CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA 3111 CAMINO DEL RIO NORTH, SUITE 200 DIEGO, CA 92108-1725 521-8036



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Filed: 6/21/99 49th Day: 8/9/99 180th Day: 12/21/99 Staff: WNP-SD Staff Report: 11/16/99 Hearing Date: 12/7-10/99

REGULAR CALENDAR STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-99-88

Applicant:

City of Carlsbad

Agent: Paul Klukas

Description:

Construction of 900 foot long parallel and adjacent replacement

pipelines: one a 84-inch (formerly 63-inch) storm drain pipeline and the other a 54-inch (formerly 48-inch) sewer main pipeline; a 200-foot long storm drain outfall and 7-foot thick energy dissipater is also proposed

on the north shore of Agua Hedionda Lagoon.

Site:

East side of San Diego Northern railroad right of way, between

Tamarack Avenue and Agua Hedionda Lagoon, Carlsbad, San Diego

County. APN 210-010-09, 11

Substantive File Documents: Certified Agua Hedionda Land Use Plan,

Hydrologic/Hydraulic Computation Report of South Carlsbad Village Storm Drain and Vista/Carlsbad Interceptor Sewer prepared by Earth

Tech, dated September 10, 1999

STAFF NOTES:

Summary of Staff's Preliminary Recommendation:

Staff is recommending approval of the proposed project, subject to several special conditions. The project raises concerns relative to potential impacts to wetland resources and water quality of the lagoon. To address these concerns, special conditions have been attached which will bring the proposed project into conformance with Chapter 3 policies of the Coastal Act. Specifically, Special Condition #1 requires that final construction/staging/flagging/fencing_plans for the proposed improvements be submitted which identify that the construction site and staging areas shall be located in a manner that has the least impact on wetland vegetation. Special Condition #2 requires the applicant to identify the location for the disposal of any removed riprap. Special Condition #3 requires implementation of a Best Management Practices program to

address water quality issues. Special Condition #4 addresses grading and allows for the applicant to grade during the rainy season with the incorporation of permanent erosion control devices prior to or concurrent with the commencement of construction.

PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

I. MOTION:

I move that the Commission approve Coastal Development Permit No. 6-99-88 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 Construction/Staging/ Flagging/Fencing Plans. Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and written approval, final construction/staging/flagging/fencing plans for the proposed improvements. Such plans shall be in substantial conformance with the preliminary construction plans submitted with the application by Earthtech, dated June 21, 1999. The detailed plans shall be incorporated into the construction bid documents and include the following:

- a. Access corridors and staging areas shall be located in a manner that has the least impact on coastal resources. No staging of materials shall occur within sensitive habitat areas. If more than one staging site is utilized, the plans shall indicate which sites are connected with which portions of the overall development, and each individual site shall be removed and/or restored immediately following completion of its portion of the overall development.
- b. the salt marsh located adjacent to the proposed riprap dissipater shall be flagged by a qualified biologist and a fence must be installed between the proposed riprap and the salt marsh. No staging or storage of equipment shall occur within the fenced salt marsh. The fence shall be removed after completion of the project.
- c. The construction corridor shall be revegetated to the extent necessary to reestablish the area to its pre-construction condition.
- 2. <u>Disposal of Removed Riprap</u>. Prior to the issuance of the coastal development permit, the applicant shall identify the location for the disposal of any removed riprap. If the site is located within the coastal zone, a separate coastal development permit or permit amendment shall be obtained prior to such disposal.
- 3. Water Quality/ Best Management Practices (BMPs). PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit for the review and written approval of the Executive Director, a BMP program for the proposed development. At a minimum, the program shall incorporate measures that shall reduce sediment and pollutants in runoff from the project site and shall include the following:
 - a. Implementation of a routine sweeping program of the paved areas that drain into the subject storm drain system. The Street Sweeping Program shall include a plan for implementing solid waste (trash removal) and street sweeping and cleaning programs for the area which is served by the proposed storm drain improvement project. The program shall include provisions for street sweeping to be conducted prior to the onset of storm season, no later than October 15th of each year.
 - b. Installation of oil/grease separators and trash racks at all inlets located along Oak Avenue and Chestnut.

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 change to the plan shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

4. <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 that shall conform to the following requirements:

- a) Grading activities shall not occur during the rainy season (the period from October 1st to March 31st of each year) unless temporary and permanent erosion control devices are installed as described below. Such devices shall be installed prior to or concurrent with on-site grading activities.
- b) All disturbed areas will be replanted immediately following grading. Prior to commencement of any grading activity, the permittee shall submit a grading schedule to the Executive Director.
- c) The use of temporary erosion control measures, such as berms, interceptor ditches, sandbagging, filtered inlets, debris basins, and silt traps shall be utilized in conjunction with plantings to minimize soil loss from the construction site and to facilitate incremental grading.

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</u>. The South Carlsbad Village Storm Drain project involves construction of a backbone storm drain system extending from the middle basin of Agua Hedionda Lagoon northward approximately 5,500 feet along the alignment of the San Diego Northern Railway (SDNR) right-of-way to Oak Avenue in Carlsbad. Only the portion of the project that is south of Tamarack Avenue is within the Commission's jurisdiction, about 900 lineal feet. The remainder of the project is within the City's permit jurisdiction pursuant to the City's certified LCP for the Mello II segment.

Within the Commission's jurisdiction the existing storm drain is underground and consists of a 63-inch diameter reinforced concrete pipe which is proposed to be replaced with an 84" diameter pipe. The outfall from the existing pipe to Agua Hedionda Lagoon consists of a 10-foot wide and 8-foot deep concrete-lined channel, approximately 200-feet in length. A rip rap field at the end of the outfall was originally in place to serve as protection and for energy dissipation; however, the riprap has now settled into the substratum and is no longer functioning as a dissipater. This riprap will either be removed or supplement the proposed energy dissipation system. The City proposes to install a 7-foot thick, 130-foot long riprap dissipation system to prevent erosion of sediments resulting from tidal fluctuation. This system would replace the existing 200-

foot long concrete channel. The proposed rip rap field is intended to reduce the velocity of storm waters existing the storm drain, thereby reducing erosion on the shoreline of the lagoon.

In addition to the storm drain, a 54" wide replacement underground sewer line is proposed parallel and adjacent to the proposed storm drain that would extend from Oak Avenue to Agua Hedionda Lagoon. This new sewer line will connect with an existing sewer line that continues to the Encina wastewater plant. According to the City, the existing 48" sewer line, constructed in 1963, was undersized for the areas that it was intended to ultimately serve.

The portion of the proposed project that is within the Commission's permit jurisdiction, i.e., the portion between Tamarack Avenue and the lagoon, is within the Agua Hedionda Lagoon segment of the Carlsbad local coastal program. The LUP for this segment was certified in 1982, however, no implementing ordinances have been certified for this segment. Therefore, this portion remains in the Commission's permit jurisdiction, and the standard of review is the Chapter 3 policies of the Coastal Act, with the certified LUP providing guidance.

2. <u>Biological Resources/Geologic Stability/Water Quality.</u> The following Chapter 3 policies of the Coastal Act are applicable and state:

Section 30230.

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

Section 30231.

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

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.

Section 30235.

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Section 30236.

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Within the Commission's jurisdiction the existing storm drain is underground and consists of a 63-inch reinforced concrete pipe which is proposed to be replaced with an 84" pipe. The outfall from the existing pipe to Agua Hedionda Lagoon consists of a 10-foot wide and 8-foot deep concrete-lined channel, approximately 200-feet in length. A riprap field at the end of the outfall was originally in place to serve as protection and for energy dissipation; however, the riprap has now settled into the substratum and is no longer functioning as a dissipater. The proposed up to 7-foot thick riprap field is proposed to prevent erosion of sediments resulting from tidal fluctuation. The energy dissipater will control the velocity of storm waters and thereby reduce erosion on the shoreline of the middle basin of the lagoon. The energy dissipater will be entirely on upland such that no fill of open coastal waters, wetlands or estuaries is proposed.

Immediately adjacent to the outfall and riprap on the east is salt marsh; however, no impacts to that salt marsh are proposed with this project. Although no impacts are

proposed, the Commission is concerned about the potential for indirect adverse impacts to the salt marsh during construction. The Commission finds that the salt marsh will be protected from indirect impacts if it is fenced during all phases of construction. For that reason, Special Condition #1 requires the pickleweed must be flagged and a fence be installed between the proposed placement of the riprap and the pickleweed. The fence should then be removed after completion of the project. An amendment to this permit would be required if any impacts are proposed to the salt marsh after the project is installed. Special Condition #1 also requires revegetation of the construction corridor to re-establish the area consistent with its present character and a staging plan be submitted which indicates no environmentally sensitive areas would be used to stage the project.

Special Condition #2 requires that the location for the disposal of any removed riprap be identified. If the site is located within the coastal zone, a separate coastal development permit or permit amendment to this permit is required before such disposal can occur.

Coastal Act section 30231 requires protection of the biological productivity of estuaries and other coastal waters. The proposed project will widen a storm drain that carries storm water runoff into Agua Hedionda Lagoon. Because storm water runoff has the potential to carry pollutants into the lagoon, it has the potential to degrade the water quality of the lagoon, thereby adversely affection the biological productivity of the lagoon. The City has provided information collected over the past 7 years as part of the National Pollutant Discharge Elimination System Program (NPDES) monitoring program. One of the collection and testing locations was the discharge point for the existing pipeline at the Agua Hedionda Lagoon. The City states that at no time during these 7 years has any contaminants been detected and that there will be no change in the runoff itself (physical, biological & chemical properties). The contaminants the City tested for include copper, total chlorine, detergents, phenols, and ammonia. Based on the information given by the City, no hydrocarbon testing was done. The City concludes that based on this information there is no reason to install a filter type system to maintain water quality.

However, the project proposes construction BMPs as part of the Storm Water Pollution Prevention Plan. These include measures such as stabilizing disturbed areas, controlling the site perimeter from excessive sediment, controlling internal erosion through temporary barrier basins, including silt fences, straw bales, proper material delivery and storage, solid, concrete and hazardous waste management, vehicle and equipment cleaning, erosion and sediment control (seeding and planting, dust control), stabilizing construction entrances, maintaining protection devices by removing all accumulated material after any significant rainfall or when accumulated material exceeds 6 inches, remove dirt as soon as excavated to eliminate a large stockpile and avoiding significant dirt stockpiles which would result in muddy streets.

Major pollutants such as petroleum hydrocarbons can be found in runoff from roads serving commercial and residential areas. The proposed storm drain improvements are associated with a system which serves a mixed use urban part of downtown Carlsbad.

The point of discharge for the subject storm drain is located in the Agua Hedionda Lagoon. Coastal Act Policies call for the maintenance, enhancement and where feasible restoration of marine resources. More specifically Coastal Act policies 30230, 30231, 30235 and 30236 all require that water quality be preserved and maintained.

The Commission finds that controlling pollutants contained in runoff draining from roads located in urban areas will serve to minimize impacts associated with development on coastal resources. While this particular discharge may be meeting standards, the cumulative impact of discharge from 23 or so storm drains into this lagoon may be creating adverse impacts, as Agua Hedionda was included in a draft 303d list of impaired waters in 1996, and tested high for sediment and coliform bacteria. New information regarding the severity of urban runoff on coastal resources suggests that City's and/or developers incorporate BMPs into new development and upgrades so that incrementally, in the long run, cumulative impacts will be reduced. In this case oil/grease separators at inlets located along Oak Av. & Chestnut and trash racks may be effective BMPs to reduce cumulative impacts. Additionally, the BMPs proposed by the City are for the construction phase and do not include address water quality from the project after installation of the improvements. Another measure to improve water quality in the longer term would be the implementation of a street-sweeping program, which would be a less expensive non-structural BMP which the City may have the capacity to do already. Therefore, Special Condition #3 is imposed, which requires the applicant to incorporate the above, in addition to the construction phase and structural (i.e., energy dissipation) BMPs proposed. The required Street Sweeping Program is limited to the area which drains into the subject storm drain system.

As noted, the proposed replacement sewer line is proposed parallel and adjacent to the proposed storm drain that would extend from Oak Avenue to Agua Hedionda Lagoon. However, its alignment is more removed from the salt marsh than the storm drain; thus, no habitat impacts are anticipated from its installation.

Special Condition #4 requires that grading and erosion control plans be submitted which identify grading activities shall not occur during the rainy season (the period from October 1st to March 31st of each year) unless temporary and permanent erosion control devices are installed prior to or concurrent with on-site grading activities. The condition also requires that all disturbed areas will be replanted immediately following grading and the use of temporary erosion control measures, such as berms, interceptor ditches, sandbagging, filtered inlets, debris basins, and silt traps shall be utilized in conjunction with plantings to minimize soil loss from the construction site and to facilitate incremental grading.

Commission staff asked the City to address the potential for diverting low flow storm waters for the proposed storm drain to the parallel sewer pipeline. The City indicates that the Encina Wastewater Authority joint powers agreement specifically excludes discharge of storm water to the sewer collection system. The sewer discharges to the Encina Wastewater Treatment Plant located south of Palomar Airport Road on Avenida Encinas.

The Encina Wastewater Treatment facility is jointly owned by the City of Vista, City of Carlsbad, Vallecitos Water District, Buena Sanitation District, Leucadia County Water District and the City of Encinitas. The Encina Wastewater Authority would have to be in a position to convince the Regional Board that no problems would occur at the treatment plant as a result of storm water flows. The City of Carlsbad has no authority to process an amendment for the treatment plant. Also, The Regional Water Quality Control Board (RWQCB) permit for operation of the treatment plant would have to be amended to accommodate storm water flows. Since the treatment plant is designed strictly as a biological treatment plant, storm water creates special problems to which the RWQCB is especially sensitive.

According to the City, the basic premises for design and permitting of the Encina Wastewater Treatment Plan are the volume and constituents of the contributing wastewater. Design parameters in the existing treatment plant include only domestic wastewater and controlled industrial wastewater contributions. Additionally, due to capacity of the plant, it is important to limit the volume of flows into the plant. These design parameters result in a planned and permitted hydraulic capacity (i.e., the amount of water the treatment plant can handle).

The City adds the following:

Storm water is an "uncontrolled" water source both in volume and constituency. An uncontrolled source of this type can result in hydraulic overload (i.e., too much water) or an unexpected constituent contribution which upsets the activated sludge balance. Either of these scenarios would cause plant failure and subsequent NPDES Permit Violation. Under recently expanded legislation, this places the plant at risk for mandatory fines for permit violations. An activated sludge failure could take the treatment plant off-line for weeks (until biological cultures could be re-established). During such a catastrophic failure, untreated wastewater would be discharged to the ocean in direct violation of the NPDES Permit.

Another possible scenario would be contamination of the bio-solids in such a manner as to preclude normal disposal operations. The treatment plant is not currently designed with fail-safe methods to accommodate alternate disposals, because the basis of design as mentioned above is "controlled wastewater sources".

Based on the City's above representations, the Commission finds that the storm drain water does not have to be diverted through the sewer system. However, the City has also indicated that it is looking in the long term to address such a concern and that there is the possibility that the storm drain could be retrofitted in the future should such an option become feasible.

In summary, as required to submit habitat preservation and rip rap disposal plans and a water quality preservation plan that would include trash racks and oil/grease separators at inlets located along Oak Av. & Chestnut, and implementation of a street sweeping program for the area which drains into the subject storm drain system, the Commission finds the proposed project can be found consistent with the above Coastal Act sections.

As conditioned, no adverse impacts to water quality are anticipated from either the storm drain or sewer line.

- 3. <u>Public Access</u>. A portion of the proposed development is located between the designated first public roadway and the sea. As such, a public access finding must be made, pursuant to Section 30604(c) of the Coastal Act. The project discharge is located on the middle basin of Agua Hedionda Lagoon near the shoreline. However, this is a location where public access in not desirable as sensitive wetlands occur along the north shore. Although the certified Agua Hedionda Lagoon LUP identifies that public access shall be provided along the north shore of the lagoon, the trail is not proposed at this location. Given the above constraints, the Commission finds the proposed project can be found consistent with the public access policies of the Coastal Act.
- 4. Growth Inducement. Regarding the upsizing of the proposed storm drain and sewer lines, the sewer line was constructed in 1963 and was undersized for the area that it ultimately serves. The City has provided a hydraulic analysis for design of the sewer interceptor pipeline. This data confirms information provided in the City of Carlsbad's Master Plan of Sewerage dated January 1992 specifying a pipeline diameter of 48-inches and 54-inches along the subject railroad right of way. The City has also provided a hydrology study for the storm drain. The proposed diameters of the pipeline are the same as those recommended in the Master Drainage and Storm Water Management Plan dated March 1994. The City also indicates the proposed upsizing is necessary to conform to General Plan demand projected in the downtown area of Carlsbad. All growth in demand associated with the line is associated with the line is in conformance with the existing General Plan and Local Coastal Program. No additional growth, beyond the existing approved buildout land use pattern, is proposed to be accommodated by the line. In addition, the City indicates the storm drain upsizing is also necessary due to undersized and in some cases non-existent drainage facilities. The proposed improvements will alleviate present flooding problems in Carlsbad that occur during rain events. Based on the above, the Commission finds the project will not be growth inducing and can be found consistent with Section 30254 of the Coastal Act.
- 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 Agua Hedionda Land Use Plan (LUP) designates the project area as "Utility"; the project is consistent with that designation. The LUP provides that all new utility systems shall be placed underground as feasible. As conditioned, the project is also consistent with the habitat preservation policies of the Coastal Act which is the standard of review and the certified Agua Hedionda Land Use Plan and should not prejudice the ability of the City of Carlsbad to prepare a fully certifiable Local Coastal Program.

6. California Environmental Quality Act (CEQA) Consistency. Section 13096 of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit to be supported by a finding showing the permit, as conditioned, is 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.

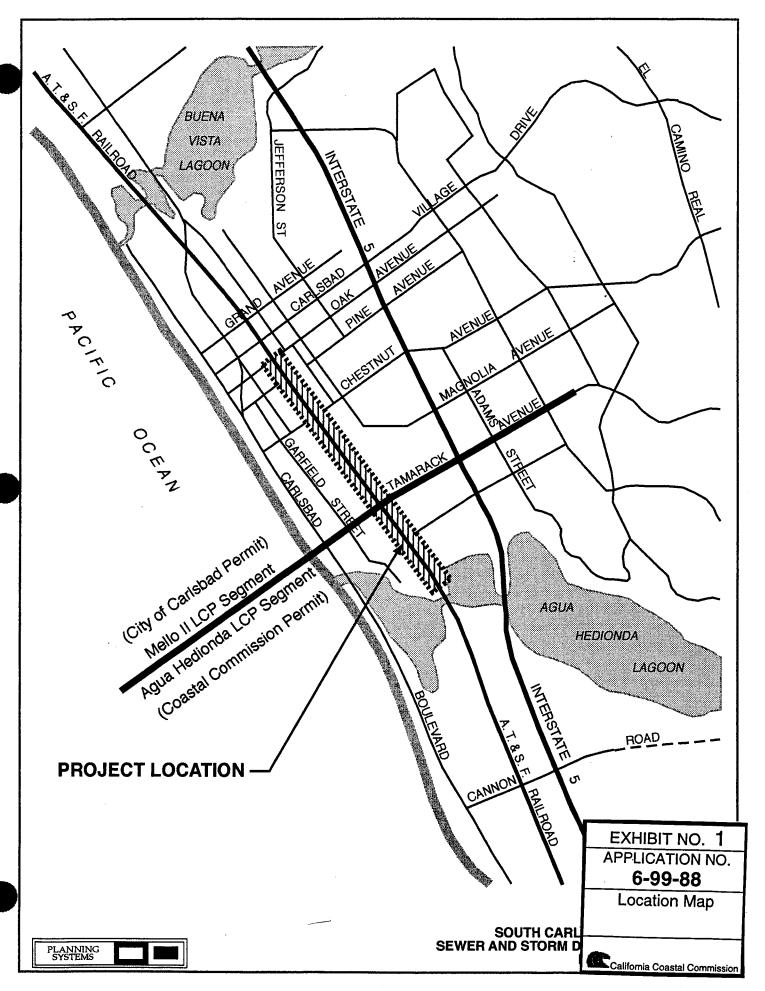
As conditioned, the proposed project has been found consistent with the resource protection and public access policies of the Coastal Act. The attached mitigation measures will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures 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, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

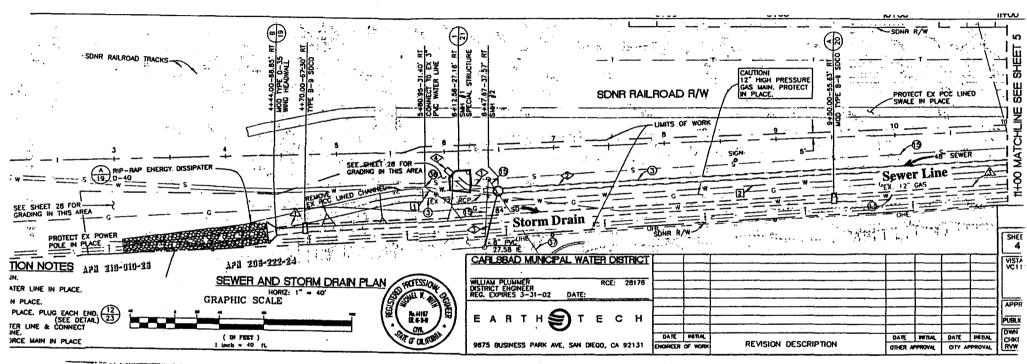
STANDARD CONDITIONS:

- 1. <u>Notice of Receipt and Acknowledgement</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.

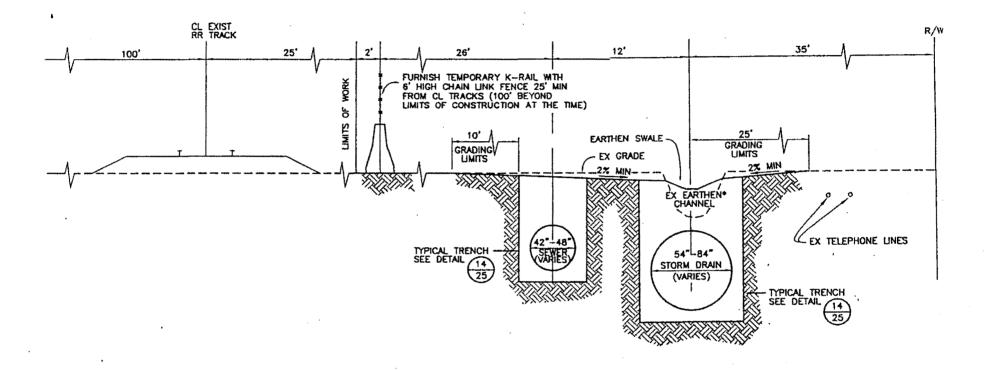
7. <u>Terms and Conditions Run with the Land</u>. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

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Alignment of Sewer Storm Drain Lines near APPLICATION NO EXHIBIT NO. Agua Hedionda 6-99-88



SDNR R/W TYPICAL SECTION (LOOKING NORTH)

NOT TO SCALE

* EXISTING 63" RCP BETWEEN STATION 24+00 AND STATION 31+00

APPLICATION NO.
6-99-88
Typical Cross Section of Sewer and Storm Drain Pipelines
California Coastal Commission



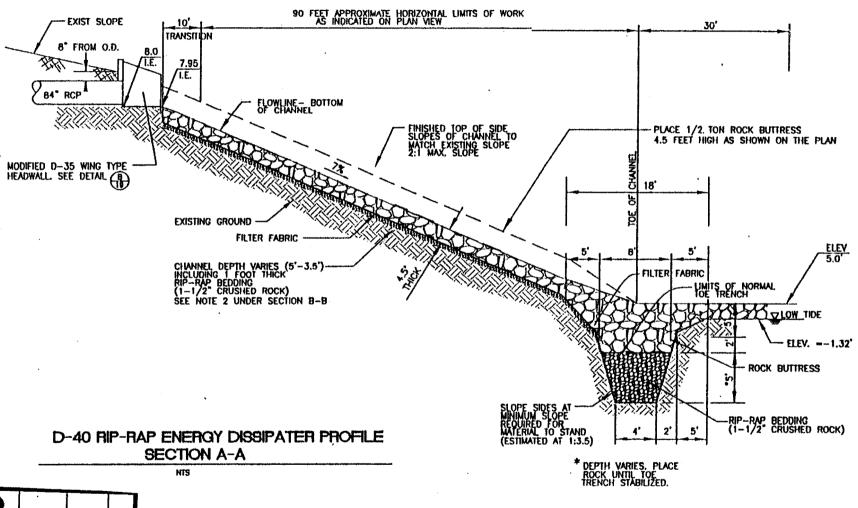


EXHIBIT NO. 4
APPLICATION NG
6-99-88
Energy Dissipater
Cross Section
California Coastal Commission



City of Carlsbad

Bill Ponder CALIFORNIA COASTAL COMMISSION 3111 Camino del Rio North Suite 200 San Diego, CA 92121



NOV 5 - 1999

CALIFORNIA COASTAL COMMISSION SAN DIEGO COAST DISTRICT

SOUTH CARLSBAD VILLAGE STORM DRAIN/SEWER PIPELINES RE:

Coastal Development Permit Application #6-99-88

Dear Mr. Ponder:

The following information is provided in response to your request for additional detail on treatment plant operations:

"The basic premises for design and permitting of the Encina Wastewater Treatment Plant are the volume and constituents of the contributing wastewater. Design parameters in the existing treatment plant include domestic wastewater and controlled industrial wastewater contributions. Additionally, due to the capacity of the plant it is important to limit the volume of flows into the plant. These design parameters result in a planned and permitted hydraulic capacity (i.e. the amount of water the treatment plant can handle).

Storm water is an "uncontrolled" water source both in volume and constituency. An uncontrolled source of this type can result in hydraulic overload (i.e. too much water) or an unexpected constituent contribution which upsets the activated sludge balance. Either of these scenarios would cause plant failure and subsequent NPDES Permit Violation. Under recently established legislation, this places the plant at risk for mandatory fines for permit violations. An activated sludge failure could take the treatment plant off-line for weeks (until biological cultures could be re-established). During such a catastrophic failure, untreated wastewater would be discharged to the ocean in direct violation of the NPDES Permit.

Another possible scenario would be contamination of the bio-solids in such a manner as to preclude normal disposal operations. The treatment plant is not currently designed with fail-safe methods to accommodate alternate disposals, because the basis of design as mentioned above is "controlled" wastewater sources."

If you have any more questions or require additional information, please feel free to contact me at (760) 438-3367 ext. 7124.

Sincerely.

KELLY WEAVER, P.E. ASSOCIATE ENGINEER

cc: File 91-403 Environmental - Coastal Development Permit

EXHIBIT NO. 5 APPLICATION NO.

6-99-88

City Letter Treatment Operations





LEGEND

EXISTING FRESHWATER MARSH
Note: Delineated As Waters Of The U.S.

EXISTING UNVEGETATED DIRT CHANNEL TO BE REPLACED BY PROPOSED 54" UNDERGROUND RCP STORM ORAIN Note: Delineated As Waters Of The U.S.

EXISTING UNDERGROUND 63" RCP STORM DRAIN TO BE REPLACED BY PROPOSED UNDERGROUND 84" RCP STORM DRAIN

PROPOSED SEWER LINE TO REPLACE EXISTING LINE

PROPOSED STORM DRAIN OUTFALL STRUCTURE

COMME SCALE : 1" - 40"

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PS990207 DATE: APRIL 30, 1999

