## CALIFORNIA COASTAL COMMISSION

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# Wed 23b

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Staff Report: Hearing Date:

November 18, 1999 December 7-10, 1999

# REGULAR CALENDAR STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-99-21

Applicant:

City of Solana Beach

Agent: ASL Consulting Engineers

Description:

Replacement of a 60-ft. long 12-inch diameter damaged sewer main crossing San Elijo Lagoon with two 10-inch diameter directionally drilled

pipes underneath the lagoon. Construction of a temporary surface bypass line past the break and a diesel-powered pump, which has been installed without a coastal development permit, in an apparent violation of the

Coastal Act.

Zoning

Open Space/Recreation/Freeway right-of-way

Plan Designation

Open Space/Recreation/Freeway right-of-way

Site:

South side of San Elijo Lagoon east of Interstate 5, south of Manchester Avenue in the City of Solana Beach and freeway off-ramp east of Interstate 5, north of Manchester Avenue, in the City of Encinitas, San

Diego County.

Substantive File Documents: City of Solana Beach General Plan and Zoning Ordinance;

Certified City of Encinitas Local Coastal Program (LCP); Certified County of San Diego LCP; Biological Technical Report for Emergency Sewer Repair Project by Recon, 11/8/99; City of Solana Beach Draft Mitigated Negative Declaration San Elijo Sewer Replacement, 11/10/99.

#### **STAFF NOTES:**

# Summary of Staff's Preliminary Recommendation:

Staff is recommending approval of the proposed sewer pipeline replacement with special conditions. The proposed project is a redesign of a previously proposed replacement project that would have had adverse impacts on wetland vegetation and could have impacted future lagoon dredging projects. In contrast, as conditioned, the proposed project will not have any adverse impact on the sensitive biological resources of the

lagoon, nor will it preclude future dredging operations. No adverse impacts to coastal resources are anticipated, and no opposition to the project has been identified. It is staff's understanding that the applicant is in agreement with the Special Conditions.

## PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

I. MOTION:

I move that the Commission approve Coastal Development Permit No. 6-99-21 pursuant to the staff recommendation.

## **STAFF RECOMMENDATION OF APPROVAL:**

Staff recommends a YES vote. This will result in adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

## **RESOLUTION TO APPROVE THE PERMIT:**

The Commission hereby approves a coastal development permit for the proposed development 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 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.

See attached page.

# III. Special Conditions.

The permit is subject to the following conditions:

1. Final Plans. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, final plans for the development. Said plans shall be in substantial conformance with the plans submitted with the application by ASL Consulting Engineers, date stamped October 21, 1999, and shall specifically include the following measures

designed to mitigate the impacts of the sewer pipe construction as written notes on the plans:

- a. No construction that involves heavy equipment may occur south of San Elijo Lagoon between February 15 and September 16 of any year.
- b. Work at the flow control facility (FCF) area, including construction, construction access, storage, and stockpiles, shall be confined to the limits of the access road on the embankment bench. These limits shall be marked prior to the beginning of construction with construction tape or fencing, and the tape or fencing shall remain in place and be inspected and replaced or repaired daily as necessary until construction is complete.
- c. The construction contractor shall retain a qualified wildlife biologist to monitor construction at the FCF area. The contractor shall inform the biological monitor of the construction schedule and the work to be completed each day, and the monitor shall be present on the site at such times that, in the monitor's opinion, there is a potential for any direct or indirect effect on biological resources. The biologist shall be empowered to stop any activity that results in adverse impacts to biological resources.
- d. All construction lighting at the project site shall be directed towards the project site and away from the lagoon.

The permittee shall undertake the development in accordance with the approved plan. Any proposed changes to the approved plan shall be reported to the Executive Director. No changes to the plan shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

- 2. <u>Grading and Erosion Control</u>. Prior to the issuance of the coastal development permit, the applicant shall submit, for the review and written approval of the Executive Director; final grading plans which shall conform to the following requirements and specifically include the following measures designed to mitigate the impacts of the sewer pipe construction as written notes on the plans:
  - a. Prior to or concurrent with all grading activities, the permittee shall install and utilize temporary and permanent erosion control devices to minimize soil loss. Such erosion control devices include the use of temporary erosion control measures, such as berms, interceptor ditches, sandbagging, and filter cloths in conjunction with plantings, as appropriate to minimize soil loss from the construction site. The erosion control measures shall remain in place until April 1 and shall be inspected after every significant rain event for continued effective. Any structural measures shall be removed by April 15.

The permittee shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No changes to the plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

## IV. Findings and Declarations.

The Commission finds and declares as follows:

1. <u>Detailed Project Description/History</u>. The proposed project is construction of a directionally drilled inverted siphon sewer main consisting of two 10-inch diameter pipes underneath a channel of San Elijo Lagoon, east of Interstate 5 in the Caltrans right-of-way, largely within the City of Encinitas. A small portion on the southern side of the site is within the City of Solana Beach. The project is proposed to replace a 12-inch diameter ductile iron sewer pipeline which broke in September 1998.

As originally constructed, the iron sewer pipeline was buried below the lagoon channel. Over the years, the channel scoured out and deepened, such that the pipeline was suspended below the surface of the water, but above the channel bottom. In September 1998, the sewer pipe broke and began discharging sewage into the lagoon. The City of Solana Beach began remedial action by intercepting the pipeline south of the channel, installing a diesel-powered pump and a surface bypass line past the break, and pumping sewage through the bypass line. The temporary bypass line is aluminum piping with mechanical coupling, except across the channel, where it is reinforced, large-diameter, flexible hosing. These measures were undertaken to temporarily address the immediate threat to the environment and human safety, but without the benefit of a coastal development permit or emergency coastal permit. The subject permit would authorize the after-the-fact construction of these temporary measures.

The City of Solana Beach originally proposed to replace the broken sewer pipe with a new 12-inch pipeline in the same location supported by piers at either side of the channel. The City has indicated that from a engineering standpoint, this is the preferred solution, since the pipe would be a "straight-through" gravity line without the potential for blockage from solids depositions and with no need for a flow control facility or pumping to maintain adequate flows.

However, construction of a pier-supported pipeline at this location would have resulted in approximately 0.1 acres of permanent impacts to cattail vegetation, and the displacement of approximately 9.3 cubic yards of water area within in the lagoon due to the construction of the columns. In addition, construction of an in-water pipeline at this location had the potential to preclude future lagoon dredging operations designed to increase the lagoon's tidal prism and enhance the health and biological productivity of the lagoon. Therefore, the City revised the project into its current configuration.

The proposed project involves a replacement pipe segment consisting of two 10-inch high-density polyethylene pipes running beneath the lagoon channel and constructed by directional drilling. Only one of the two 10-inch pipelines would ordinarily be operational; the other pipeline is for standby emergency bypass in case of blockage of the operational one. Directional drilling is a trenchless technology for pipeline construction in which the pipeline is constructed between a drilling pit and a receiving pit without disturbing the ground surface between the pits (in this case, the lagoon channel). A drilling rig is set up at the drilling pit and a boring machine drills below the surface to the receiving pit. At the receiving pit, pipe is laid out, fuse-welded, and then pulled through the bore. The temporary bypass line and pump would be removed after installation of the new pipe is completed.

For the proposed project, the drilling pit will be located within the Manchester Avenue freeway interchange north of the lagoon and Manchester Avenue in the City of Encinitas. There is an existing pump station within the circle of the freeway off-ramp at this location. The staging area would also be at this location. The drilling pit will be excavated with a backhoe. A bore will be drilled from the pump station at least 10 feet below the bottom of the lagoon channel, to the receiving pit south of the channel. The new pipeline will follow roughly the same alignment as the San Elijo Joint Powers Authority reclaimed water line that was constructed across the lagoon channel in 1999 (#6-98-125). The 10-foot clearance beneath the lagoon bottom is designed to ensure that dredging of the lagoon (which is generally in the form of widening, not deepening) could be accommodated in the future.

The receiving pit will be located in an existing graded dirt access road on the south side of the lagoon. The pit will be approximately 20 feet wide by 35 feet long, and up to 12 feet deep. A flow control facility (FCF) will be constructed within the receiving pit. The FCF will be about 12 feet wide, 20 feet long, and 12 feet deep. Pipe will be laid out on the access road south of the receiving pit and drawn through the bore to the drilling pit. A pipe storage area about 15 feet wide and 100 feet long would be located in the access road about 100 hundred feet south of the receiving pit.

The FCF will replace the existing manhole and address the problems of solid deposition in the low portion of the inverted siphon below the channel during low flow periods. The structure will house a wet well with a trash rack and a discharge valve chamber. Sewage collects in the wet well, and when enough is accumulated to obtain the desired flow velocities in the pipeline, the discharge valve, activated by a float switch in the wet well, releases sewage into the pipe. The FCF will be telemetered to signal City of Solana Beach operations and maintenance personnel in the case of such blockage so that clearing of the blocked pipe could be instituted.

Both the drilling and receiving pits would be backfilled when construction is complete, and the FCF would be covered. Construction of the project is expected to take approximately 60 days. The City is proposing to complete all major construction work prior to February 15 to avoid the breeding seasons of the light-footed clapper rail and the California gnatcatcher.

The proposed development is located partially within the City of Solana Beach and partially within the City of Encinitas. The portion of the project north of San Elijo Lagoon and Manchester Avenue, and the portion within the boundaries of the San Elijo Lagoon Regional Park, lies within the City of Encinitas, within an area of the Commission's original jurisdiction. The southernmost portion of the project is within the City of Solana Beach, which does not yet have a certified local coastal program. Therefore, the standard of review for the proposed development is Chapter 3 policies of the Coastal Act.

2. <u>Wetlands/Sensitive Biological Resources</u>. 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 30233 of the Act states, in part:

- (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:
- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
- (3) In wetland areas only, entrance channels for new or expanded boating facilities....
- (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
- (5) 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.

- (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
  - (7) Restoration purposes.
  - (8) Nature study, aquaculture, or similar resource dependent activities.

[...]

In addition, Section 30240 of the Act is applicable and states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- (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.

Portions of the project are located within and adjacent to the San Elijo Lagoon Ecological Reserve. San Elijo Lagoon is an environmentally sensitive habitat area and Regional Park that is managed jointly by the California Department of Fish and Game and the San Diego County Parks and Recreation Department. The lagoon is one of the 19 priority wetlands listed by the Department of Fish and Game for acquisition. The lagoon provides habitat for at least five State or Federal-listed threatened or endangered birds including the California least tern, the light-footed clapper rail, Belding's savannah sparrow, the brown pelican and the western snowy plover. The California gnatcatcher has also been observed around the lagoon reserve. As such, the proposed development has the potential to adversely impact this sensitive resource area.

The proposed development includes drilling under San Elijo Lagoon for the placement of two sewer pipes. As cited above, under the Coastal Act, disturbance and/or fill of wetlands is severely constrained. Coastal Act Section 30233(a) sets forth a three part test for all projects involving the fill of coastal waters and wetlands. These are:

- That the project is limited to one of the eight stated allowable uses;
- That feasible mitigation measures have been provided to minimize adverse environmental effects; and
- That the project has no feasible less environmentally damaging alternative.

It is unclear whether drilling under San Elijo Lagoon, which clearly is a wetland, constitutes "diking, filling or dredging" of wetlands as described in Section 30233 of the Coastal Act. However, in this particularly case, the proposed development meets the above requirements. The drilling and placement of the pipeline is for an incidental public service project to repair an existing broken sewer line. By drilling under the lagoon

rather than constructing a pipe on piers within the channel, laying pipe, or trenching through the lagoon, the development involves the least environmentally damaging alternative, avoiding all wetland impacts. The existing temporary bypass line currently pumping sewage across the lagoon rests across the water connecting with existing pump station to the north and the manhole to the south. The temporary pump is located within an existing access road south of the lagoon. There are no impacts to sensitive resources associated with the temporary bypass operations. All of the proposed work would take place in disturbed, non-vegetated areas upland of the lagoon. As such, the proposed development is consistent with Section 30233 of the Act.

A biological report submitted by the applicant for the project concluded that the proposed directional drilling project would impact a total of 0.2 aces of disturbed land; 0.1 acres at the drill entrance area north of Manchester Avenue, and 0.1 acres in the existing dirt road south of the lagoon at the drill exit/flow control structure location. Staging and storage plans submitted by the City indicate that all work can take place within the access road. No direct impacts to lagoon wetlands or the coastal sage scrub habitat near the project area would result. The report does identify a potential indirect impact to the light-footed clapper rail and the California gnatcatcher were construction to take place during the February 15 to September 15 breeding season, and recommends that construction take place outside of the breeding season.

A draft mitigated negative declaration (MND) for the project also requires that as mitigation for potential noise impacts, no work at the drill exit site area be performed from February 15 to August 15. Work at the FCF location including construction, construction access, storage, and stockpiles, must be confined to the limits of the access road. The limits of the road must be marked prior to the beginning of construction with construction tape or fencing, which must remain in place throughout the construction period. In addition, the mitigation measures require that the construction contractor retain a qualified wildlife biologist to monitor construction at the FCF location. The monitor would be empowered to stop any activity that could result in adverse impacts to biological resources.

However, the MND is still in draft form, and the City has not specifically proposed implementing these mitigation measures. Therefore, Special Condition #1 requires the submittal of final plans specifying the limits on the time of construction, the marking of construction limits, and the presence of a biological monitor. Because any construction involving heavy equipment has the potential to create noise impacts on sensitive nesting bird species, the condition specifically prohibits heavy equipment from operating on the lagoon portion of the construction between February 15 and September 15 (not August 15, as stated in the draft MND) of any year, as recommended by the biological report. In addition, staff at the California Department of Fish and Game have reviewed the proposed project and recommended that any construction lighting associated with the project be directed away from the project site, and this condition is included in Special Condition #1.

The drilling exit site is approximately 150 feet away from the lagoon, however, loose dirt and soil associated with the proposed grading could runoff into the lagoon waters adversely impacting water quality and biological resources. For this reason, grading near lagoons is often restricted to outside of the rainy season. However, as noted above, in the case of the proposed project, the work can only be done outside of the breeding season (February 15 through September 15) of the sensitive bird species found near the project site. And the work must be completed as quickly as possible, because the temporary bypass sewage system in place is not meant to function in the long-term, and is subject to leaks or vandalism which could result in additional sewage spills into the lagoon, which would result in serious impacts to the natural environment and to potentially to human health. Therefore, the project can be allowed to proceed in the rainy season if erosion control measures are put in place, which will substantially reduce the risk to the lagoon from runoff. Special Condition #2 requires the applicant to submit an erosion control plan (best management practices) requiring that temporary erosion control measures be constructed and maintained on the site throughout the rainy season. Therefore, as conditioned, the project will not have any adverse impact on the biological integrity of the lagoon, and can be found consistent with the above-cited resource protection policies of the Coastal Act.

## 3. <u>Visual Resources</u>. 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....

The construction of the flow control facility (FCF) and drill exit site will be located within and adjacent to San Elijo Lagoon, a scenic natural area, and will be visible during construction from Manchester Avenue on the north shore and from trails within and overlooking the lagoon. However, public view impacts will be temporary as all the pipeline and FCF will be buried and the sites restored to their pre-construction condition. No impacts to visual quality are expect to result from the construction at the pump station site. Therefore, the project, as conditioned, will not have a significant adverse impact on the visual quality of the area, and the project can be found consistent with the view protection policies of the Coastal Act.

4. No Waiver of Violation. The temporary sewer crossing line was constructed without the benefit of a coastal development permit in September 1998 after the existing line broke and spilled sewage into the lagoon posing a risk to the environment and public health. The proposed project will provide a permanent replacement for the temporary work which has already occurred. Although development has taken place prior to submission of this permit application, consideration of the application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. Approval of the permit does not constitute a waiver of any legal action with regard to this

violation of the Coastal Act that may have occurred; nor does it constitute admission as to the legality of any development undertaken on the subject site without a coastal development permit.

5. <u>Local Coastal Planning</u>. 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 proposed development is located partially within the City of Solana Beach and partially within the City of Encinitas. The portion of the project north of and adjacent to San Elijo Lagoon and Manchester Avenue lies within the City of Encinitas, within an area of the Commission's original jurisdiction. The southern portion of the project is within the City of Solana Beach, which does not yet have a certified local coastal program. As such, the standard of review for the proposed development is Chapter 3 policies of the Coastal Act.

Within the City of Solana Beach the area is zoned and planned for open space/recreational uses. The area within the City of Encinitas is identified as freeway right-of-way. The proposed public project is consistent with these designations. Since as conditioned, the proposed development will not have any significant adverse environmental impacts, the Commission finds that approval of the development will not prejudice the ability of the cities to prepare and implement a certified local coastal program.

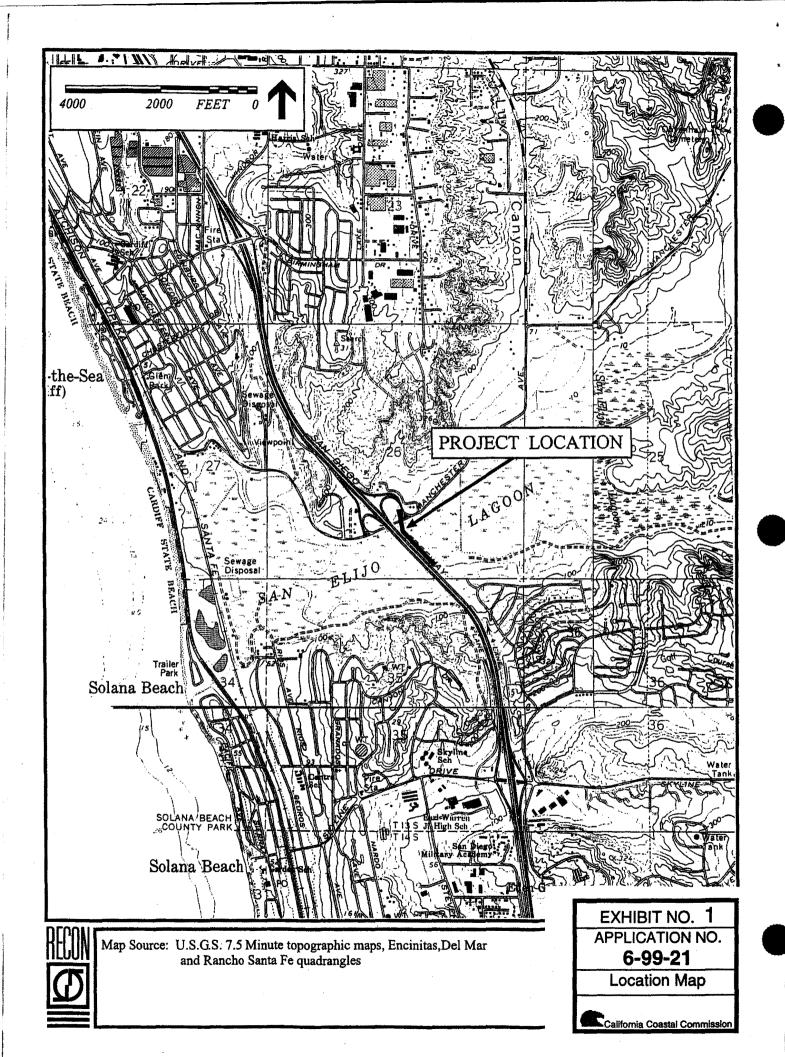
6. California Environmental Quality Act (CEQA). Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental 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.

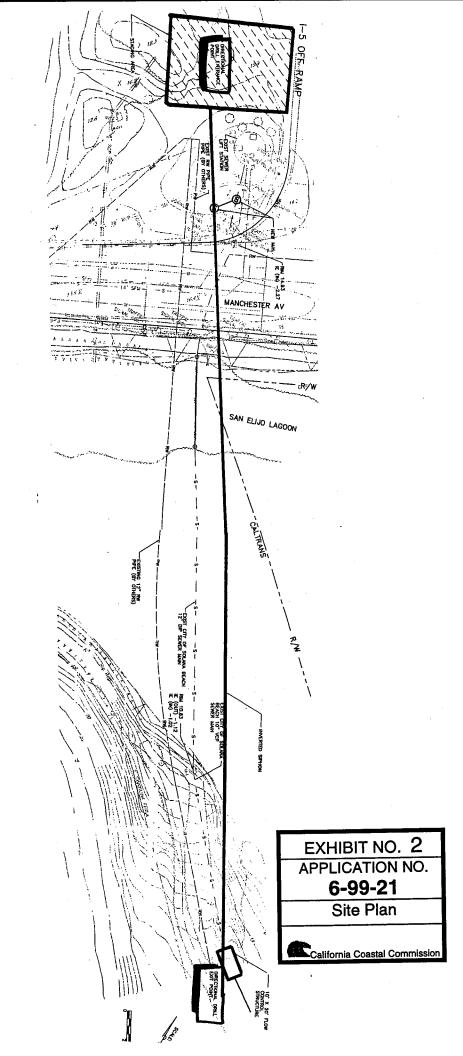
The proposed project has been conditioned in order to be found consistent with the sensitive resource policies of the Coastal Act. Mitigation measures, including limits on the timing of construction and requiring an on-site biologist, will minimize all adverse environmental impacts. As conditioned, there 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.

#### STANDARD CONDITIONS:

- 1. <u>Notice of Receipt and Acknowledgment</u>. 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. <u>Expiration</u>. 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. <u>Compliance</u>. All development must occur in strict compliance with the proposal as set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
- 4. <u>Interpretation</u>. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- 5. <u>Inspections</u>. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
- 6. <u>Assignment</u>. 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.
- 7. <u>Terms and Conditions Run with the Land</u>. 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.

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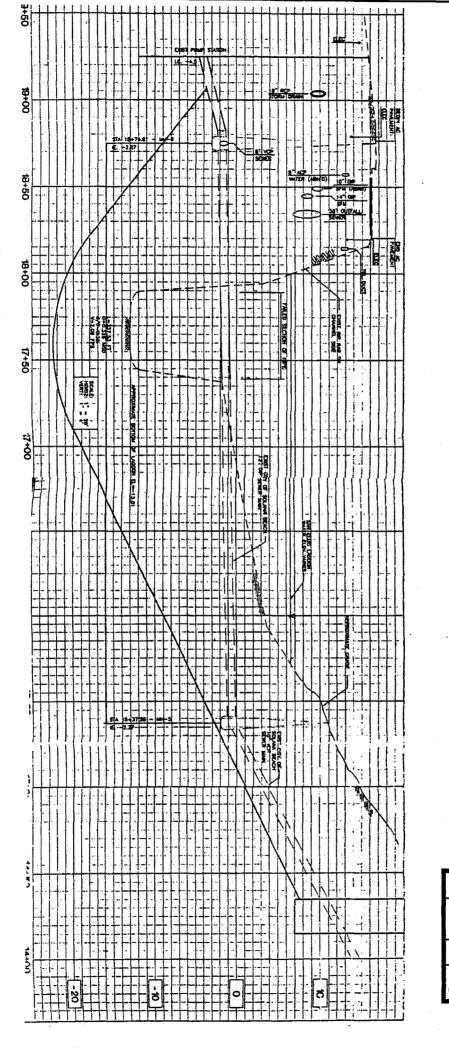
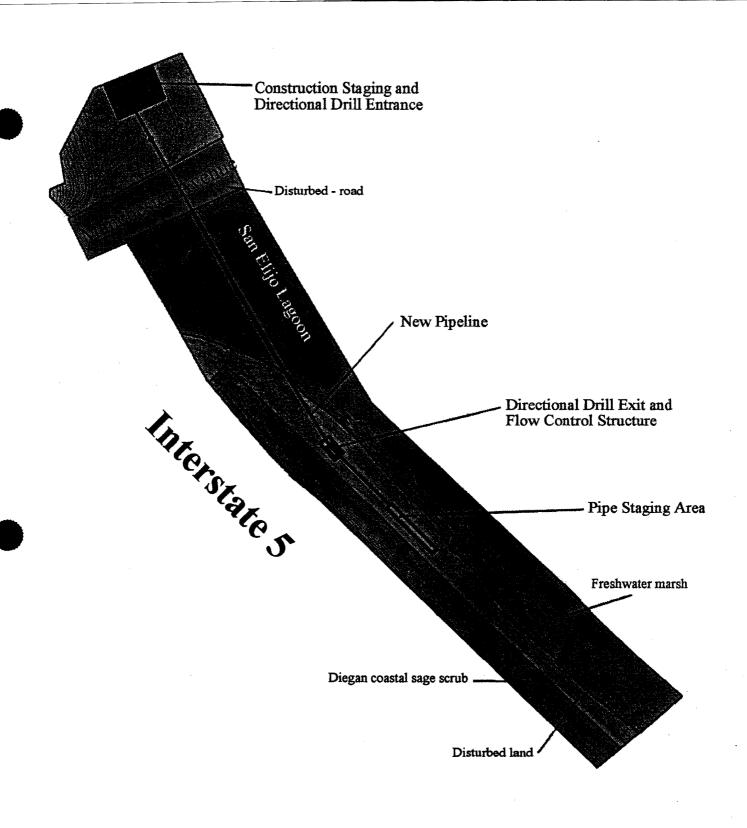


EXHIBIT NO. 3
APPLICATION NO.
6-99-21
Cross-Section

California Coastal Commission







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