

CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA

3111 CAMINO DEL RIO NORTH, SUITE 200

SAN DIEGO, CA 92108-1725

(619) 521-8036

RECORD PACKET COPY**Mon 6a**

Filed: 7/6/00
 49th Day: 8/24/00
 180th Day: 1/02/01
 Staff: WNP-SD
 Staff Report: 7/18/00
 Hearing Date: 8/7-11/00

REGULAR CALENDAR
STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-00-49

Applicant: Cabrillo Power I, LLC

Agent: Hofman Planning

Description: Repair two small segments of existing revetment along the north shore of Agua Hedionda Lagoon that have failed by recovering migrated stones adjacent to the failed revetment and replacing them on the revetment. Also proposed is the placement of fill material inland of the repaired revetment to repair two eroded segments of the adjacent public trail/access road. Approximately 1,168 tons of new rock and fill are proposed to complete the revetment and trail repairs

Zoning PU: Public Utility
 Plan Designation: Open Space

Site: Along the north shore of the western basin of Agua Hedionda Lagoon, east of Carlsbad Blvd. and south of intersection of Garfield and Chinquapin Streets, Carlsbad, San Diego County. APN #206-07-06.

STAFF NOTES:Summary of Staff's Preliminary Recommendation:

Due to a number of factors, the existing revetment that lines the western basin of the north shore of Agua Hedionda Lagoon has been subject to significant erosion such that the revetment has failed in several areas. The failure of the revetment has led to erosion of the public trail/access road adjacent to the revetment. On May 23, 2000, the Executive Director approved an emergency permit to pull up existing rock that has migrated and place it back on the revetment to stop further erosion and deterioration of the trail/access road. The emergency repairs have been completed, but additional rock and work on the revetment is necessary to assure continued protection of the shore and trail system. The subject development addresses both the follow up to the emergency permit as well the need to install additional rock and fill to complete the repairs. While Commission staff is concerned

with the import of new rock, staff has worked with the applicant to assure that only the minimum amount of rock and fill is necessary to complete the recommended repairs.

Staff is recommending that the proposed project be approved subject to special conditions that limit the footprint of the revetment repairs so that nearby eelgrass will not be adversely impacted, a requirement that the eroded public trail that is adjacent to the repairs be restored to its original condition and that all repair work be engineered to assure stability of the shoreline improvements. Other conditions require that access and staging areas are identified, that the Commission review any future repairs regarding seaward encroachment of the shoreline protective device and that the Commission is indemnified from its approval of the project.

Substantive File Documents: Certified Agua Hedionda Land Use Plan, CDP #6-92-65, CDP #6-00-49-G, Updated Geotechnical Study, West Basin Agua Hedionda Lagoon (June, 2000)

I. PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

MOTION: *I move that the Commission approve Coastal Development Permit No. 6-00-49 pursuant to the staff recommendation.*

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a YES vote. Passage of this motion will result in approval of the permit as conditioned and 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 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.

See attached page.

III. Special Conditions.

The permit is subject to the following conditions:

1. Final Plans. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit to the Executive Director for review and written approval, final rip rap repair plans approved by the City of Carlsbad for the permitted development. Said plans shall be in substantial conformance with the submitted plans by Kercheval Engineers, dated June 6, 2000. The plans shall indicate:

- a) the completed revetment repairs go no further seaward than the 0' MLLW;
- b) the public trail/access road has been restored to its original condition;
- c) the revetment repairs at both locations have been engineered; and
- d) that no beach sand or cobble is to be used as back fill material for any aspect of the project

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

2. Construction Access and Staging Areas. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit plans showing the locations, both on- and off- site, which will be used as staging areas and storage areas for materials and equipment during the construction phase of this project. The staging and storage plan shall be subject to the review and written approval of the Executive Director. The plans shall indicate that no portion of existing public parking lots or public on-street parking areas shall be used for the interim or overnight storage of construction equipment or materials.

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

3. Waiver of Liability. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit a signed document which shall indemnify and hold harmless the California Coastal Commission, its officers, agents and employees against any and all claims, demands, damages, costs, expenses of liability

arising out of the acquisition, design, construction, operation, maintenance, existence, or failure of the permitted project.

4. Future Maintenance. The permittee shall be responsible for maintenance of the permitted revetment. If after inspection, it is apparent repair or maintenance is necessary, the permittee should contact the Commission office to determine whether permits are necessary.

5. State Lands Commission Review. PRIOT TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall obtain a written determination from the State Lands Commission that:

- a) No state lands are involved in the development; or
- b) State lands are involved in the development, and all permits required by the State Lands Commission have been obtained; or
- c) State lands may be involved in the development, but pending a final determination of state lands involvement, an agreement has been made by the applicant with the State Lands Commission for the project to proceed without prejudice to the determination.

6. Location of Rock/Fill Material. PRIOT TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall identify the location from which the rock/fill material will be obtained. If the site is located within the coastal zone, a separate coastal development permit or permit amendment shall first be obtained from the California Coastal Commission or its successors in interest.

IV. Findings and Declarations.

The Commission finds and declares as follows:

1. Detailed Project Description/History. The applicant is proposing to repair two small segments of existing revetment that have failed along the north shore of the western basin of Agua Hedionda lagoon. Also proposed is the placement of fill material immediately inland of the repaired revetment segments to repair each section of the adjacent dirt public trail/access road which has created a public hazard for people using the public trail/access road. The unimproved trail/access road is located near the shoreline and is used by coastal visitors who walk near the water's edge and the applicant in its dredging operations (i.e., the public trail/access road is used by plant personnel to access anchor pins located within the nearby bluff which provide anchorage moorings for the dredging vessel that periodically removes sediment from the lagoon). Approximately 1,168 tons of new rock and fill (505 tons of rock and 663 tons of select fill) are proposed to complete the revetment and trail/access road repairs.

On May 23, 2000, the Executive Director issued Emergency Permit #6-00-49-G for the repair of two small segments of existing revetment that failed: one in front of the Hubbs-

Seaworld Fish Hatchery and the other just east of the hatchery). The repair work was completed by recovering migrated stones adjacent to the failed revetment segment and replacing them on the revetment. However, no import of additional rock or riprap was authorized. The repair work involved mechanically retrieving all available and accessible rock onsite. The emergency repairs were completed in early June, 2000. However, using only materials recovered onsite, the largest hole was not fully stabilized. Also approved was the placement of fill material inland of the repaired segments to repair two eroded segments of the adjacent public trail. While the temporarily repaired rock face has helped to reduce the amount of tidal scouring in the hole and has slowed down the continued erosion, an additional 1,168 tons of new rock and fill are proposed to complete the revetment repairs and public trail/access road repairs at this location. The subject application is the follow-up to the emergency permit.

On July 8, 1992, the Commission approved CDP #6-92-65 for the rehabilitation of a portion of the existing revetment that is located on the north shore of Agua Hedionda Lagoon. The rehabilitated segment is located west of the proposed revetment work. The applicant has indicated that the remainder of the revetment within the western basin of the lagoon requires rehabilitation but will be the subject of a future permit request.

The project lies within the plan area of the certified Agua Hedionda Land Use (LUP) segment. The LUP was certified in 1982; the City is currently preparing the necessary documents to certify the entire local coastal program for this segment. As such, the standard of review is Chapter 3 policies of the Coastal Act with the certified LUP used as a guidance.

2. Shoreline Protection. Sections 30235 and 30253 of the Coastal Act are applicable to the proposed project and state, in part:

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...

Section 30253

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...

Agua Hedionda Lagoon is one of three coastal lagoons within Carlsbad, along with Buena Vista Lagoon and Batiquitos Lagoon. Agua Hedionda Lagoon comprises approximately 230 acres of water surface, and additional upland marsh and wetland areas. The lagoon extends 1.7 miles inland from the coast and is approximately .5 mile across at its widest point. The lagoon consists of three distinct areas:

Western Lagoon: containing 66 acres of water surface, used as a cooling water source for the Encinia Power facility operated by Cabriño Power;

Middle Lagoon: containing 27 acres of water surface, used principally for passive recreational uses;

Inner Lagoon: totals approximately 140 acres of water surface, used for active recreation activities. Additional wetland areas, containing environmentally sensitive habitats, are located at the extreme eastern portion of the lagoon.

The separation of the lagoon into three areas is the result of the development of transportation corridors crossing the lagoon body. These include the construction of the railroad in the late 1800s, the bridging of the lagoon mouth by Pacific Coast Highway in 1910, and the construction of the I-5 corridor in 1967.

Originally, the lagoon was an increasingly restricted salt water marsh, the result of accumulated sedimentation, and the absence of tidal flushing. Between 1952 and 1954, SDG&E removed approximately 310,000 cubic yards of sediment from the lagoon to an average 10 foot depth, and opened the lagoon mouth to permanent tidal flushing. The site of the proposed project is the western (outer) lagoon.

The applicant is proposing to repair two small segments of existing revetment that have failed by recovering migrated stones adjacent to the failed revetment and replacing them on the revetment. Also proposed is the placement of fill material inland of the repaired revetment to repair two eroded segments of the adjacent public trail/access road. Approximately 1,168 tons of new rock and fill are proposed to complete the revetment and trail repairs. The applicant has documented through submittal of correspondence and photographs that over the years, tidal and wave action from major storms have eroded the existing rip rap revetment in several segments, damaging it and the adjacent public trail/access road. As a result, a number of high tides have overtopped the revetment, resulting in further erosion to the shoreline and the adjacent public trail/access road. The project is proposed to prevent further erosion and damage to the public trail/access road. The applicant indicates that since the recent dredging of all three basins of the lagoon in 1998/99, the tidal prism has been enlarged and water level within the lagoon has been raised. The applicant further indicates that these increases along with increased high tides and the potential of a large swell from Southern Hemisphere storms could result in additional failure of portions of the revetment and public trail/access road.

In reviewing any shoreline protective structure, the Commission is mandated to review several factors. First, under Section 30235 of the Coastal Act, the Commission must determine whether the proposed protection is justified to protect existing principal structures in danger from erosion.

Secondly, under the public access and recreation policies of the Coastal Act, a protective work must be analyzed to determine the appropriateness of its alignment and design with regard to beachfront encroachment and public access considerations. Third, the work must be performed in the least environmentally damaging manner, considering visual impacts, construction techniques and maintenance requirements.

In this case, the principal structure is the public trail/access road located immediately adjacent to the north shore of the lagoon. This trail/dirt road is used by Cabrillo Power in its dredging operations; it is used by plant personnel to access anchor pins located within the bluff. These pins provide anchorage moorings for the dredging vessel that periodically removes sediment from the lagoon (the lagoon is dredged approximately every two years to ensure sufficient quantities of cooling water in the operation of the Encina Power Plant; the sand is placed on the beach located on the west side of Carlsbad Boulevard). The applicant states that without these pins there would be no safe and practical way to anchor the vessel in areas affected by the inlet's strong current and wave action. Thus, the repairs are needed to protect the public access trail and the access road that is essential to effective operation of the power plant.

Section 30235 of the Coastal Act also requires that the shoreline protective device must be designed to eliminate or mitigate adverse impacts on local shoreline supply. The Commission has long recognized that shoreline protective devices adversely alter shoreline processes and must be designed not only to withstand the natural forces they are subjected to but also must be designed to provide adequate protection without creating additional adverse impacts that can not be mitigated.

The applicant has submitted a site-specific coastal engineering study to document the nature of the hazard and evaluate the threat of the trail/road to wave attack. It includes a wave runup analysis which documents the need for protection and recommends the proposed design and augmentation to the revetment. In short, some larger quarter ton and 2 ton rock is proposed to augment the existing revetment (the original revetment in this location was not engineered). Approximately 1,168 tons of new rock and fill (505 tons of rock and 663 tons of select fill) are proposed to complete the revetment and trail repairs along the north shore of the western basin of Agua Hedionda lagoon. As noted, the repair work involved mechanically retrieving all available and accessible rock onsite. The proposed engineered revetment will be raised to elevation 10.5 MLLW--just above its original height of 10 MLLW--to provide protection for the trail/road. The submitted plans indicate the toe of the revetment repairs will not go further seaward than the 0' MLLW, the original toe depth. The Commission's coastal engineer has reviewed the engineering study and uprush analysis and has indicated the submitted materials document the need for the project and the project represents the least environmentally damaging alternative if conditioned to allow no seaward encroachment of the revetment into eelgrass beds.

Special Condition #1 requires final plans which indicate the toe of the repairs will not go further seaward than the existing revetment. The main concern is the presence of eel grass resources in the lagoon. That is, by extending the revetment any further seaward into the lagoon, there is the possibility that eel grass could be adversely impacted. Special Condition #1 also requires that the revetment repairs at both locations have been engineered to ensure that the repair work has been done correctly and will standup better to the "forces of nature" in the future. The repairs were

completed but not engineered. Finally, Special Condition #1 requires that the segments of the public trail/access road that has been damaged by erosion be restored to its original condition.

With respect to adverse impacts to shoreline processes and local shoreline sand supply, because the revetment is not located along the open ocean shoreline, it will not have a direct impact on shoreline processes which distribute sand to area beaches. That is, the proposed shoreline protection will not physically interfere with sand transport along the littoral cell that provides nourishment to local beaches. While any seawall has indirect adverse effects on sand supply - by protecting sand supplies (bluffs) from erosion by wave scour - in this particular case there is little or no adverse indirect impact to sand supply from the proposed repair work. As noted, this portion of the lagoon is currently riprapped and is a sand trap that experiences an excess of sand and sediment which hampers the cooling operation of the Encina Power Plant. It is routinely dredged as part of a beach nourishment program that returns this trapped sand to the local beach. Therefore, the Commission finds that the proposed project will not adversely affect shoreline processes or local sand supply.

Regarding the second test, while the project does not propose extensive shoreline protection (the proposed 1,168 tons of new rock and fill indicate the limited scope of the project), alternative design and alignment of shoreline protective devices must be considered to prevent beach encroachment and associated impacts on public access and recreational opportunities. As noted, the emergency repair work was completed by recovering migrated stones adjacent to the failed revetment segment and replacing them on the revetment. The applicant was directed to retrieve all usable stone that was available along the entire approximately 1,100 foot stretch of shoreline between previous repairs the Commission approved in CDP #6-92-65 and the railroad trestle that crosses the lagoon and divides the western basin from the middle basin of the lagoon. After the entire stretch of shoreline was inspected for usable stone, the repair work involved mechanically retrieving all available and accessible rock onsite. Commission staff has inspected this portion of the shoreline and concurs that all available rock was retrieved that had migrated immediately offshore. As noted, no import of additional rock or riprap was authorized under the emergency permit. However, using only materials recovered onsite, the largest hole was not fully stabilized. While the temporarily repaired rock face has helped to reduce the amount of tidal scouring in the hole and has slowed down the continued erosion, an additional 1,168 tons of new rock and fill are proposed to complete the revetment repairs and public trail/access road repairs at this location.

Vertical seawalls have been the preferred design for shoreline protection because they eliminate the seaward encroachment that is typically associated with riprap revetments which are more expansive in design. In this particular case, the shoreline where the revetment is proposed is currently covered with riprap. Lateral access opportunities along the immediate shoreline are limited to primarily fishing off the existing riprap and walkers. It is expected the proposed repairs will not result in a significant change to the nature of the shoreline. A revised design, such as a vertical seawall, would not be warranted in this case to maximize the area of sandy beach seaward of the protective device.

Finally, the Coastal Act requires that the shoreline protective work is performed in the least environmentally damaging manner, considering visual impacts, construction techniques and maintenance requirements. While the western basin of Agua Hedionda Lagoon is used primarily as a reservoir of cooling water for power plant operations, it also supports eel grass, an underwater plant community that is considered a sensitive habitat worthy of protection under the Coastal Act. The applicant has conducted an eel grass study of the outer basin which indicates that no eel grass would be impacted by the placement of additional rock proposed as part of the project. Special condition #1 requires that the proposed work go no further seaward than the existing toe of the revetment so no adverse impacts to eel grass are anticipated.

Special Condition #2 requires plans showing the locations, both on- and off- site, which will be used as staging areas and storage areas for materials and equipment during the construction phase of this project. The plans shall indicate that no portion of existing public parking lots or public on-street parking areas shall be used for the storage of construction equipment or materials. With regard to visual concerns, the revetment repairs would be visible from Carlsbad Boulevard (a scenic highway in the LCP). However, because of its limited scope, its visual impact would be negligible when compared with that of the existing revetment.

There remains an inherent risk to development along the shoreline. Special Condition #3 requires the applicant to submit a signed document which shall indemnify and hold harmless the California Coastal Commission, its officers, agents and employees against any and all claims, demands, damages, costs, expenses of liability arising out of the acquisition, design, construction, operation, maintenance, existence, or failure of the permitted project.

Special Condition #4 advises the applicant of the need to maintain the revetment and that any change in the design of the wall or future additions/repairs may require a coastal development permit.

In summary, there is an existing revetment along the north shore of the western basin of Agua Hedionda Lagoon that provides protection to an adjacent public trail/access road. The proposed repairs are necessary to assure continued protection of these facilities. As condition, the proposed repairs have been minimized and will not encroach any further than the existing revetment. Therefore, the proposed revetment repairs can be found to meet the requirements of Section 30235 and 30253 of the Coastal Act.

3. Public Access. Section 30604 (c) of the Coastal Act requires that for any development between the nearest public road and the sea, the Commission must find that the permitted development is in conformity with the public access and recreation policies of Chapter 3 of the Coastal Act.

Section 30210

In carrying out the requirements 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 the public safety needs and the need to protect public rights, rights of private property owners, and natural resources from overuse.

Section 30211

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including but not limited to the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

The project site is located between the first public road and the sea. The Agua Hedionda Lagoon LUP calls for a trail on the north shore of the lagoon. The site has been historically used by the public and a public access easement for public pedestrian use and bicycle access for the site was approved by the Commission in CDP #6-93-113/Hubbs Sea World. Implementation of the proposed repairs will restore two segments of the dedicated trail that have been made unpassable by erosion from wave uprush.

The applicant indicates that discussions with the State Lands Commission revealed that the agency did not have jurisdiction, or leases, with regard to the subject site. However, no written documentation was received by Commission staff regarding this concern. Therefore, the Commission finds that Special Condition #5 is necessary. It requires the applicant to obtain a written determination from the State Lands Commission that no state lands are involved in the development; or if state lands are involved, all permits or agreements required by the State Lands Commission have been obtained. Based on the above, and as conditioned to obtain State Lands Commission approval of the project, the project can be found consistent with Sections 30210 and 30211 of the Coastal Act.

4. Local Coastal Planning. Section 30604 (a) 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 site lies within the Agua Hedionda Land Use Plan segment of the Carlsbad LCP. The LUP was certified by the Commission in 1982. To date, no implementing ordinances for this segment have been submitted for Commission review. Thus, the standard of review for the proposed development is Chapter 3 policies of the Coastal Act with the certified LUP used as guidance.

As conditioned, the project can be found consistent with Chapter 3 policies of the Coastal Act that pertain to shoreline development. Also the project will allow for continued pedestrian access along the immediate shoreline of Aqua Hedionda Lagoon, consistent with the historic pattern of public use and the access policies of the certified LUP. Therefore, approval of the proposed development, as conditioned, will not prejudice the ability of the City of Carlsbad to prepare a fully certifiable local coastal program for this area.

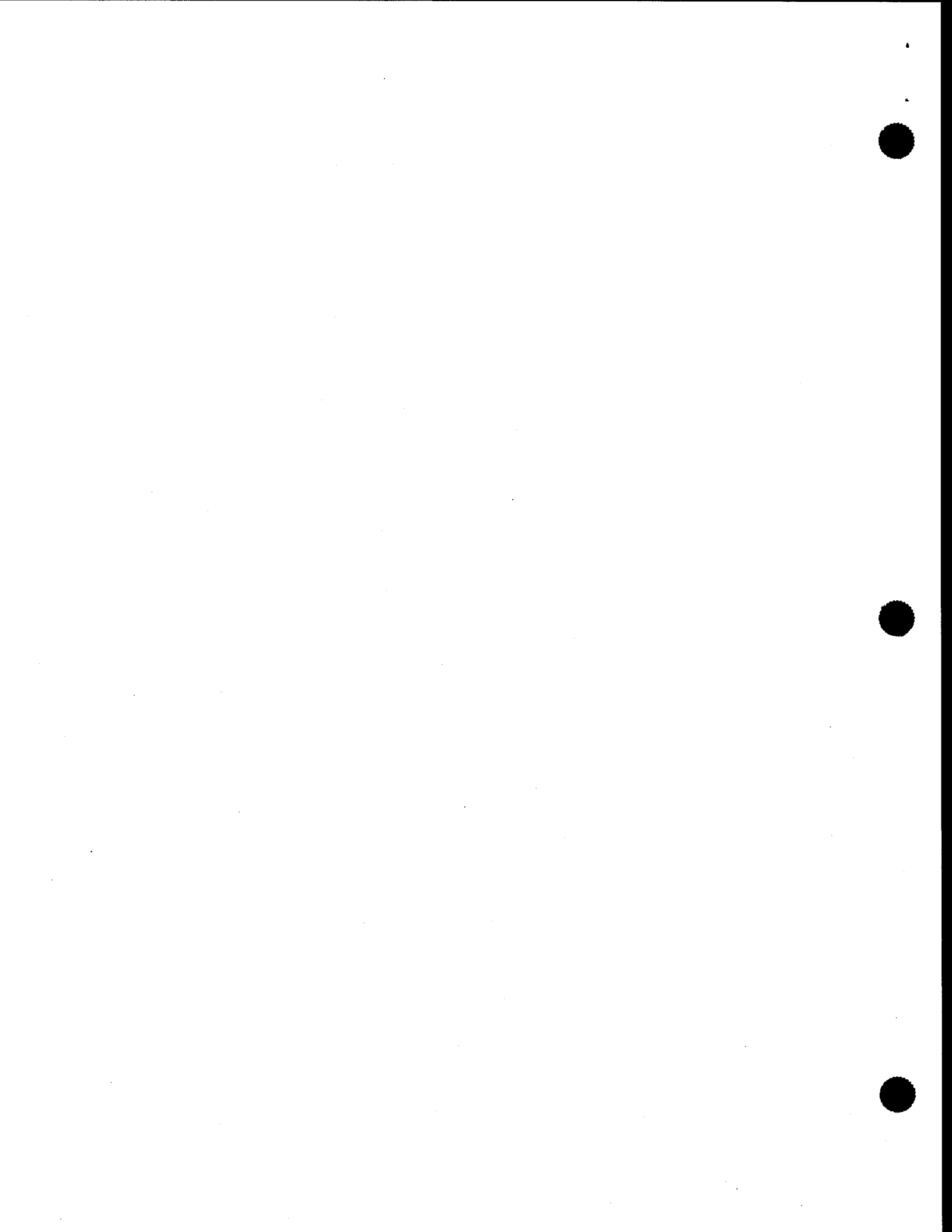
5. California Environmental Quality Act (CEQA) Consistency. Section 13096 of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit to be supported by a finding showing the permit, as conditioned, is consistent with any applicable requirements of the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

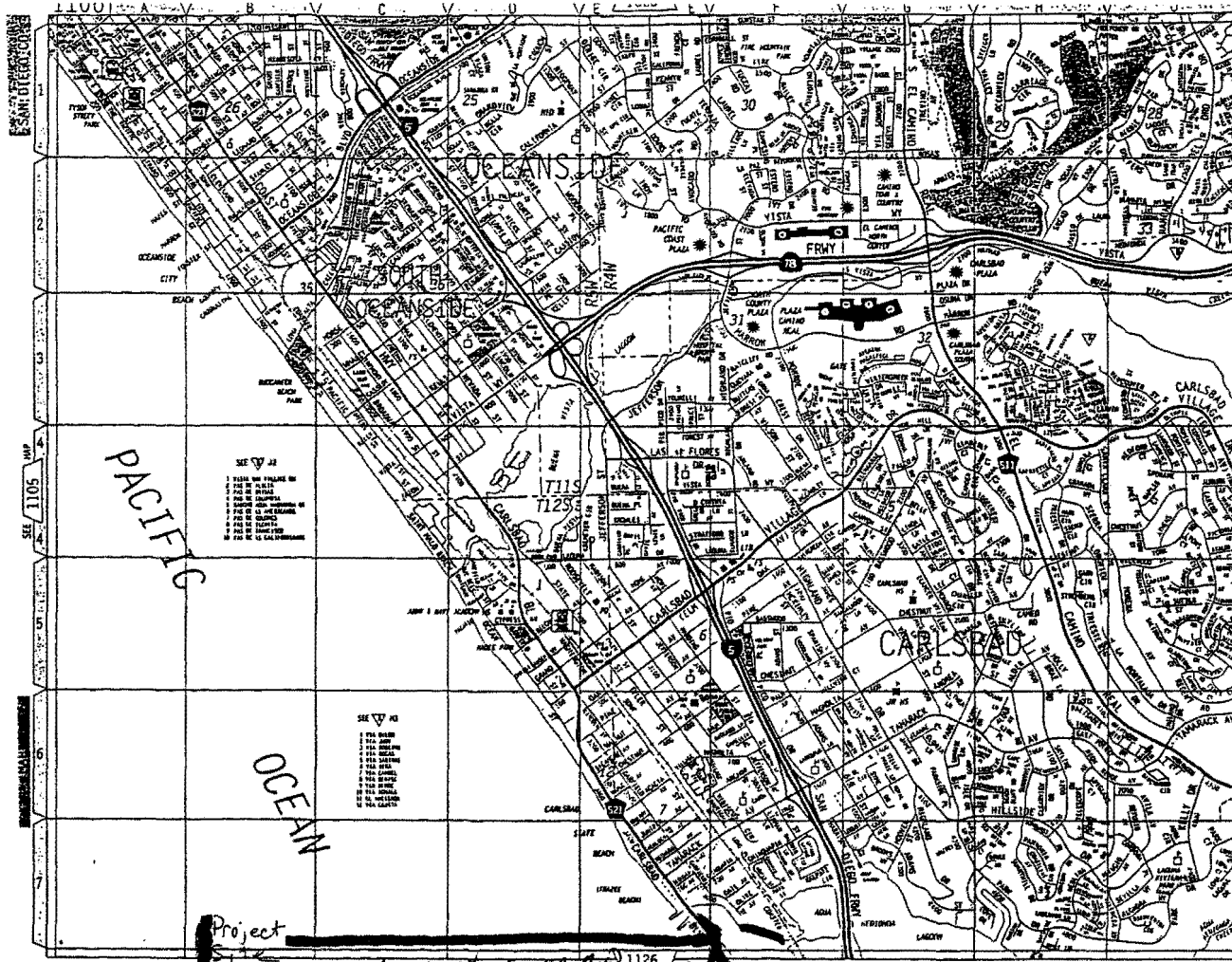
(CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect, which the activity may have on the environment.

The proposed project has been conditioned to be found consistent with the shoreline and public access protection 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 environmentally-damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

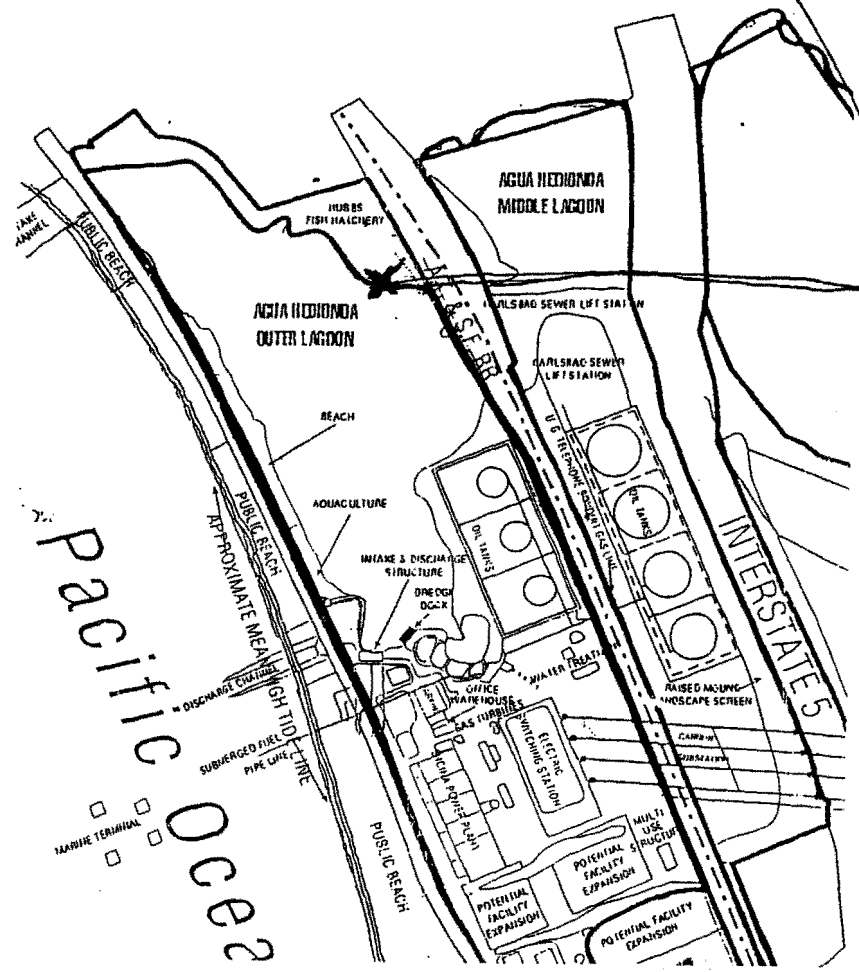
STANDARD CONDITIONS:

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 or 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.





VICINITY MAP 1126 MAP



Project Site

EXHIBIT NO. 1
 APPLICATION NO.
 6-00-49
 Location Map

N 29° 17' 10" W 656 54'

Z

Largest Hole

Hubbs

LIMITS OF D

FG = 20

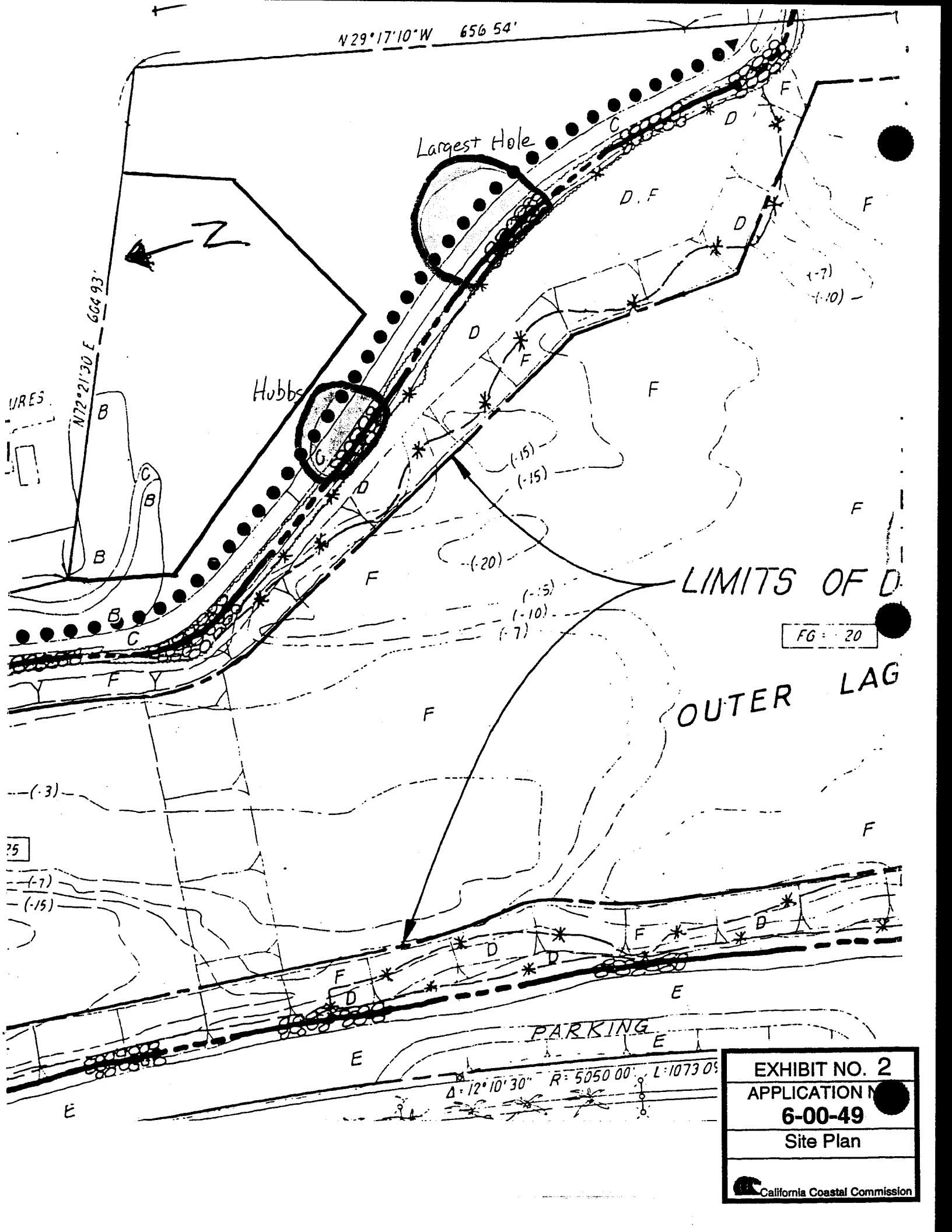
OUTER LAG

PARKING

$\Delta = 12^\circ 10' 30''$ R = 5050 00' L = 1073 05'

EXHIBIT NO. 2
APPLICATION NO.
6-00-49
Site Plan

California Coastal Commission



Largest Hole, East of Hubbs-Seaworld Research Institute

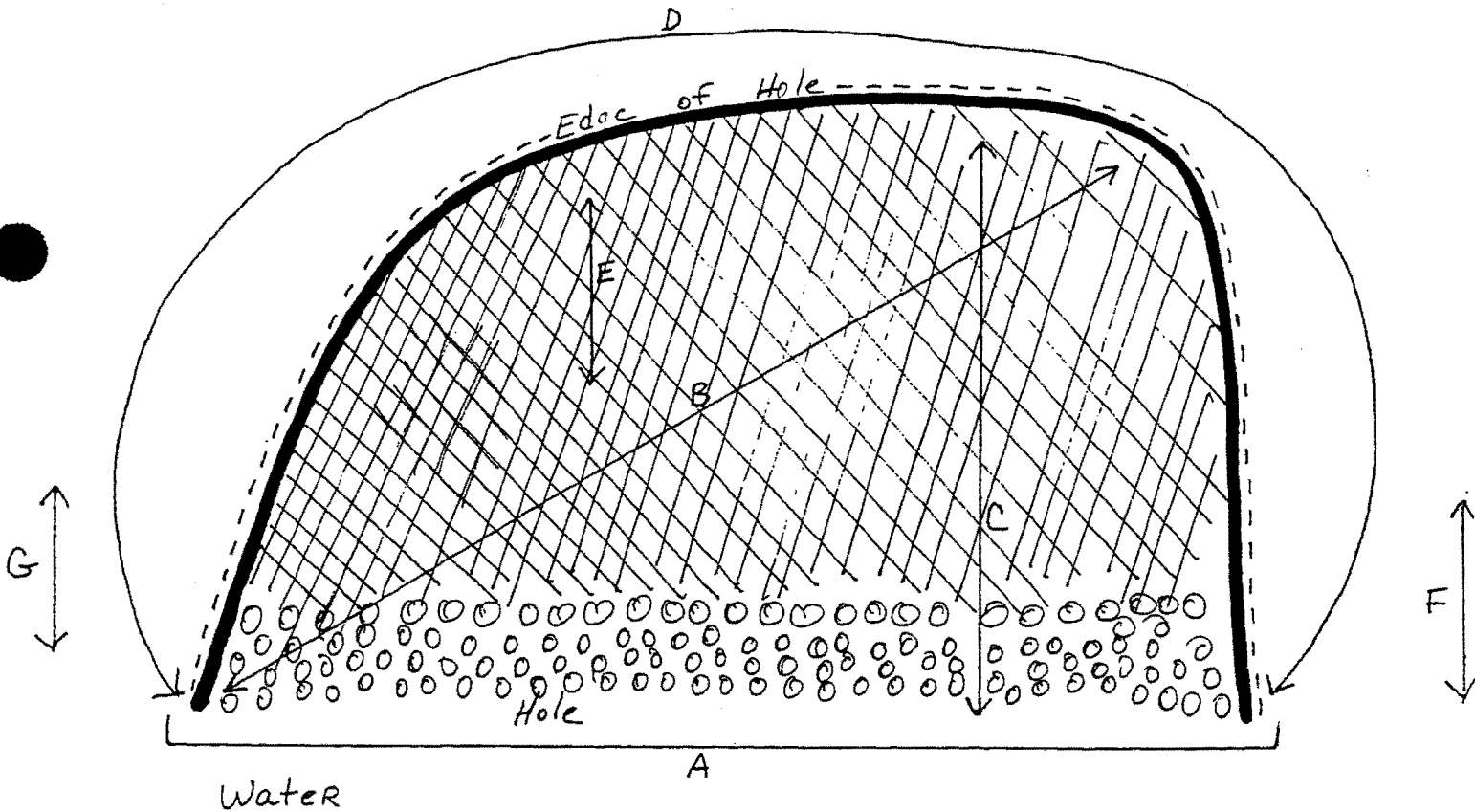
RECEIVED

MAY 11 2000

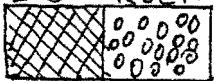
CALIFORNIA
COASTAL COMMISSION
SAN DIEGO COAST DISTRICT

- | | | |
|----|-----------------------------------|----------|
| A. | Length of Mouth: | 67'- 3" |
| B. | Diagonal Maximum Length: | 66'- 0" |
| C. | Maximum Width: | 42'- 1" |
| D. | Perimeter Distance: | 122'- 2" |
| E. | Vertical Depth: | 7'- 2" |
| F. | Trail Width on East Side of Hole: | 12'- 0" |
| G. | Trail Width on West Side of Hole: | 6'- 9" |

The hole is generally the shape of a half-circle with some irregularity along the westernmost side. The bottom of the hole is covered primarily with small rocks. Larger rocks are on the bottom, toward the seaward most part of the hole. To pass this hole, people must walk on unfenced private property.



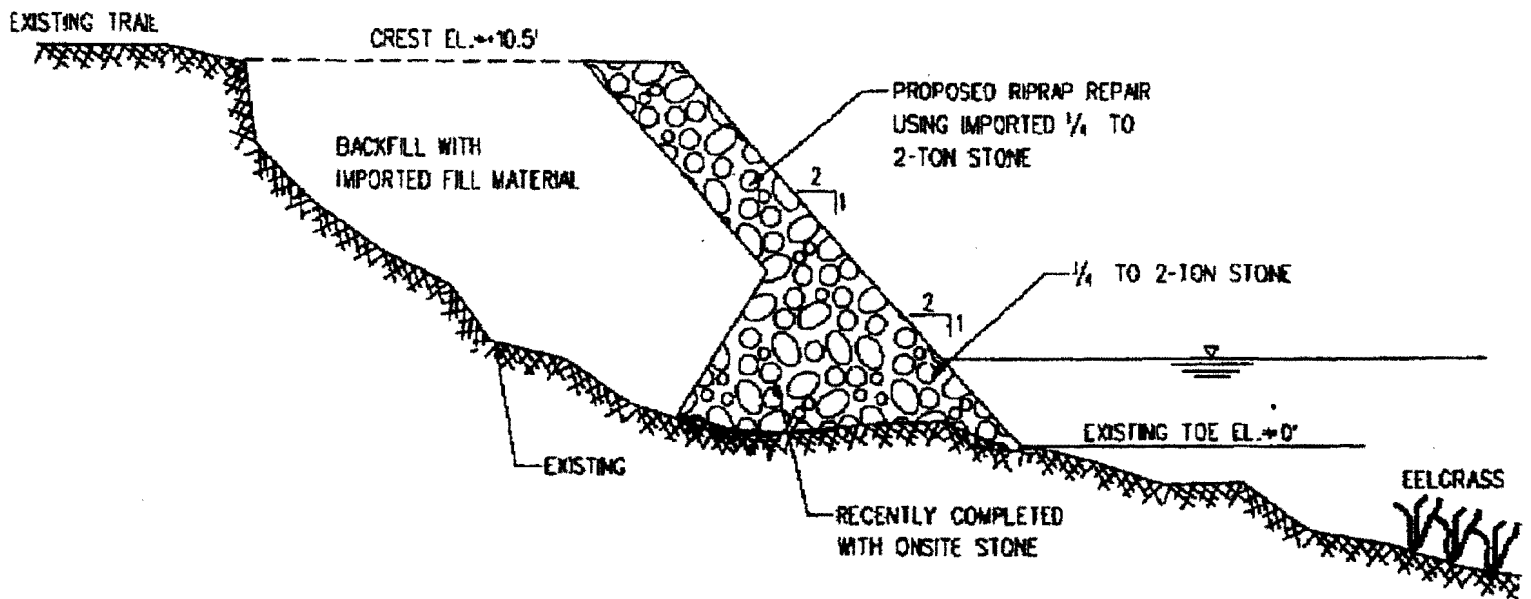
Proposed
placement of
DG Rock



DRAWING IS FOR ILLUSTR.


▲
NORTH

EXHIBIT NO. 3
APPLICATION NO.
6-00-49
Largest Hole
California Coastal Commission



TYPICAL RIPRAP REPAIR SECTION
(NON-ENGINEERED IMPROVEMENT)

Not To Scale

EXHIBIT NO. 4
APPLICATION NO.
6-00-49
Repair Section
 California Coastal Commission