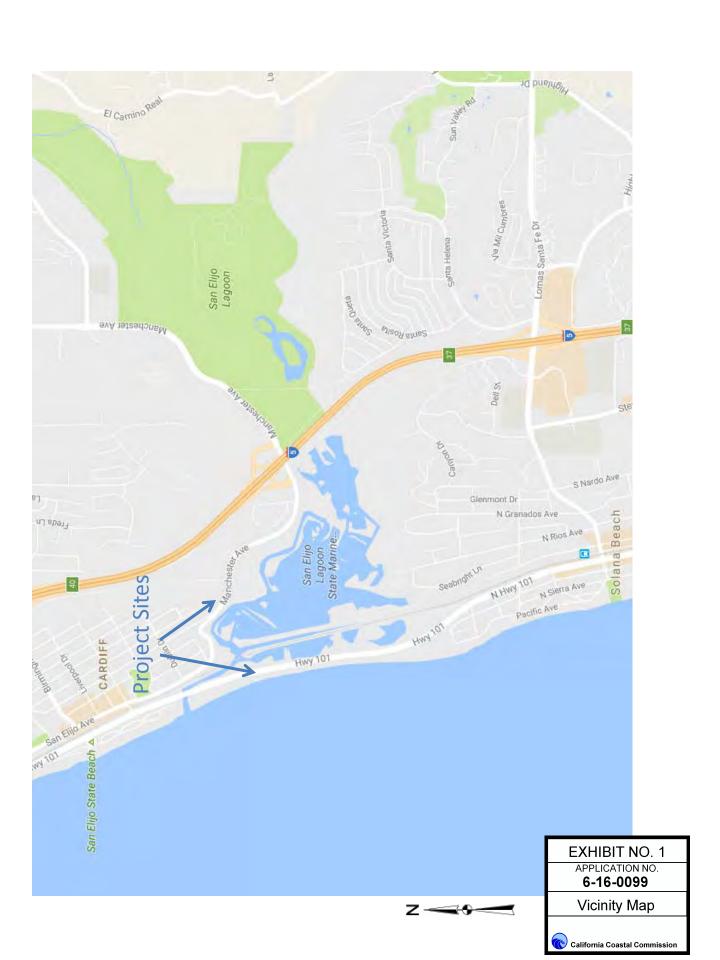
Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse

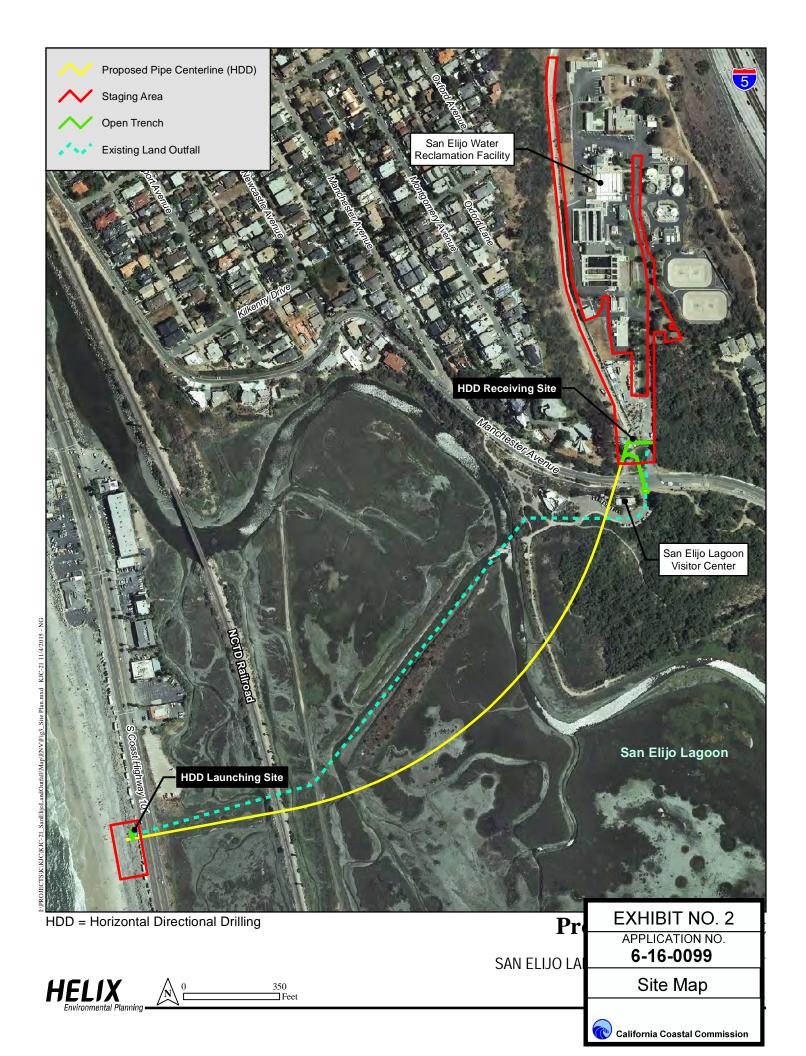
effect which the activity may have on the environment. In February 2016, the San Elijo Joint Powers Authority adopted a Final Initial Study/Mitigated Negative Declaration for the proposed project. The Study concluded that potentially significant impacts would occur with respect to biological resources (nesting birds and sensitive vegetation) and cultural resources (unknown subsurface archaeological and/or paleontological resources), but that impacts would be less than significant with mitigation, such as pre-construction surveys, monitoring during construction, and implementation of BMPs.

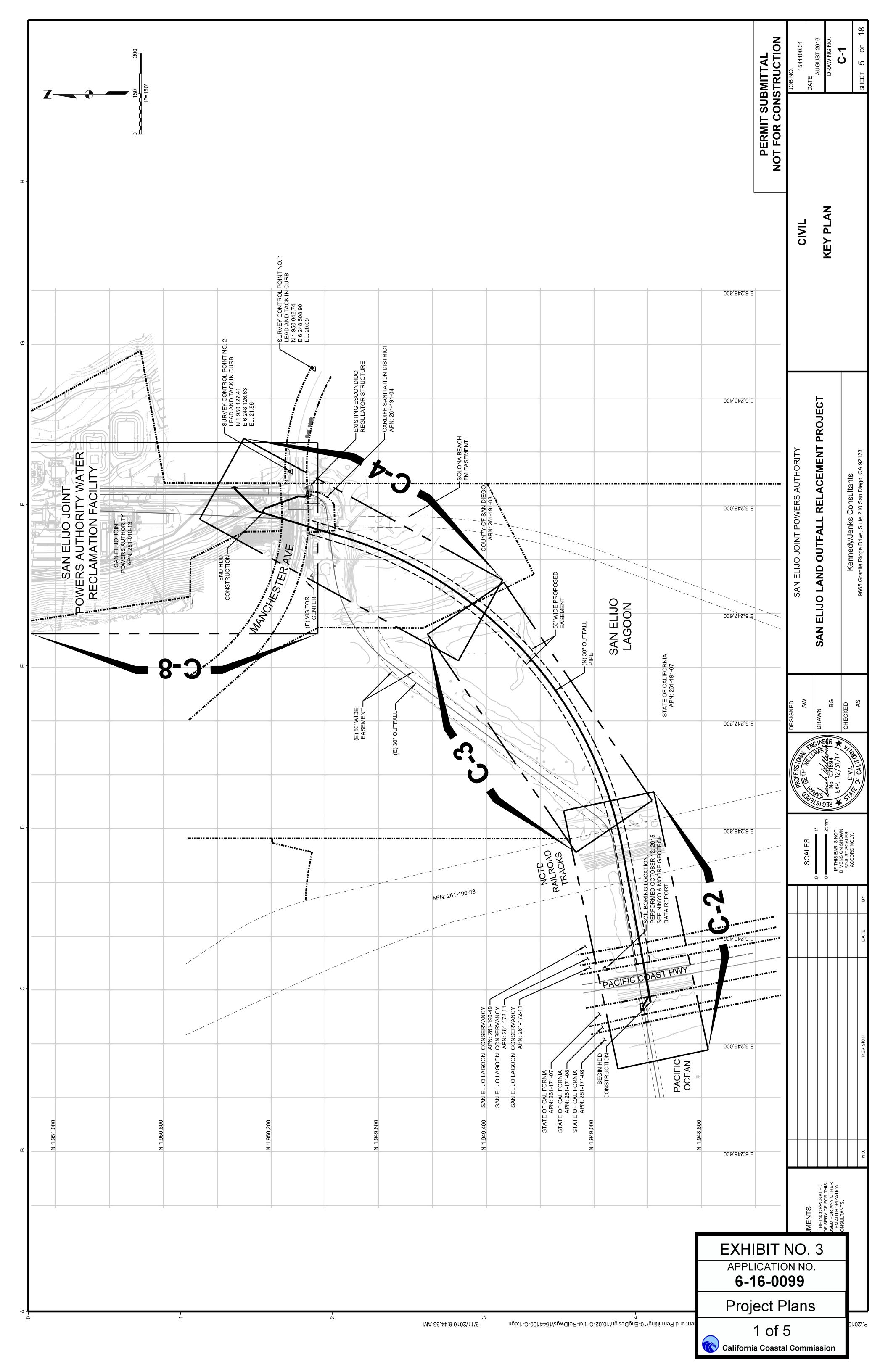
The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including conditions addressing water quality, biological resources, public access, coastal hazards, and archaeological and paleontological resources will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

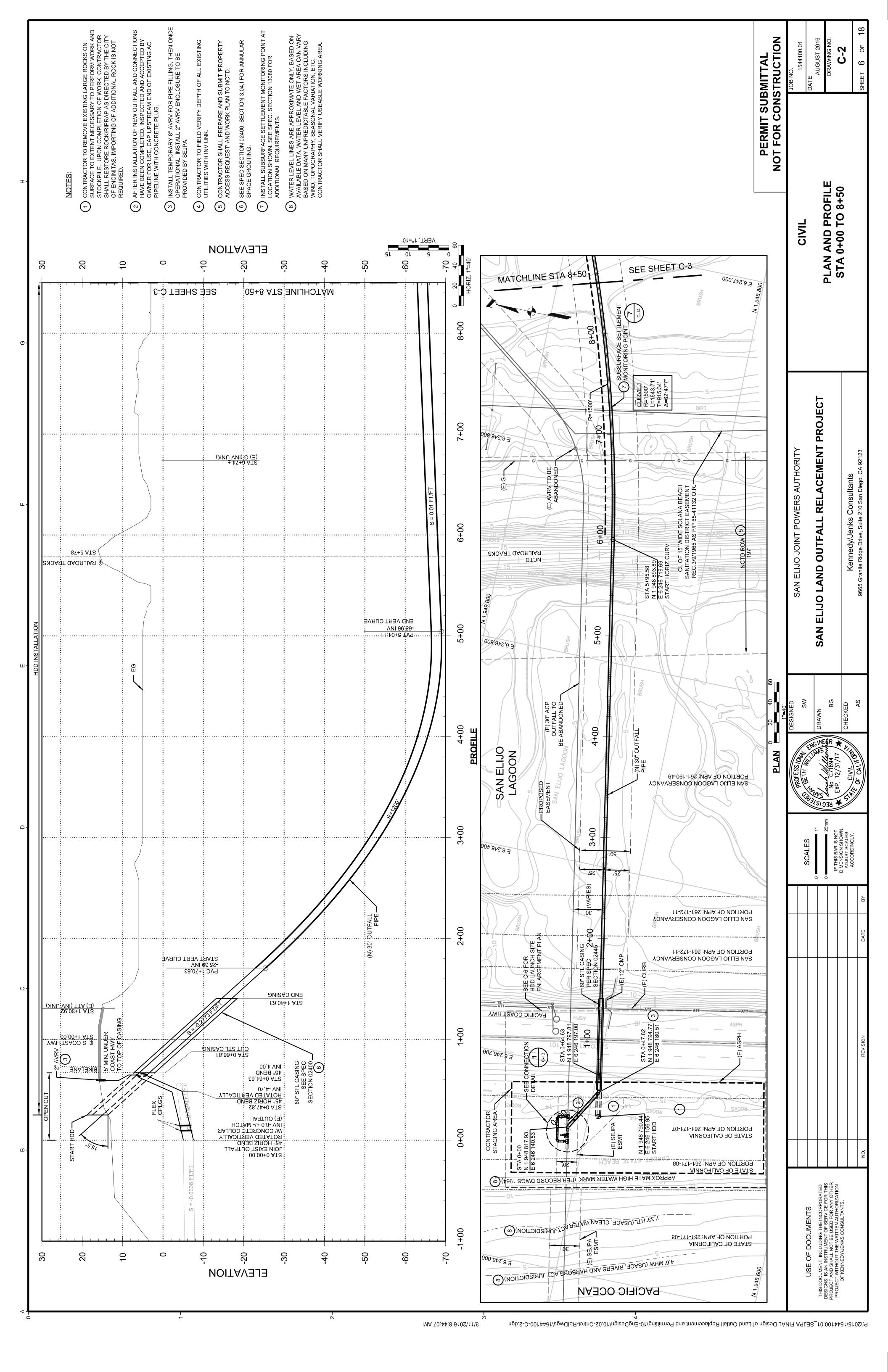
APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

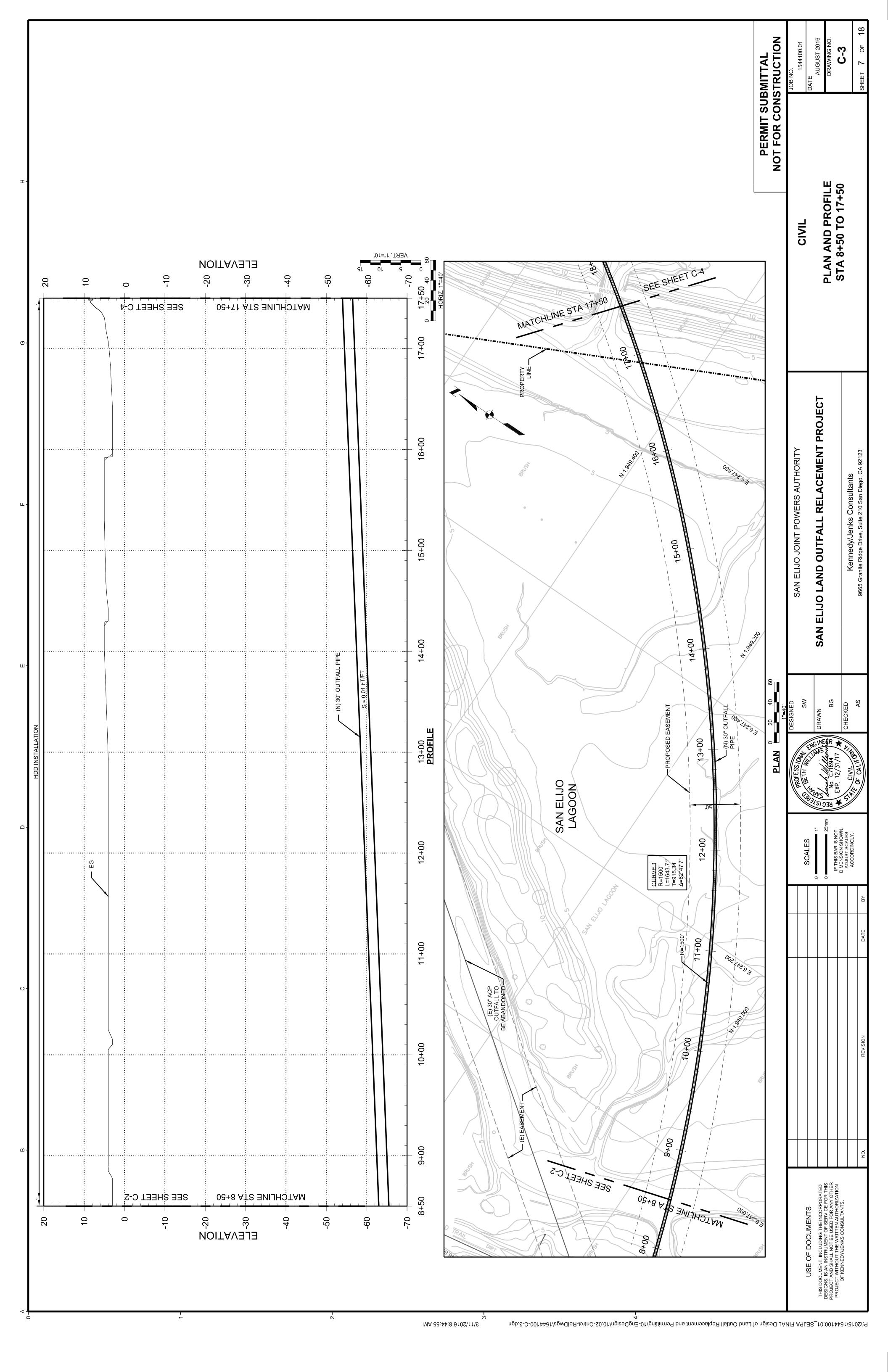
- Final Initial Study/Mitigated Negative Declaration for San Elijo Land Outfall Replacement Project dated February 2016 by San Elijo Joint Powers Authority.
- San Elijo Joint Powers Authority Outfall Preliminary Design Report dated June 2015 by Kennedy/Jenks Consultants.
- Geotechnical Evaluation San Elijo Joint Powers Authority Final Design of Land Outfall Replacement Cardiff by the Sea, California dated January 29, 2016 by Ninyo and Moore Geotechnical and Environmental Sciences Consultants

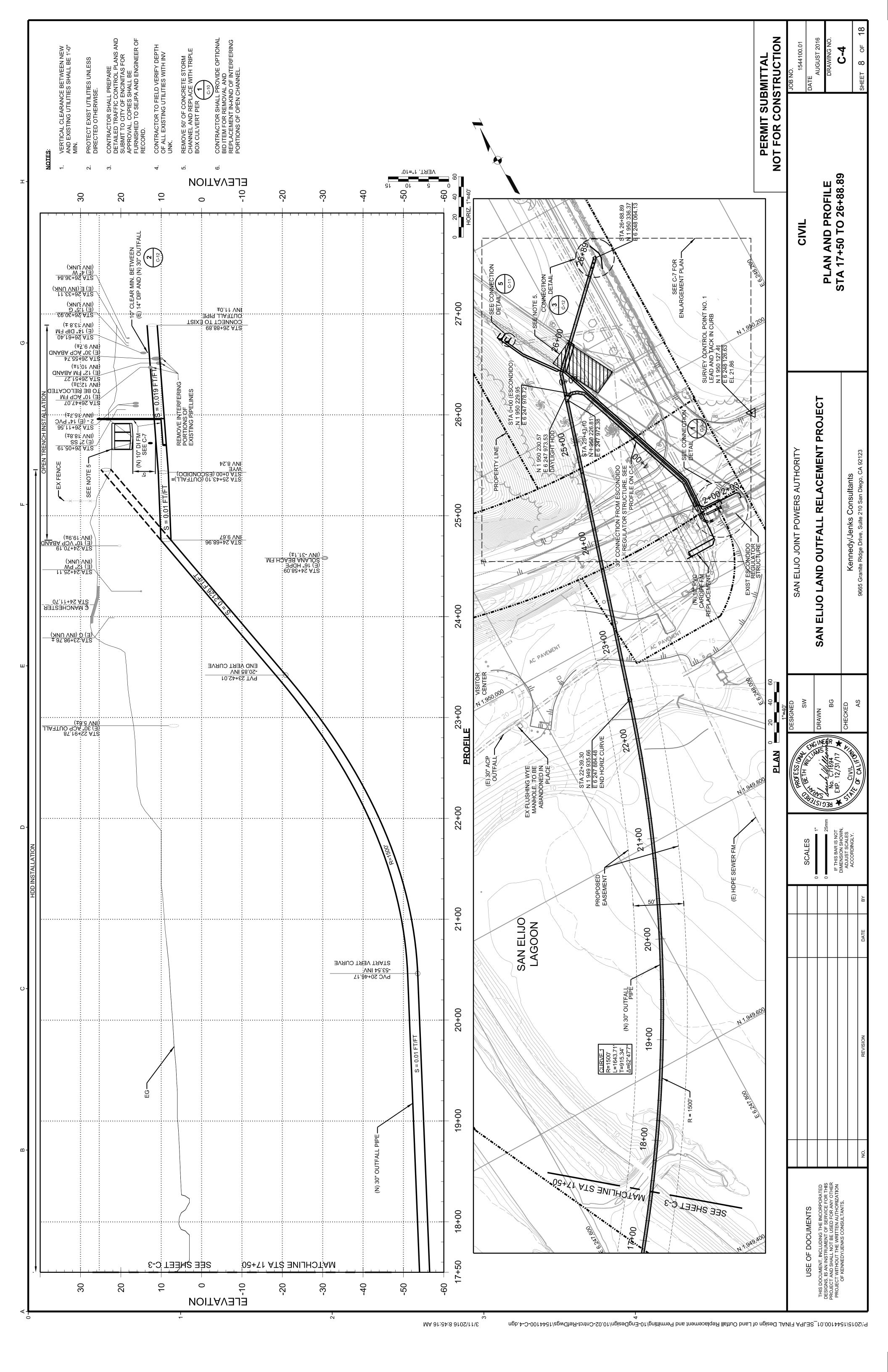


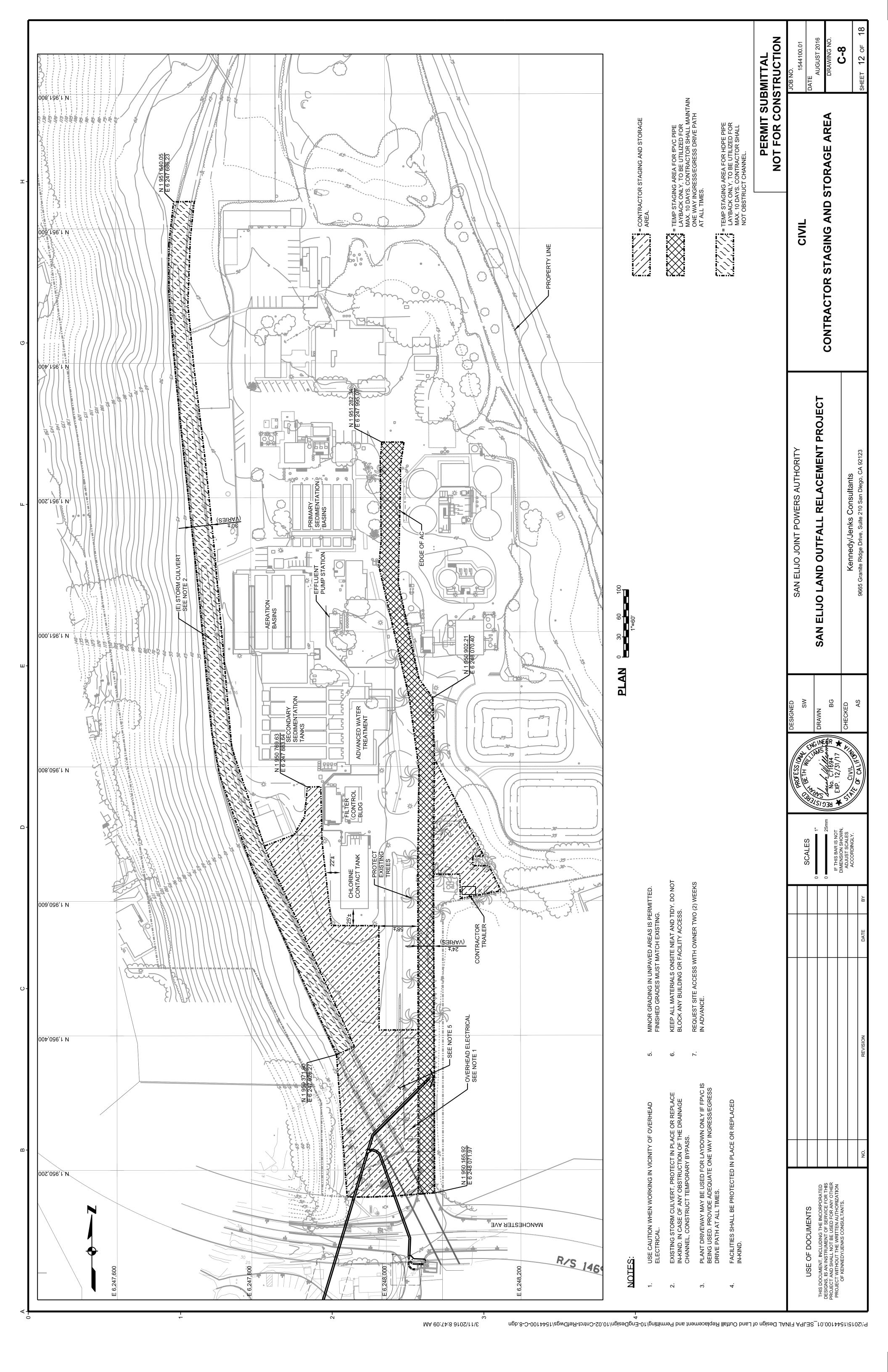














September 16, 2016

VIA MAIL AND EMAIL

Melody Lasiter
California Coastal Commission
San Diego District
7575 Metropolitan Drive Suite 103
San Diego CA 92108-4402

CONSOLIDATED COASTAL DEVELOPMENT PERMIT

Dear Melody Lasiter:

This letter is to authorize the California Coastal Commission to process and act upon a consolidated Coastal Development Permit application for the San Elijo Outfall Project improvements located from the San Elijo Joint Powers site on 2695 Manchester Avenue, through the San Elijo Lagoon and terminating on Cardiff State Beach. On August 18, 2016 the Planning Commission of the City of Encinitas approved Case No. 15-314 MUP and Resolution PC-2016-49 for these improvements. To comply with the provisions of Public Resource Code Section 30601.3 of the California Coastal Act, please ensure that public participation is not substantially impaired by the permit consolidation.

The proposed improvements include the abandonment of an existing pipeline and the realignment of approximately 3,000 feet of new outfall pipeline utilizing a horizontal drilling methodology. Additionally, temporary construction staging will be utilized through the duration of the project on the San Elijo Joint Powers site and in a 100-foot by 250-foot designated area on Cardiff State Beach.

If you have any questions, please contact Associate Planner Andrew Maynard at (760) 633-2718 or via email at amaynard@encinitasca.gov or my direct line is (760) 633-2712 or you can email me at mranu@encinitasca.gov.

Sincerely.

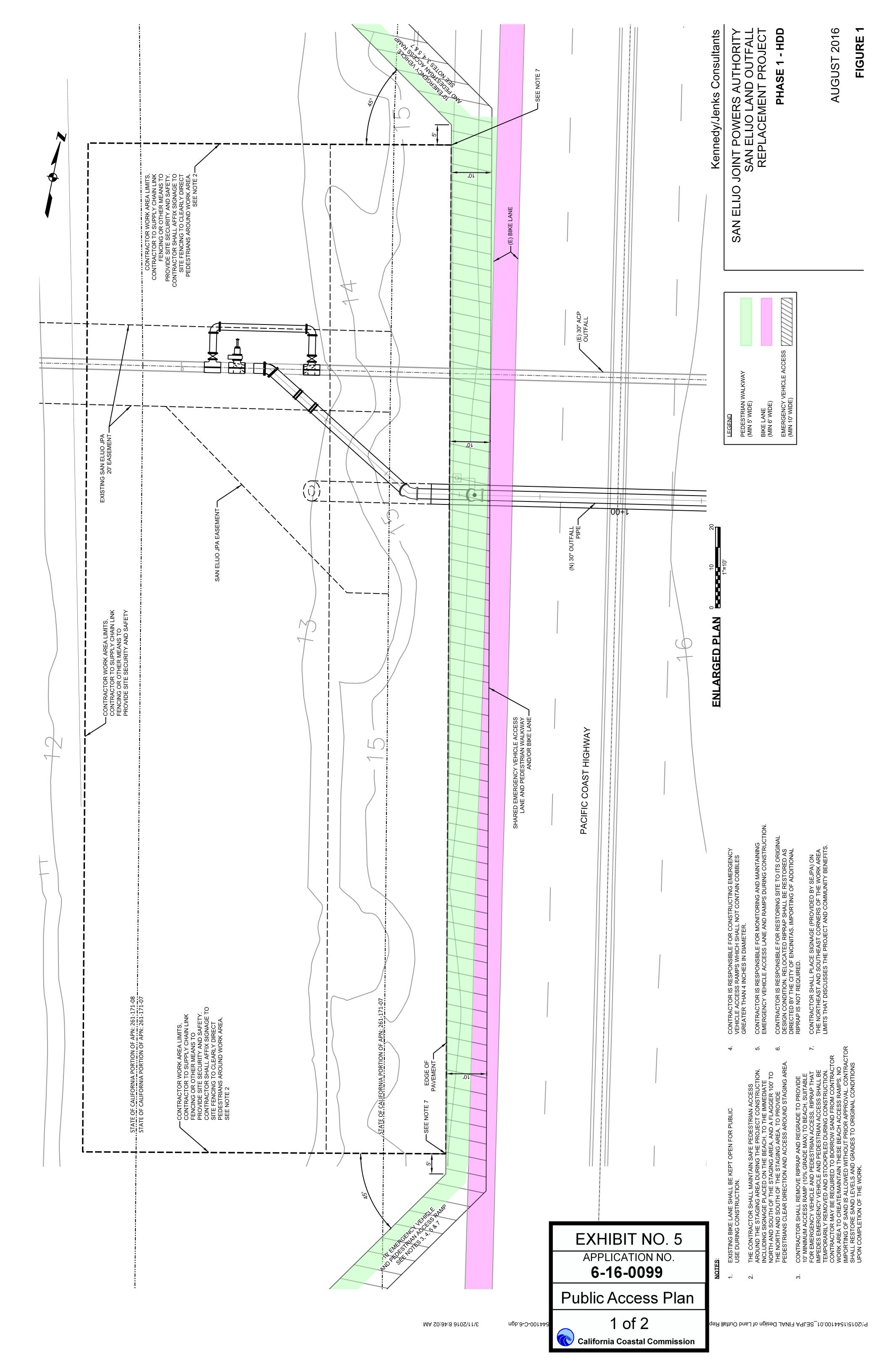
MANJEET RANU, Acting Director Planning & Building Department

EXHIBIT NO. 4

APPLICATION NO.
6-16-0099

CDP Consolidation
Letter

California Coastal Commission



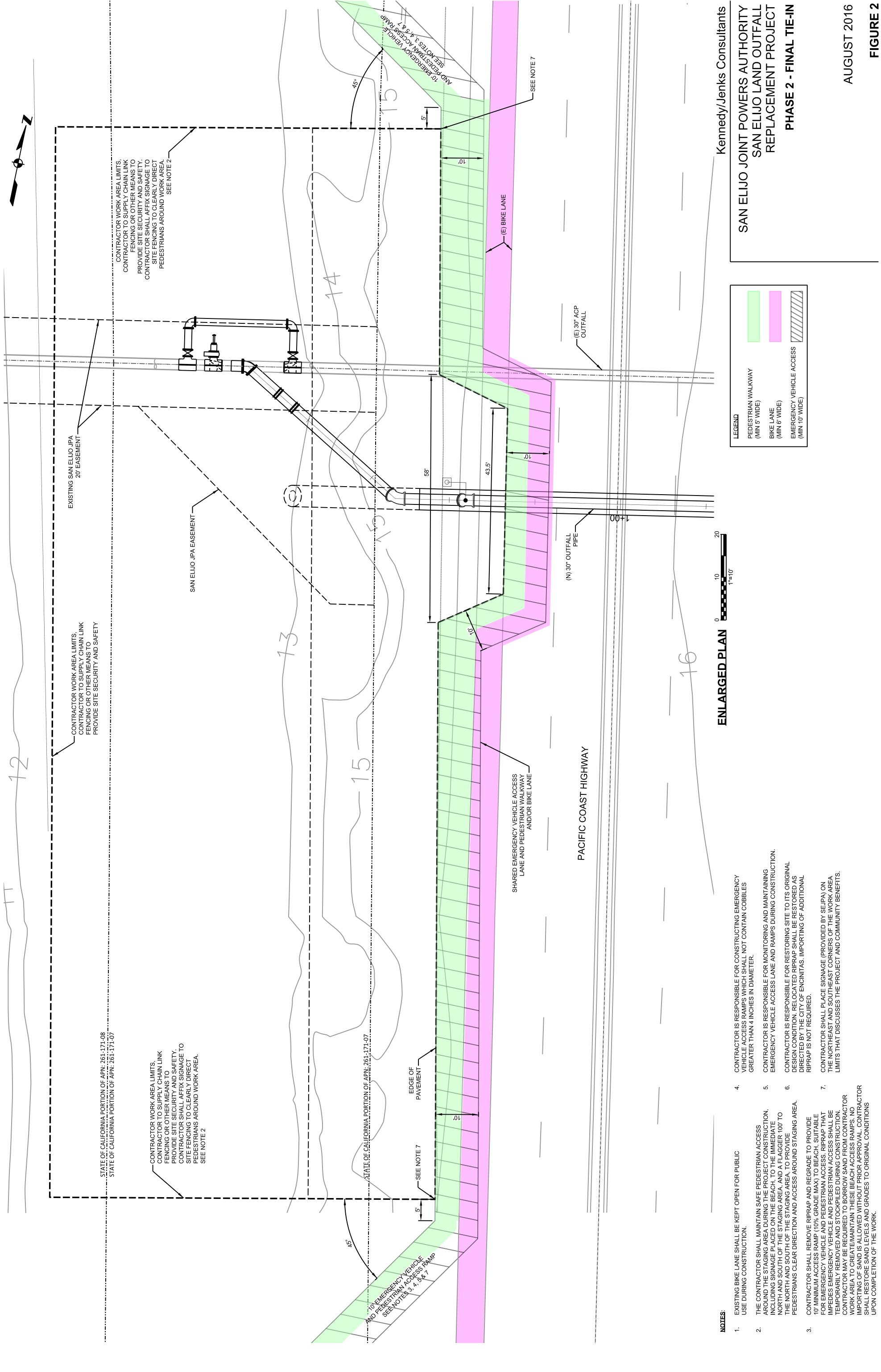




Photo 1. Looking north across Manchester Avenue at the entrance to the San Elijo Water Reclamation Facility (SEWRF). Temporary open trenching associated with the project would occur within these developed areas.



Photo 2. Looking north at the proposed staging area within the SEWRF property.

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Representat

SAN ELIJO LAND OUTFALL REPLACE

EXHIBIT NO. 6 APPLICATION NO.

6-16-0099



Site Photos





Photo 3. Looking south at developed lands within the proposed staging area on the SEWRF property. An unvegetated, concrete-lined storm water channel is shown in the right half of the photo.



Photo 4. Looking north at disturbed lands within the proposed staging area on the SEWRF property. An unvegetated, concrete-lined storm water channel is visible at the left of the photo.

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Photo 5. Looking south at beach habitat adjacent to Coast Highway 101 within the proposed staging area and horizontal directional drilling launching site.



Photo 6. Looking north at beach habitat adjacent to Coast Highway 101 within the proposed staging area and horizontal directional drilling launching site.

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