

CALIFORNIA COASTAL COMMISSION

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

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Staff: DL-SD
Staff Report: April 23, 1998
Hearing Date: May 12-15, 1998

AMENDMENT REQUEST
STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-97-132-A2

Applicant: Nancy O'Neal Agent: Walt Crampton

Original

Description: Temporary placement and removal of rip-rap or large sand filled bags (geotubes) along the base of a coastal bluff below one bluff-top property containing a single-family residence. The rip-rap or geotubes would be approximately 10 feet high (5 feet above current sand level, 5 feet below), and would encroach approximately 12 feet onto the beach. All rip-rap or geotubes are proposed to be removed by April 15, 1998.

First

Amendment: Allow riprap to remain on beach below residence until May 15, 1998.

Proposed

Amendment: Allow riprap to remain on beach below residence until August 31, 1998.

Site: Bluff and beach below 367 Pacific Avenue, Solana Beach, San Diego County. APN 263-312-03.

Substantive File Documents: Certified County of San Diego Local Coastal Program (LCP); City of Solana Beach General Plan and Zoning Ordinance

STAFF NOTES:Summary of Staff's Preliminary Recommendation:

Staff is recommending denial of the proposed amendment because the riprap would have a substantial adverse impact on the public's ability to access and use the beach during the peak summer season, and would increase the likelihood that bluff erosion will accelerate on either side of the project site. The riprap was originally approved as a short-term measure to protect the bluffs during an unusually severe El Niño-related storm period. However, the time period during which the riprap is now proposed to remain on the beach is a time sand is expected to the return to the beach and the risk of storms is very low, therefore significantly reducing the need for shoreline protection. The applicants have not

submitted any evidence demonstrating that shoreline protection is necessary for protection of the existing bluff-top residence. In addition, in a permit application for construction of the residence approved in 1997, the landowner (and current applicant) agreed to remove threatened portions of the residence rather than construct shoreline protection. The landowner offered this agreement in exchange for authorization to build the house where it would likely need shoreline protection. Other alternatives to the proposed amendment include sand replenishment, which has been approved at the project site. Shoreline management should be pursued at the project area; however, it should be done in a proactive, comprehensive manner designed to provide protection for both the bluff-top properties and the public beach, and reduce the need for more substantial bluff protection in the future.

PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

I. **Denial.**

The Commission hereby denies an amendment for the proposed development on the grounds that the development will not be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976 and would 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 of the Coastal Act.

II. **Findings and Declarations.**

The Commission finds and declares as follows:

1. **Original Project Description/History.** On December 10, 1997, the Commission approved the subject application, and thirteen other applications, for temporary placement and removal of a total of either approximately 4,862 tons of 4-5 ton size rip-rap boulders, or 815 lineal feet of large sand filled bags known as geotubes along the base of a coastal bluff below the subject site and thirteen other contiguous and non-contiguous bluff-top properties in the City of Solana Beach (CDP #6-97-125 through #6-97-138). Either the rip-rap or the geotubes were to be approximately 10 feet high (5 feet above current sand level, 5 feet below), and would encroach approximately 12 feet onto the beach. The north and south ends of the rip-rap or geotubes on each non-contiguous site would be curved out to reduce "edge" effects on the adjacent, non-protected properties.

Each of the applicants proposed to remove the protection by April 15, 1998, and each received a Temporary Emergency Special Use Permit from the City of Solana Beach requiring that prior to construction, each applicant post a bond with the City of Solana Beach for the amount of \$12,000 (\$25,000 for the one condominium site) to ensure that money was available to remove all of the rip-rap or geotubes.

The Commission approved the development with special conditions requiring that the applicants remove the protection by April 15, 1998, and the submittal of final plans, proof of bonding, an assumption of risk, and approval by the State Lands Commission.

In January and March of 1998, the Commission approved placement of riprap below two additional single-family residences (#6-97-149; 6-98-2). Ultimately, only seven applicants, including the subject applicant, placed riprap under the approved permits. Geotubes were not used.

The subject amendment request involves the riprap placed at only one site below an existing single-family residence located at 367 Pacific Avenue. The subject site consists of an approximately 75 foot high coastal bluff below an existing single-family residence. The City of Solana Beach owns the bluff face and beach below the residence.

In July 1997, the Commission approved a permit for demolition of the existing single-family residence on the bluff top, and reconstruction of a new residence, with portions of the existing residence remaining on the site (#6-97-50). Since less than 50% of the existing residence was to remain standing, the Commission reviewed the project as demolition and new construction. In its approval of the project, the Commission gave the applicant the option of either locating all construction at least 40 feet back from the edge of the bluff, or, as proposed by the applicant, keeping the older portions of the home closer than 40 feet from the bluff edge, and recording a deed restriction providing that the landowner would not construct any upper or lower bluff stabilization devices (other than preemptive filling of any seacaves located at the base of the bluff), to protect the portion of the residence located closer than 40 feet from the bluff edge. The recorded document additionally provides that if erosion proceeds to a point where the portion of the principal residence located seaward of the 40 foot blufftop setback is determined to be unsafe for occupancy, the landowner will submit an application for a coastal development permit to remove the portion of the structure in its entirety. The applicant chose the latter option and portions of the home remain up to 19.5 feet from the bluff edge.

In March 1998, the Executive Director approved an emergency permit request by the applicant to fill a seacave which had developed on the subject site (#6-98-27-G). The follow-up regular permit application has not been submitted yet.

2. First Amendment Request. Information was submitted by the project applicant in early May documenting that El Niño-generated storm conditions were likely to continue beyond April 15, and thus, there was a continued need for temporary protection on the project site. Therefore, a non-material amendment to allow the riprap to remain on the site until May 15 was approved by the Executive Director on April 17, 1998, after circulation to interested parties. Three letters of comment were received, but none objected to the one-month extension request, thus, the amendment was approved.

3. Current Amendment Request. The current amendment requests that the riprap be permitted to remain on the project site until August 31, 1998. The City of Solana Beach has given the applicant approval to keep the riprap on the site until August 31, 1998, with an option that the time limit could be extended for additional 90 day periods if an emergency situation continues to exist and the applicant is pursuing a long-term solution.

4. Consistency with Chapter 3 of the Coastal Act:

Geologic Conditions and Hazards: Section 30235 of the Coastal Act states, in part:

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.

Additionally, Section 30253 of the Act states, in part:

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.

Public Access/Recreation: Pursuant to Section 30604 (c), the Coastal Act emphasizes the need to protect public recreational opportunities and to provide public access to and along the coast. Section 30210 of the Coastal Act is applicable to the proposed development and states:

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

Section 30211 states:

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.

In addition, Section 30212 of the Act is applicable and states, in part:

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

- (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,
- (2) adequate access exists nearby....

Section 30213 states in part:

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. [...]

Additionally, Section 30220 of the Coastal Act provides:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221 states:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Visual Quality: 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.

At the time the placement of the riprap was originally approved by the Commission, the applicant had not submitted any site-specific information demonstrating that the existing bluff-top structure was currently in danger from erosion. However, there was evidence that the 1997-1998 winter storms were likely to be more severe than usual due to the presence of an El Niño condition with higher amounts of rainfall and coastal wave surge. These conditions presented an increased likelihood of bluff failure and block falls, which would potentially result in the need for permanent shoreline protective devices. Storm events which coincide with high tides can be particularly damaging to coastal bluffs.

Thus, the rip-rap was approved as a temporary, preventative measure to reduce the potential for extraordinary damage to property during an unusually harsh rainy season. Therefore, although the existing blufftop structure was not threatened at that time, the Commission weighed the temporary adverse impacts to public resources associated with construction of temporary shore/bluff protection during the winter months only, against the advantages of avoiding substantial bluff failures which may lead to greater impacts in the future.

There are a number of adverse impacts to public resources associated with the construction of either temporary or permanent shoreline structures. These include the loss to the public of the sandy beach area that is displaced by the structure, "permanently" fixing the back of the beach, which leads to the narrowing and eventual disappearance of the beach in front of the structure, a reduction/elimination of sand contribution to the beach, sand loss from the beach due to wave reflection and scour, accelerated erosion on adjacent unprotected properties and the adverse visual impacts associated with construction of a shore/bluff protective device on the natural bluffs. As such, the construction of bluff and shoreline development raises consistency concerns with the public access and recreational policies of the Coastal Act and Sections 30235, 30240, 30251, and 30253.

Even on a short-term basis, the impacts from placing riprap along the shoreline are not inconsequential. The sand loss associated with even normal winter conditions significantly reduces the width of the beach, making lateral access along the beach difficult or impossible at higher tides. Thus, the placement of riprap on the beach presents an additional substantial obstacle, making beach access problematic even during lower tides. The subject site is located approximately three blocks north of Fletcher Cove, the main access point to the northern shoreline of Solana Beach. The City's Tide Park public access stairway is located approximately two blocks north of the site. However, the public stairway was damaged during winter storms, and thus is temporarily closed to public access. Thus, for several months, Fletcher Cove has been the only place to access the northern shoreline south of Cardiff State Beach, which is located on the southern end of Encinitas, approximately three-fourths of a mile from Fletcher Cove. Since the riprap is located only blocks from Fletcher Cove, it has the effect of precluding shoreline access to the northern shoreline of Solana Beach during all but the lowest tides.

However, the Commission found that impacts to the public from the beach encroachment would be minimal since the riprap would be present during the winter months, when beach use is typically at its lowest level. In addition, the Commission found that compared to permanent seawalls, the impacts to shoreline processes and sand supply from the riprap would be minimized, as long as the protection would be in place for only a few months.

In addition, given the predictions of an extraordinarily severe storm season, there was a potential that without some kind of short-term protection, the Commission would be faced, possibly under emergency conditions, with proposals for permanent shoreline protective devices with far more significant and longer-lasting impacts to visual quality,

public access and sand supply than the temporary riprap. Thus, as a short-term, temporary measure, the Commission found the riprap to be a preventative measure, which, in the long run, would reduce the potential impacts to the public. April 15, 1998 was established as the deadline for removal of the riprap since the Southern California storm season is typically over or greatly diminished by this date, and because beach use is relatively infrequent before this date.

In fact, the predictions of an unusually severe storm season were largely borne out, although the San Diego region coastline experienced somewhat less damage than other parts of the state. In particular, the segment of coastline in Solana Beach from Fletcher Cove to just north of Tide Park has experienced nearly constant wave action and erosion and undercutting of the base of the bluffs has resulted. Overhanging portions of the bluff have sheared off in a number of locations. As previously noted, the Executive Director approved an emergency permit to fill a seacave on the project site. As the April 15, 1998 deadline for removal of the riprap approached, the applicant submitted evidence that the storm season was likely to extend beyond April 15 and that temporary protection was still necessary. Thus, a non-material amendment was circulated extending the removal deadline until May 15, 1998.

However, approval of the current amendment request would allow the riprap to remain on the beach until August 31, 1998, more than four months longer than originally anticipated. The impacts associated with the project increase the longer and later the riprap remains on the beach. The Commission has typically defined the "summer season" as the time period between Memorial Day and Labor Day weekends, as the beaches receive the highest amount of public use during this time period. Even if sand returns to the shoreline during the next few months (as is typical for the summer months), resulting in wider beaches, the proposed riprap would still totally or partially block lateral access along the shoreline during higher tides, precluding lateral access necessary for strolling and jogging, which is one of the primary forms of beach use along Solana Beach's shoreline due to the lack of wide sandy beaches everywhere except Fletcher Cove.

Section 30221 requires that oceanfront land suitable for recreational use be protected for recreational use unless public demand can be accommodated elsewhere in the area. As previously discussed, if access is blocked at the project site, there is currently no other way to access the shoreline north of the site until Cardiff State Beach, which is located at the southern end of Encinitas where the State Beach parking lot is also closed due to storm damage at this time; however, there are a small number of street parking spaces north of the lot. Retention of the riprap would eliminate use of a beach area that receives heavy use during the peak summer months, especially during the Memorial Day and Independence Day holiday weekends, without providing any alternative access route or mitigation for the loss of recreational area.

The riprap also represents an adverse visual impact, as the rock is clearly not part of the natural beach/bluff landform, and thus, is not compatible with the character of the area. Again, during the winter months when relatively few people use the beach, the temporary

visual impacts of several tons of riprap were outweighed by to the benefits of providing short-term protection. However, leaving the riprap on the beach well into the summer months when the recreational and tourist season is at its height would represent a significant impact on the visual quality of a highly scenic shoreline.

In addition, the applicant has not submitted any geotechnical information demonstrating the impacts that riprap has had on the bluffs, either negatively or positively (by providing protection to the site). However, the riprap was designed as short-term protection that would be in place for less than five months. The longer the riprap remains on the beach, the greater the potential for "edge" effects such as scouring and increased erosion on the neighboring properties. The riprap was placed in January/February 1998, and thus will have been in place for approximately three months by May 15, and approximately six months by August 31, 1998. Without any specific geotechnical information it is difficult to assess the extent of impact the rock has had on the bluffs, but it is well documented that hard structures on the beach have some degree of adverse edge effects, and these will cease when the riprap is removed.

The applicant has submitted a statement from a geotechnical engineer addressing, in general, the threat to the existing bluff-top properties along the northern stretch of Solana Beach's coastline. The letter indicates that the fundamental threat to these properties comes from the fact that there is little or no sand on the beach at this time, and thus, for the majority of any given day, waves are impacting directly upon, and actively eroding the coastal bluff. The report notes that although the recent El Niño-type storms have accelerated coastal erosion, it the wholesale loss of sand over the past years that has created the serious erosion problems, with the El Niño storms merely accelerating the severe increased rate of erosion. The report concludes that although El Niño conditions are lessening, high sea surface temperature anomalies, and hence additional storm potential, are expected to remain through May 15 and extending into the summer of 1998.

However, there is evidence that sand has begun to return to the beaches in Solana Beach. As of April 22, 1998, more than two feet of sand had returned to beaches in the Fletcher Cove over what had been present only weeks ago (Steve Apple, personal comm.). Waves do continue to hit the toe of the bluff at the project site. However, if typical sand/wave patterns continues, more sand will continue to accumulate at the base of the bluffs over the next several weeks and months, thereby reducing the threat that substantial bluff erosion will continue through the summer. In addition, the City of Solana Beach has indicated that it is aggressively pursuing a variety of beach replenishment projects. There are currently two beach replenishment projects approved which could provide sand to Solana Beach including a grade separation project approved by the Commission in October 1994 (#6-94-207) and the Navy Homeporting project approved in 1997 (CD #95-95). The City is also pursuing a sand for trash exchange program (see attached newspaper article, Exhibit #3). Implementation of any of these projects would reduce the need for the riprap.

Furthermore, the applicant has not submitted any evidence indicating that the existing bluff-top structure is currently in danger, such as the distance between the residence and the edge of the bluff, predicted erosion rates, the natural angle of repose of the current bluff configuration, the potential for landslides, or any other site-specific geotechnical information. An analysis of these factors on the subject site was performed only one year ago, in 1997, in association with the demolition and reconstruction of the existing residence on the bluff top (#6-97-50). The geotechnical report indicated that a conservative estimate of bluff retreat at the project site is 16.5 to 25 feet over the next 75 years, but predicted that the bluff retreat rate would actually be no more than 6 to 16.5 feet over the next 75 years. Thus, the new residence would not be threatened for next 75 years. However, because there was a possibility that portions of the existing residence would become undermined within the life of the new structure, the applicant agreed to remove these portions of the residence closer than 40 feet to the bluff edge should it become threatened, in order to retain this portion of the residence. In addition, as previously noted, a seacave which did develop on the site over the winter has been filled under an emergency permit (#6-98-27-G), and thus, should not present a serious threat to the stability of the existing structure. Even with the accelerated erosion rate associated with the El Niño storms, there is no indication that the existing residence is in danger from bluff retreat.

Thus, given that there is no evidence that the existing residence is in danger of erosion, the Commission is not required to approve a shoreline altering device pursuant to Section 30235. Approval of retention of the riprap would be inconsistent with the Chapter 3 policies regarding the minimization of landform alteration, the protection of public access and recreation, and the preservation of scenic areas.

Moreover, there are feasible alternatives to leaving the riprap on the beach. As noted above, there is no evidence that removal of the rock will jeopardize the existing principal bluff-top structure. Therefore, removal of rock is the least environmentally damaging alternative. In addition, the applicant has previously agreed to remove portions of the existing residence rather than construct shoreline protection devices. Without the applicant's proposal, construction of a new home with portions as close as 19.5 feet from the bluff edge would not have been consistent with Section 30253 of the Coastal Act, which prohibits new development which will require shoreline protection. There are also a number of other alternatives that have not been explored, such as underpinning the existing residence and addressing groundwater and irrigation runoff.

However, the Commission recognizes that the entire shoreline in the area of the project site did experience varying amounts of block failures, undercutting, seacave formation and expansion, and bluff retreat this past winter. Although there is no specific evidence documenting the risk to existing bluff-top structures in the area, it seems reasonable to assume that given the damage the bluffs sustained this year, next winter's storms may present a similar risk of erosion. Even if there is no need for shoreline protection at the subject site because of the existing structure's setback or because at-risk portions of the structure would be removed, the Commission may soon be faced with requests for

temporary or permanent shoreline protection all along the northern segment of the Solana Beach shoreline.

The riprap was approved previously because there are significant benefits to both the public and private property owners associated with taking proactive measures to protect bluff-top structures before an emergency situation arises which results in the construction of permanent shoreline protective devices with significant and long-lasting impacts to visual quality, public access and sand supply. Similarly, there are benefits associated with doing long-term, comprehensive planning for permanent shoreline protection before existing bluff-top structures are in imminent danger from erosion. Therefore, it would behoove both the applicant, other private property owners in the area, and the City of Solana Beach (which owns the majority of the bluff face in northern Solana Beach and the beach) to explore protective measures with less environmental impacts than riprap, and to do so in a proactive, comprehensive manner.

Any comprehensive shoreline planning effort should examine a range of alternatives including beach sand replenishment, underpinning existing structures, addressing irrigation and groundwater, removing threatened portions of existing development, and any combination of these measures. Any of these alternatives would avoid the significant adverse impacts associated with shoreline protective structures. However, through this planning process it may be determined that a minimal amount of shoreline protection, such as a lower bluff seawall, if properly designed to minimize all adverse impacts and mitigate any remaining impacts, would reduce the risk that substantial lower and upper bluff protection, with significantly greater impacts, would be required in the future.

However, if the construction of shoreline protective devices is determined to be the least environmentally damaging feasible alternative for the northern Solana Beach coastline, it is vital that the protection be designed in a consistent, comprehensive manner, not on a lot-by-lot, piecemeal basis. Numerous studies have indicated that when continuous protection is not provided, unprotected adjacent properties experience a greater retreat rate than would occur if the protective device were not present. This is due primarily to wave reflection off the protective structure and from increased turbulence at the terminus of the seawall. According to James F. Tait and Gary B. Griggs in Beach Response to the Presence of a Seawall (A Comparison of Field Observations).

“[t]he most prominent example of lasting impacts of seawalls on the shore is the creation of end scour via updrift sand impoundment and downdrift wave reflection. Such end scour exposes the back beach, bluff, or dune areas to higher wash energies and wave erosion.”

As such, the base of the bluff continues to erode on the unprotected adjacent properties and failure of the bluff is likely. Thus, future failures could “spill over” onto other adjacent unprotected properties, prompting requests for much more substantial and environmentally damaging seawalls to protect the residences. This then starts a “domino” effect of individual requests for protection.

In addition, shoreline protection constructed on a lot-by-lot, individual basis tends to have an inconsistent appearance, with different construction materials, coloring, texture, etc., which intensifies the adverse visual impact of the structures.

Therefore, it is crucial that the applicant, other bluff-top property owners, and the City of Solana Beach begin to develop a long-term plan to address bluff stability in Solana Beach prior to the next winter season. In spite of the adverse impacts associated with permanent shoreline protection, if designed and built in a comprehensive manner before an emergency situation arises, the adverse impacts can be reduced and mitigated. Leaving riprap on the beach through mid-summer is simply a "band-aid" solution which puts off the admittedly difficult process of comprehensive planning at the expense of the public. The proposed amendment would also reduce the incentive for bluff-top property owners to work together to reach a long-term solution that could be implemented prior to the next winter storm season.

In summary, as a short-term, temporary measure, the impacts on public access, recreation, shoreline processes, and visual quality from the placement of riprap on the project site were significant but acceptable in light of the unusually severe El Niño conditions, and the fact that the impacts would occur during the winter season. However, leaving the riprap until August 31, 1998, would impact a large number of people during the time period when demand for public beach access is highest. The longer the riprap remains on beach, the greater the likelihood that the riprap will have erosive effects on the bluffs to either side of the project. The sand is expected to return to the beaches over the next few weeks and months, reducing the need for shoreline protection. Finally, although the applicants have not demonstrated a need for shoreline protection at this time, there are less environmentally-damaging alternatives to riprap that could include a permanent seawall, if it could be constructed in a proactive, comprehensive manner with appropriate mitigation. Therefore, the Commission finds that the proposed amendment is inconsistent with the public access and recreational policies of the Coastal Act and Sections 30235, 30240, 30251, and 30253 of the Coastal Act and must be denied.

5. 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 cannot be made.

The subject site was previously in the County of San Diego Local Coastal Program (LCP) jurisdiction, but is now within the boundaries of the City of Solana Beach. The City will, in all likelihood, prepare and submit for the Commission's review a new LCP for the area. Because of the incorporation of the City, the certified County of San Diego Local Coastal Program no longer applies to the area. However, the issues regarding protection of coastal resources in the area have been addressed by the Commission in its review of the San Diego County LUP and Implementing Ordinances. As such, the Commission will

continue to utilize the San Diego County LCP documents for guidance in its review of development proposals in the City of Solana Beach until such time as the Commission certifies an LCP for the City.

As shoreline erosion along the coast rarely affects just one individual property, it is imperative that a region-wide solution to the shoreline erosion problem be addressed and solutions developed to protect the beaches. In preparation of an LCP, the City of Solana Beach is faced with many of the same issues as the City of Encinitas, located immediately north of Solana Beach, whose LCP was certified by the Commission in March 1995. The City of Encinitas' LCP includes the intent to prepare a comprehensive plan to address the coastal bluff recession and shoreline erosion problems in the City. The plan will include at a minimum, bluff top setback requirements for new development and redevelopment; alternatives to shore/bluff protection such as beach sand replenishment; removal of threatened portions of a residence or the entire residence or underpinning existing structures; addressing bluff stability and the need for protective measures over the entire bluff (lower, mid and upper); impacts of shoreline structures on beach and sand area as well as mitigation for such impacts; impacts for groundwater and irrigation on bluff stability and visual impacts of necessary/required protective structures.

The City of Solana Beach should also address these items in the context of a comprehensive approach to management of shoreline resources. However, the proposed amendment does not involve a comprehensive solution, and does not address any of the alternatives to the proposed project which would lessen or eliminate the impacts of the project. Allowing riprap to remain on the beach reduces the incentive for bluff-top property owners to participate in a long-term comprehensive solution which should be pursued prior to the next winter storm season. As detailed above, the amendment cannot be found consistent with the Chapter 3 policies of the Coastal Act, and, thus, approval of the project would not prejudice the ability of the City of Solana Beach to complete a certifiable local coastal program. Therefore, the project must be denied.

6. Consistency with the 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 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.

As discussed herein, the proposed project would cause significant adverse impacts to the environment. Specifically, the project cannot be found consistent with the public access, recreation, shoreline alteration and visual impact policies of the Coastal Act. There are feasible alternatives available which would substantially lessen the significant adverse impact which the project would have on the environment, including removing the riprap by May 15, 1998, or implementation of a comprehensive shoreline management program

which included various options for shoreline protection such as beach replenishment, underpinning of existing structures, addressing groundwater and irrigation runoff, and/or construction of a minimal lower bluff seawall designed to mitigate and reduce environmental impacts. Therefore, the Commission finds that the proposed project is not the least environmentally damaging feasible alternative and cannot be found consistent with the requirements of the Coastal Act to conform to CEQA.

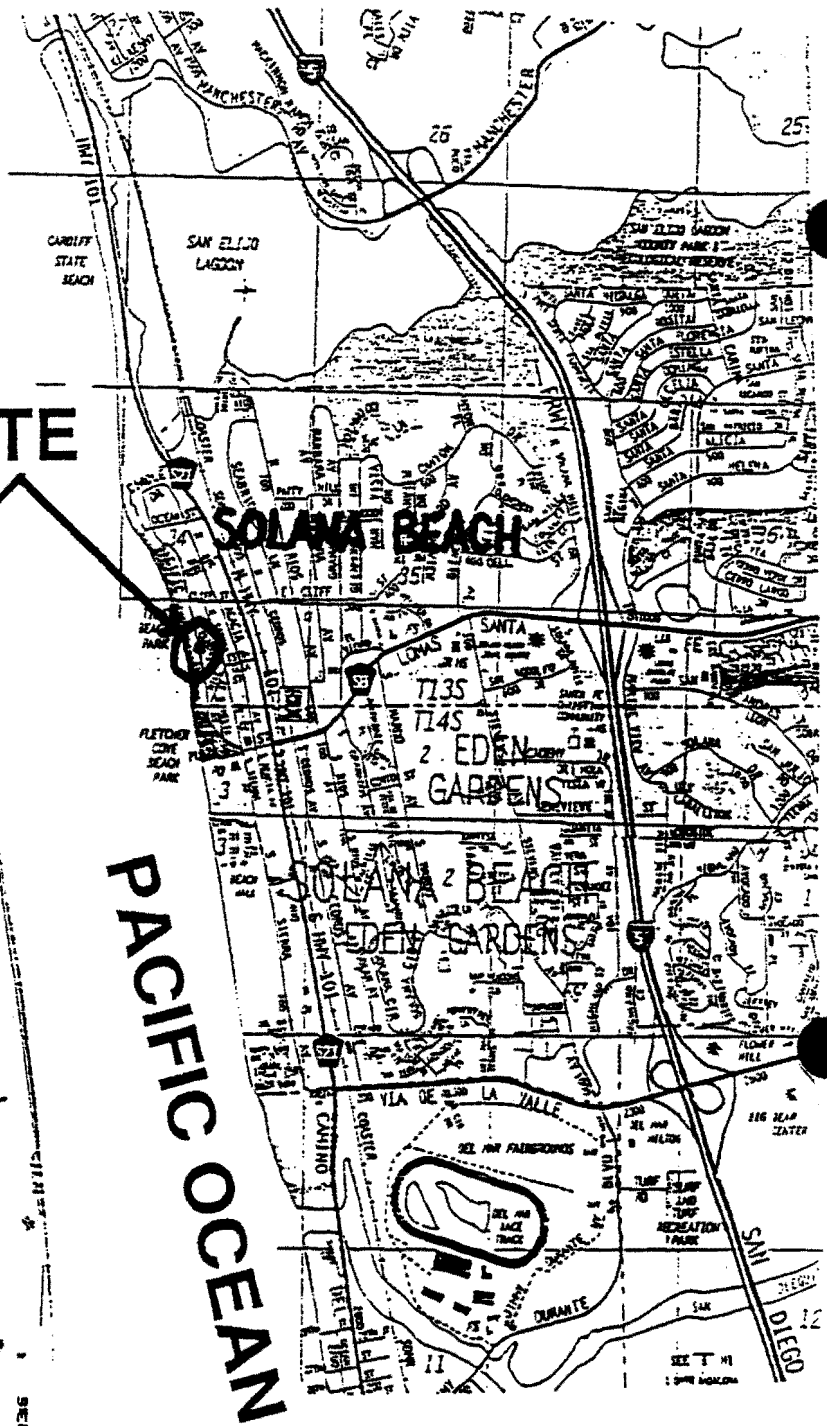
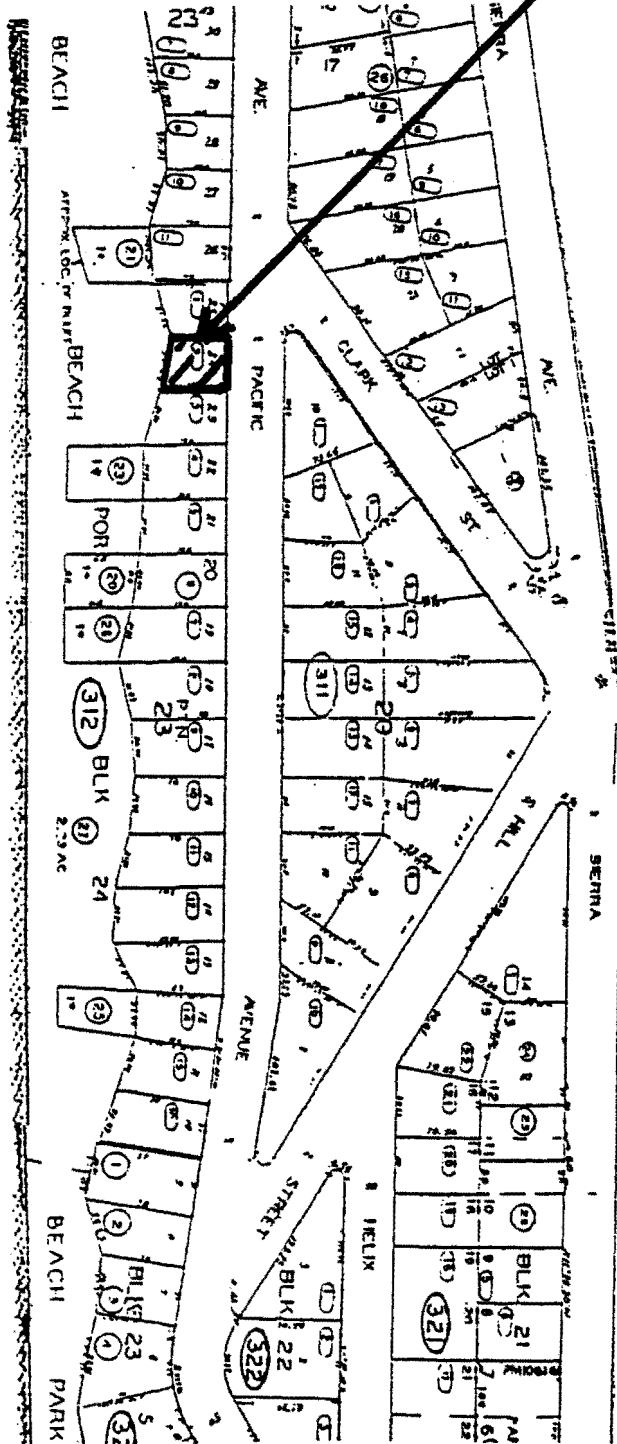
(7132A2)

TH. 12g.

SUBJECT SITE

PACIFIC OCEAN

FOR OPEN SPACE ESSENT

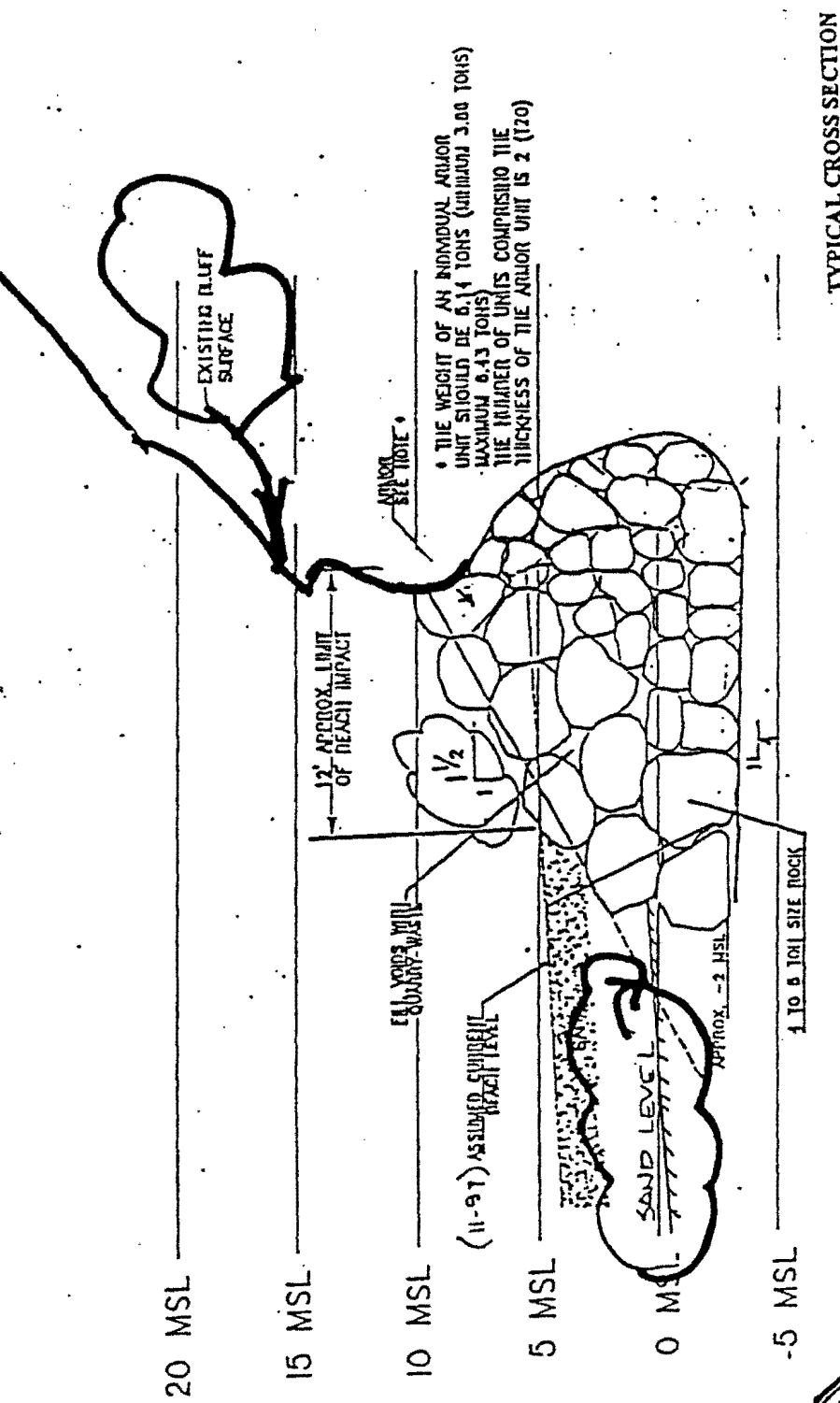


PACIFIC OCEAN



EXHIBIT NO. 1
APPLICATION NO.
6-97-132-A2
Location Maps
California Coastal Commission

FIGURE 1



RIP-RAP
H.T.S.

CHARLES J. RANDLE, PE
5858 MT. ALIFAN, SUITE 225, SAN DIEGO, CA 92111
TELEPHONE (619) 571-6271

ENGINEER

EXHIBIT NO. 2
APPLICATION NO.
6-97-132-A2
Typical Cross-Section
Of Riprap
California Coastal Commission

Solana Beach to test

THE SAN DIEGO UNION-TRIBUNE.

THURSDAY, APRIL 23, 1998

sand-for-trash

Dwight Daniels
STAFF WRITER

SOLANA BEACH — Desperate to protect storm-battered Fletcher Cove beach from El Niño-driven erosion, city lawmakers have approved a pilot sand-for-trash program with two Arizona-based waste companies.

The effort, bringing in what geologists have labeled top-quality sand from a dredging project along the Colorado River near Yuma, will be similar to an aesthetically successful but economically questionable sand-for-trash deal tried last year in Oceanside.

Under the Solana Beach plan, about 6,500 cubic yards of sand will be trucked here during the last two weeks of May on American Waste Transport Inc. trucks.

The hauler currently delivers East County trash to a USA Waste Inc. landfill in Yuma, returning with empty trucks.

Officials here, led by City Councilman Joe Kellejian, negotiated a deal to cover the \$7,000 cost of a project that would have the trucks return full of sand. American Waste Transport and USA Waste Inc. will each cover \$25,000 of the total. The city will pay more than \$32,000 from reserve accounts and use an anonymous donation of \$5,000 toward the project.

"Fletcher Cove is this city's jewel," a pleased Kellejian said after a 3-0 vote backing the trial. Mayor Paul Tompkins and Councilwoman Teri Enteria were absent.

"This is giving us enough additional sand to cover the beach at Fletcher Cove six feet deep," Kellejian said. "I jumped on this idea, knowing we need to do all we can to provide adequate cover to protect Fletcher Cove. It really is the city's treasure.

"This is a way to test the idea without any long-term commitments," he said.

Mayor Dick Lyon of Oceanside said his city's test last year proved the concept of sand-for-trash could work.

"The sand was great," he said of the delivered sand the city received in March 1997. "The process worked, but for the economies of scale to be viable, it would have to be a regional

effort. We just didn't produce enough trash here."

Oceanside's \$70,000 deal, with a different waste company, brought in 900 tons of sand to a beach at the end of Oceanside Boulevard. Questionnaires later distributed to the public showed most beachgoers liked the sand, which came from La Paz, Ariz., even though it appeared a bit more brown than the native gray sand in the area.

The sand Solana Beach will receive appears to be less brown. Two plastic bags of the stuff received rave reviews from council members and those in the audience Tuesday night.

"It's superb sand," said Moi Arzamendi, a senior executive with Woodward-Clyde, an environmental engineering firm in San Diego, who did a study of the substance. "It's the best I've ever seen."

Coming from a project to keep river water flowing to Imperial County, it has only minus-

cule particles of silt and no clay, unlike the brownish sand Oceanside got, Arzamendi said.

"This sand by far exceeds all Environmental Protection Agency and (U.S. Army) Corps of Engineer requirements," he said.

One Solana Beach resident made a pitch Tuesday night to have some sand delivered at Tide Beach Park along Solana Vista Drive.

The council declined, but Blayne Harman, vice president of TEG, an environmental sampling and analysis company, vowed to raise at least \$10,000 for the effort anyway.

"I don't mean to sound cavalier, but Solana Beach is about beaches, isn't it?" he said. "I'm hoping for other contributors, but I'll cut the check myself if I have to."

Somewhere between 2,000 and 4,000 cubic yards would be needed for adequate cover of Tide Beach, city officials said.

Encinitas City Councilman James Bond, who has been seeking sand for Encinitas' storm-ravaged beaches for months, said he will watch the Solana Beach experiment with great interest.

"Let's see if it works, and what the economics of it works out to be," he said, noting that Encinitas already purchases about \$30,000 worth of sand from an area quarry each year to help keep Moonlight Beach covered. "We may be interested in trying it too, depending on results."

EXHIBIT NO. 3

APPLICATION NO.

6-97-132-A2

Sand For Trash

Article

California Coastal Commission



Certified DBE/MBE

Geotechnical Engineering

Gravel

Hydrogeology

Coastal Engineering

Hydrology

Hydraulics

Environmental
Engineering

Project No. 1831-EC01
April 16, 1998

RECEIVED

APR 16 1998

CALIFORNIA
COASTAL COMMISSION
SAN DIEGO COAST DISTRICT

Ms. Diana Lilly
CALIFORNIA COASTAL COMMISSION
3111 Camino Del Rio North, Suite 200
San Diego, California 92108

EMERGENCY RIPRAP PERMIT REQUEST
211 PACIFIC AVENUE - J&N O'NEILL
215 PACIFIC AVENUE - GARY GLASGOW
219 PACIFIC AVENUE - R&A BAKER
265 PACIFIC AVENUE - W&L BENNETT
269 PACIFIC AVENUE - M&M PASKIN
301 PACIFIC AVENUE - D&M STROBEN
309 PACIFIC AVENUE - D&P LINGENFELDER
367 PACIFIC AVENUE - J&N O'NEILL
SOLANA BEACH, CALIFORNIA

Dear Ms. Lilly:

As we discussed on the phone yesterday, Group Delta Consultants, Inc. (GDC) has been retained to represent the above-listed homeowners in their application of a permitted shoreline protection project, along with the resolution of the temporary riprap placed in front of the subject structures this past winter. All of the above-referenced properties have obtained emergency permits from both the City of Solana Beach and the California Coastal Commission, with the City's permit in effect through July/August 1998, and the Coastal Permit effective until April 15, 1998. Provisions exist within both agency permits for time extensions if an emergency situation can be documented at the project site that requires the retention of riprap or, in the case of the City's permit, "the time period for removal of a temporary emergency structure may be extended by the Planning Director if the Planning Director finds that the property owner has applied for, and is diligently pursuing, a Special Use Permit for a permanent protection structure or device."

EXHIBIT NO. 4

APPLICATION NO.

6-97-132-A2

Letter from Applicant

In compliance of Condition No. 4 of the Emergency Coastal Permit, all of the applicants have previously requested extensions of the Emergency Permit to the May 15, 1998, non-material extension date, and have additionally requested consideration of an additional extension while in the process of applying for a regular Coastal Development Permit.

In discussions with both City Staff and Coastal Staff, the applicants are all aware that the Coastal Commission's position is that emergency riprap, as placed, does not minimize shoreline encroachment, nor is it the least environmentally-damaging alternative. With these considerations, the applicants recognize that the emergency riprap will not be permanently authorized and that any permitted future coastal protection must minimize shoreline encroachment, must be designed to minimize the alteration of natural landforms, and must be visually compatible with the character of the surrounding coastal bluffs. Moreover, on behalf of the applicants, we believe that properly designed coastal protection can enhance the visual quality in certain areas, while improving public safety and thus utilization of the coastline.

We have had several discussions with City Staff (both Messrs. Steve Apple and Daryle Mitchell) regarding permit requirements and City policies regarding shoreline and coastal bluff protection. We have also discussed this issue with Councilmember Joe Kellejian, and in all discussions have indicated a strong willingness to work with City Staff in developing a coastal bluff stabilization project sensitive to the coastal resources of the City. Although the City does not have a Local Coastal Program (LCP), at least in verbal discussions, both City Staff and Councilmember Kellejian indicated that any coastal bluff protection measures, if approved, must be designed and located to minimize the alteration of natural landforms and the visual character of the area, and to the extent possible, maximize the scenic and visual qualities of the City's coastline. With this basic premise, and if designed in conformance with the applicable provisions of the Coastal Act, some level of pro-active coastal protection may be approved by the City. With this in mind, it is our intent to work with City Staff in developing a project that can be supported by both the City Council and the citizens of Solana Beach.

In discussions with both City Staff and Councilmember Kellejian, the City is apparently committed to developing some level of pro-active coastal policy intended to preserve and

enhance the City's coastal resources for the benefit of both the public and their coastal bluff-top constituents alike. At the March 31 City Council meeting, the City Council requested that Staff review the general plan and develop a Beaches, Bluff, and Sand Element as a part of the General Plan, in part addressing the various coastal bluff issues. City Council authorized Staff and approved funds for the formation of a Citizen Participation Group chaired by an environmental/planning consultant to address and develop consensus regarding suitable measures for protecting and enhancing the City's coastal resources and to address suitable measures for dealing with the various coastal bluff issues, including ongoing coastal erosion. Mr. Steven Apple, Director of Community Development for the City of Solana Beach, has been directed to prepare the Request for Proposal for the implementation of a Citizen Participation Group, including a series of semi-monthly public workshops, with a proposed plan completion date of six months.

Although this will likely not be a comprehensive plan to address coastal bluff policy within the City of Solana Beach, it is intended to form the basis for the City's future efforts in developing an approved LCP and will also form the basis for a more focused policy on the utilization, preservation, and enhancement of the City's coastline. In our discussions with Messrs. Kellejian and Apple, we voiced strong support for the City's pro-active adoption of a section on coastal bluff issues within the City's General Plan, along with a strong desire to work with City Staff in developing coastal protection guidelines that complement the preservation and enhancement of the City's admittedly fragile coastal resources.

In our discussions with you, we understand that any permit application to the Coastal Commission to retain the existing emergency riprap beyond May 15, 1998 (the non-material amendment date), must be accompanied by detailed and specific documentation justifying the need for extending the duration of the permit, including the potential for additional damaging El Niño-type storms. As we have previously discussed, the fundamental threat to all of these properties comes from the fact that Solana Beach today has essentially no transient beach sand, so that the underlying bedrock shore platform is exposed along virtually the entire coastline. Although accurate elevations of the cliff-platform junction fronting the various properties are currently unknown, we estimate that the shore platform elevation near the base of the sea cliff ranges from approximately +1 to +2 feet, mean lower low water datum (MLLW). This is based on elevations measured

at Tide Park, and on a visual affirmation of similar foreshore elevations to the south. We are currently in the process of acquiring a high-quality photogrammetrically-prepared topographic base map, flown during an extreme tidal low to refine variability in shore platform elevations and the extent of recent coastal erosion compared to the available ortho photo maps on file with the City flown on January 3, 1991. In any case, with a cliff-platform junction elevation below mean sea level, for the majority of any given day, waves are impacting directly upon, and actively eroding, the coastal bluff.

It is important to recognize that the progressive loss of the transient sand beach, resulting from the cumulative effects of sand removal in the urbanizing coastal watershed, has caused a dramatic increase in the rate of marine erosion not previously observed during man's initial habitation of the North County coastal area. The City of Solana Beach's Shoreline and Coastal Bluff Protection Section of the Municipal Code, which discourages the use of seawalls, presupposes the existence of a sandy beach at the foot of the coastal bluffs; however, this beach has in recent years been entirely lost due to conflicting societal pressures throughout the coastal watershed. Additionally, the City's loss of beach replenishment sand from both the Navy Homeporting Project and the Solana Beach Grade Separation Project, at least for the near term, essentially ensures the total loss of this protective sand beach, and an accelerated rate of coastal erosion that negatively impacts both the public utilization of this important resource, and the coastal bluff-top owners alike.

Our own measurements of sea-cliff retreat, principally along that portion of coastline northerly of Tide Park, indicates locally upwards of 10 feet of sea-cliff retreat since 1993 within the more highly fractured zones of the sea cliff. Although the recent El Niño-type storms have accelerated coastal erosion, it is the wholesale loss of sand that has created the serious erosion problem, with the El Niño-type storms merely accelerating this very severe increased rate of erosion. The rate of sea-cliff erosion can be mathematically described with a simple predictive cliff erosion model as follows (Sunamura, 1977¹):

¹Sunamura, T., 1977, A relationship between wave-induced cliff erosion and erosive forces of waves. *J. Geol.* 85, p. 613-18.

$$dx/dt \propto \ln \left(\frac{f_w}{f_r} \right)$$

where: dx/dt is the horizontal rate of erosion
 f_w is the wave force
 f_r is the rock resistance, which is proportional to its unconfined compressive strength.

Although the rate of erosion is a function of both rock strength and wave force, more importantly, these numerical models describe that, for a given unconfined compressive strength, the rate of erosion is proportional to the natural log of the wave force and, thus, not linearly increasing with increase in wave height. This is important for two reasons. Initially, since breaking waves are depth limited, and more a function of the still water depth at the base of the sea cliff, it is the high tides, coupled with barometric low pressure, storm surge and wave setup, that define maximum still water elevation and, hence, the depth-limiting breaking wave force, i.e., f_w . Additionally, the presence of a protective sand beach, which limits (or eliminates) the still water depth at the base of the bluff quickly reaches a threshold below which no additional marine erosion occurs.

Large-scale El Niño-type conditions resulting from higher than normal sea surface temperatures in the Equatorial Pacific and Indian Oceans, result in weaker easterly trade winds and higher sea levels along North and South America. Enhanced convection of energy into the tropical atmosphere usually enhances the number and intensity of storms over the North Pacific. During these events, average sea levels in Southern California can rise up to 0.5 foot above normal. The record water level of 8.35 feet, MLLW, observed at San Diego in January 1983, includes an estimated 0.8 foot of combined surge and El Niño-induced sea level rise (Flick and Cayan, 1984²). The important observation is that a 10± percent increase in El Niño-induced wave energy results in a somewhat smaller increase in increased erosion rate. The absence of sand, coupled with high water surface elevations

²Flick, R.E., and Cayan, D.R.. 1984. Extreme sea levels on the coast of California, proceedings of 19th Coastal Engineering Conference, Amer. Society of Civil Engineers, pgs. 886-898.

and any sizeable deep-water waves, results in high erosion rates. The lack of this protective sand beach results in the high wave force, f_w , and hence high rate of erosion. It is this wholesale loss of sand that creates the need for extending the duration of the emergency permit.

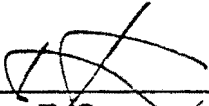
With regard to El Niño-type conditions, in discussions with Drs. Reinhard Flick and Dan Cayan, both with Scripps Institute of Oceanography (SIO), we understand that high sea surface temperature anomalies continue to exist within the Equatorial Pacific, thus extending the potential for future El Niño-type storms. The Experimental Climate Prediction Center at SIO has developed a model to forecast sea surface temperature anomalies within the Equatorial Pacific, indicating El Niño-type conditions extending through August 1998, with forecasts for March/April/May 1998 and June/July/August 1998 shown on Figures 1 and 2, respectively. By comparison, Figure 3 shows the measured sea temperature anomaly for January 1998. However, please note that Figure 2 shows both measured sea surface temperature (the upper half of the figure) and measured ocean temperature anomaly at depth. Maximum measured sea surface temperature anomalies for January amounted to 4° centigrade, where maximum predicted sea surface temperature anomalies for March/April/May 1998 and June/July/August 1998 were 3° centigrade and 3+° centigrade, respectively (the latter anomaly moving easterly toward Central America). Although the El Niño conditions are lessening, high sea surface temperature anomalies, and hence additional storm potential, are expected to remain through May 15 and extending into the summer of 1998, providing yet further justification for retaining the riprap past the May 15, 1998, date.

Given the above considerations, and recognizing that the temporary permit applications with the City of Solana Beach are valid through July/August 1998, we respectfully request an extension of the Coastal Commission's Emergency Permit to be concurrent with the permit authorization granted by the City of Solana Beach. We are currently working with the City of Solana Beach in obtaining approval for some form of a shoreline stabilization project, and we wish to work with Coastal Staff in fulfilling the various permit requirements; however, the City has requested that the applicant's defer any permanent permit applications for shoreline protection until the City's Beaches, Bluff, and Sand Element to the General Plan is completed. This City recognizes that the fundamental erosion problem

is the loss of sand, and has agreed to work with the above-listed homeowners to maintain mutually-agreeable temporary coastal bluff protection, consistent with the policies of Chapter 17.62 of the Solana Beach Municipal Code.

After Coastal Staff has had a chance to review this request, we welcome the opportunity to meet as soon as possible to discuss any additional Staff requirements or information necessary to process this request. We would like to thank you again for your continued understanding in this matter. If you have any questions or require additional information, please give us a call.

GROUP DELTA CONSULTANTS, INC.
Very truly yours,



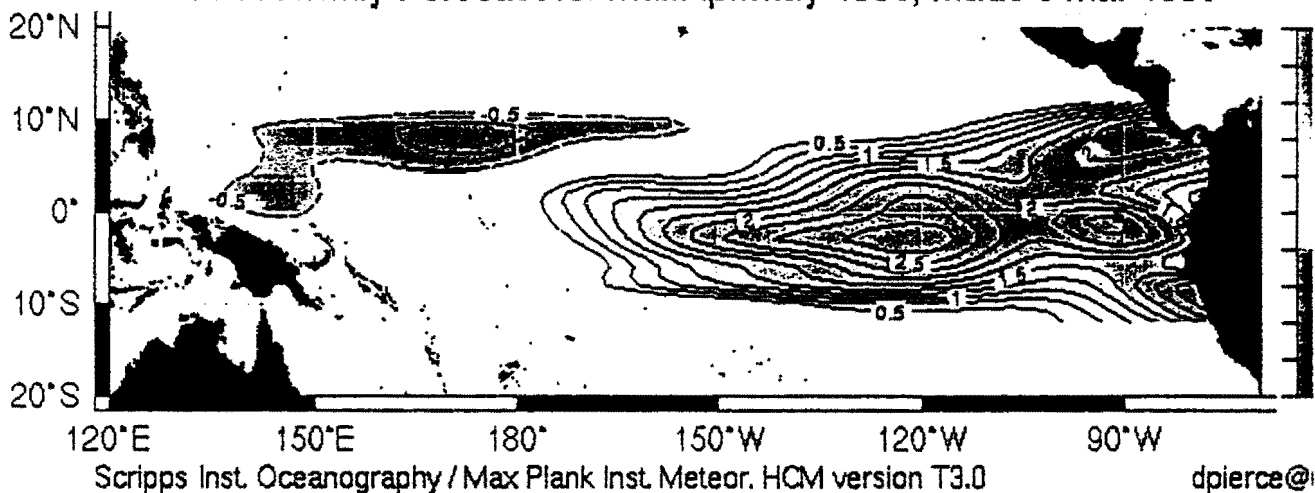
Walter F. Crampton, Principal Engineer
R.C.E. 23792, R.G.E. 245

WFC/jc
Attachments

cc: J & N O'Neill
Gary Glasgow
R & A Baker
W & L Bennett
M & M Paskin
D & M Stroben
D & P Lingenfelder
Mr. Steven Apple, City of Solana Beach



SST Anomaly Forecast for Mar/Apr/May 1998, Made 3 Mar 1998



Where in the world am I looking at?

You are looking at *Sea Surface Temperature anomalies* in degrees Centigrade, or "SST anomalies" for short. Yellows and purples mean warm, greens and blues mean cold. SST anomalies are how much temperatures depart from what is normal for that time of year. This makes sense; we might say that we had a "warm winter" even though it was still much colder than summer. What we mean is that it was warmer than a normal winter; in our parlance, we would say that it was a "positive anomaly". An unusually cold winter would be a "negative anomaly". For Pacific SST, an anomaly in the range of 1.5 to 3.5 degrees Centigrade would be considered characteristic of an El Nino; the warmer and more widespread the water, the stronger the El Nino.



Last modified: 3 March 1998
Contact: dpierce@ucsd.edu

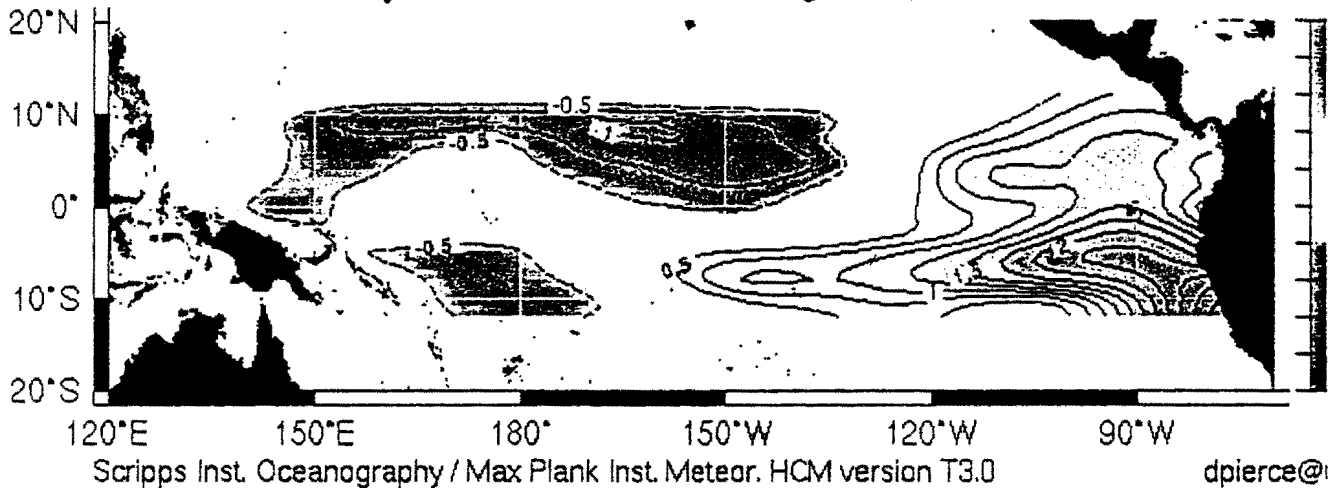
FIGURE 1

SCRIPPS
INSTITUTION OF
OCEANOGRAPHY



EXPERIMENTAL CLIMATE
PREDICTION CENTER

SST Anomaly Forecast for Jun/Jul/Aug 1998, Made 3 Mar 1998



Where in the world am I looking at?

You are looking at *Sea Surface Temperature anomalies* in degrees Centigrade, or "SST anomalies" for short. Yellows and purples mean warm, greens and blues mean cold. SST anomalies are how much temperatures depart from what is normal for that time of year. This makes sense; we might say that we had a "warm winter" even though it was still much colder than summer. What we mean is that it was warmer than a normal winter; in our parlance, we would say that it was a "positive anomaly". An unusually cold winter would be a "negative anomaly". For Pacific SST, an anomaly in the range of 1.5 to 3.5 degrees Centigrade would be considered characteristic of an El Nino; the warmer and more widespread the water, the stronger the El Nino.

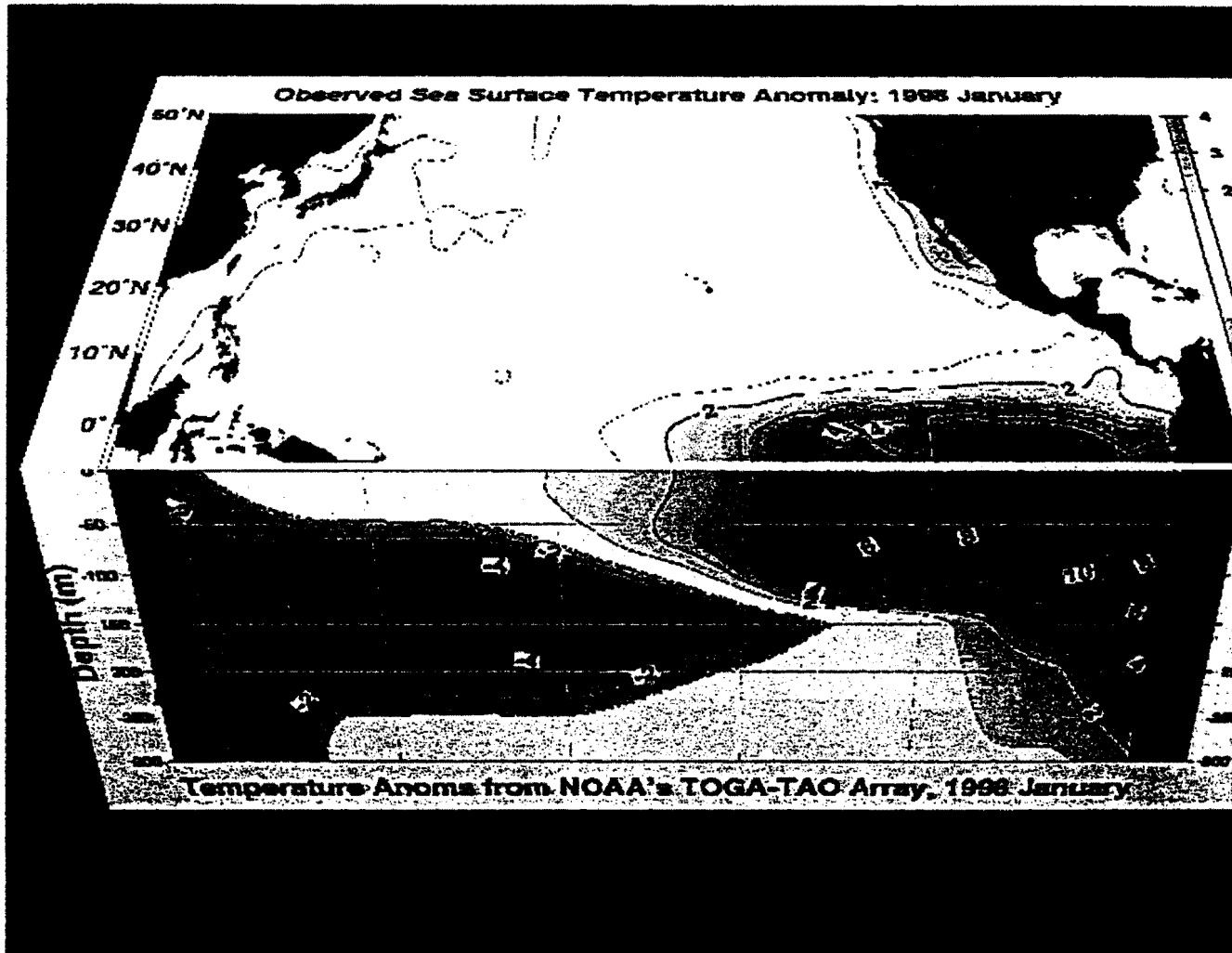


Last modified: 3 March 1998
Contact: dpierce@ucsd.edu

FIGURE 2



January 1998



In January of 1998, the El Niño is fully underway. Look, though, at how the unusually cold water at depth in the western Pacific has expanded towards the East. Our forecast model predicts that this anomaly will spread across to the coast of South America by the latter part of 1998, initiating the cold-water event known as "La Niña".

FIGURE 3



REC'D

APR 23 1988

CALIFORNIA
COASTAL COMMISSION
SAN DIEGO COAST DISTRICT

April 22nd 1988

Dear Commissioners:

I AM STILL OF THE OPINION
THAT RIP RAP SHOULD NOT RE-
MAINS IN PLACE ONCE SUMMER
ARRIVES. PLEASE DO NOT GIVE
EXTENSION UPON EXTENSIONS.

OUR SURF CONDITIONS ARE
RETURNING TO NORMAL AND
SAND IS STARTING TO MOVE
BACK IN.

HERE'S TO ANOTHER
BEAUTIFUL SUMMER IN SOLANA
BEACH!

Sincerely

Roy E. Wardlaw

Letter of Support

6-97-132-A2

MARTHA L. STROBEN
DONALD R. STROBEN

RECEIVED

APR 17 1998

April 15, 1998

CALIFORNIA
COASTAL COMMISSION
SAN DIEGO COAST DISTRICT

Mr. Rusty Arelas
Chairman
California Coastal Commission
1400 "N" Street, Suite 9
Sacramento, CA 95814

Dear Chairman Arelas,

We have owned a home at 301 Pacific Avenue in Solana Beach, California since 1988. The house sits at the top of the ocean bluff and was originally built in 1926. It was re-modeled several times over the years including by us in 1991-2. In recent years there has been minor sluffing of the top soil on the mid-bluff and some failure of ancient wooden retaining walls. Nothing too serious, however, and nothing to cause concern over the safety of people on the beach below our house, or the structural integrity of the house itself. This has all changed in a dramatic fashion during the last year. In the last 6 months our property has lost about 5-7 feet of lower bluff. That is, the vertical face at the bottom of the bluff (about 25-30 in height) has moved eastward approximately 5-7 feet.

Similar bluff loss has also occurred to most of the single family residence properties in Solana Beach this winter. In many instances, as in our case, we have had not one failure, but several. These failures result in very large (as much as 6' x 6') "hunks" of sandstone falling onto the beach. One cubic yard weighs about one ton. Large enough to kill someone!

Why is this happening now when the bluffs have been reasonably passive in recent years? Most observers, primarily the media, are blaming El Nino. Without a doubt the storms have battered and soaked the bluffs. This has weakened the vertical bluff structure, created severe coving and created a multitude of sea caves (we've had 3 in 6 months). The end result has been severe bluff failure. Another contributing factor, of possibly even more impact, has been the loss of at least 6 vertical feet of sand on the beaches. This means that the waves coming in are not "diffused" as they roll in and hit the bluffs with enormous force. For the last year or so all single family

6-97-132-A2
Objection Letter

April 15, 1998

Page 2

residences in Solana Beach shake during high tide and heavy wave action periods. When your pictures on the wall are tilted with the pounding from the wave action, you know something very serious is happening to the vertical face of the bluff at the beach level. Interestingly, a sea cave of 8 feet in depth and 13 feet wide, will disappear when a failure occurs as all the material above and around the cave simply gets sliced off. Fortunately, no one has been injured when a failure has occurred but you can see that such a tragedy is waiting to happen in Solana Beach.

We took advantage of the emergency permitting by the Coastal Commission and the City of Solana Beach to place rip rap (and fill a new sea cave) at the base of our bluff. As I am sure you know this was not done at a nominal cost (\$28,000), plus a "bond" (\$10,000) to insure the removal of the rip rap. We can assure you that no home owner who took advantage of this emergency permit could understand why the rip rap had to be removed. The only explanation forthcoming has been that the Coastal Commission is not in favor of rip rap as a permanent solution to bluff erosion. We might say here that nothing is a permanent solution to the vagaries of nature. We just have to try, however, to make the best of difficult situations as they occur.

Since the placement of the rip rap our home no longer shakes with heavy wave action. What should this mean to the Coastal Commission? One, the lower bluff is not getting battered and no failures have occurred when rip rap has been in place. Two, a procedure has been found (at least for Solana Beach) that works. Three, the legal and human risk of injury has been mitigated, if not eliminated (the rip rap extends out from the vertical face of bluff some 10-12 feet) and keeps people away from the high risk edge of the bluff.

We hear the complaints of some citizens about rip rap:

It's not natural it seems to us that rock is pretty natural. Rip rap can be colored to match the Torrey Sandstone.

It will hurt our boards little surfing is done offshore from the single family homes in Solana Beach. Most is done opposite Fletcher Cove and Tide Park, non-residential areas of the City. If a board is damaged in front of our rip rap we'd be happy to pay that cost!

People might get hurt climbing on it yes, and also crossing the street.

It encroaches on the beach yes, but a minimum amount of encroachment is a small sin for the sake of personal and home safety.

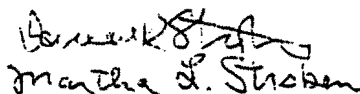
There is no proof that rip rap works oh no? Just ask about 15 bluff top residents in Solana Beach.

Rip rap has an "edge effect" Yes, but this can be moderated or eliminated by proper rock placement.

By not allowing rip rap to remain the only other possible solution to the severe bluff failure issue is to permit seawalls. This action will certainly involve considerable staff and petitioner time, legal and consulting expenses, public input and controversy and other constraints too numerous to recite.

We are currently processing a permit to extend the period of time for the rip rap to remain in place until July. Why force all of us to remove this effective barrier even then? Most, if not all experts, agree that rip rap is the most effective means of minimizing wave power and protecting the bluffs from continuing damage. As involved citizens with a strong vested interest we request a response in writing from the Coastal Commission regarding its opposition to rip rap as a "permanent solution" to the bluff failure issue in Solana (No) Beach.

Very truly yours,


Martha L. Stroben

Martha & Donald Stroben

DS/cs

cc: All Commissioners
All Non-Voting Members
All Alternate Commission Members
Staff - C. Damm and D. Lilly ✓
Staff - Solana Beach - S. Apple

April 9, 1998

DL
RECEIVED

APR 13 1998

CALIFORNIA
COASTAL COMMISSION
SAN DIEGO COAST DISTRICT

To: Diane Lilly
California Coastal Commission
San Diego Area
3111 Camino Del Rio North, Suite 200
San Diego CA 92108-1725
Re: Permit No. 6-97-106-A1

Dear Ms. Lilly,

I received a mailing from Peter Douglas, Executive Director, notifying me of the decision to approve request for the extension to May 15, 1998 to allow riprap on the beach at Solana Beach at Fletcher Cove Bluff. I support the Coastal Commission of the decision to extend the timeline based upon the evidence that El Nino storms are expected to continue several weeks beyond April 15, 1998.


I must object to this permit if certain conditions are not by the permittee. One of criterion listed for allowing the riprap to be installed is that there be minimal impact to public access and recreation. I must register my objection to the continual parking of large construction equipment in the Fletcher Cove Bluff parking lot. This heavy equipment has significant impact on beach users and residents of the bluff area. In addition, this equipment has the potential for environmental impact

Residents and users of the Fletcher cove are subjected to the unsightly presence of heavy machinery that is parked in the Fletcher Cove parking lot. In addition, there is construction debris and piping that has not been removed from the vicinity of the beach access ramp. This makes the beach access area look like a garbage dump and is an unsightly mess that impacts public access. This equipment and debris is not in use and should be removed until the day before rip-rap removal is scheduled to occur.

The permittee should be held responsible for not allowing any parking of construction equipment **anywhere** in the parking lot except during actual periods of construction. For the past year, heavy equipment has been maintained in the parking lot for a variety of construction projects. The visual impact affects beach access because parents are concerned about young children injuring themselves on the equipment. The potential for environmental impact exists from the leaking of petroleum products from the equipment. Visual inspection of where the equipment is parked will show evidence of leaking oils and/or fuels. This is evidenced by the stains in the parking lot surface where the equipment is parked. No booms or retention systems or efforts for preventing runoff from entering the beach area has been implemented. This potential environmental impact can be completely avoided by removing the equipment from the beach when not in use.

Thank you for the opportunity to assist the Coastal Commission in protecting California's coastline.

Sincerely,



Steven C. Gerken, Ph.D.

6-97-132-A2
Comment Letters
on non-material
amendment

RECEIVED

APR 6 1998

CALIFORNIA
COASTAL COMMISSION
SAN DIEGO COAST DISTRICT

April 6

Dear Ms Lilly:

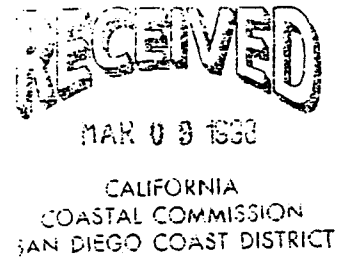
I HAVE RECEIVED THE
AMENDMENT TO RIP RAP
REMOVAL IN SOLANA BEACH
THANK YOU FOR KEEPING US
POSTED.

I HAVE NO OBJECTION
TO THAT EXTENSION ALTHOUGH
I HOPE EL NIÑO IS FINISHED.

ONE POINT TO BE CONSIDERED
THE SAND IS STARTING TO MOVE
BACK IN. WILL IT BE IMPOSS-
IBLE TO REMOVE THIS STUFF
IF IT IS HALF COVERED WITH
SAND?

Sincerely
Joy A. Wender

Gary L. Sirota
544 North Rios Avenue
Solana Beach, California 92075
(619) 755-3395/envesq@connectnet.com



March 5, 1998

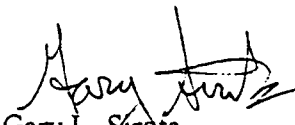
Honorable Members of the California Coastal Commission:

My name is Gary Sirota, and I am a resident of Solana Beach, California. I am writing you today to express my desire that you not allow the temporary placement of rip-rap for emergency purposes to become permanent on the beaches of Solana Beach.

I understand that many property owners have been granted emergency permits to place rip-rap on the beach. I also understand that the rip-rap must be removed by April 15, 1998 unless an extension has been granted by you. I speak against any such extension of the emergency permits, unless the applicants can demonstrate a true emergency. I find it difficult to agree that knowledge of shoreline retreat for about 30 years in North San Diego County somehow represents an emergency. Further, I am strongly against the granting of any applications for any shoreline armoring without full consideration under the Coastal Act Guidelines for such applications, and a public hearing in the local venue.

The beaches of Solana Beach, and the near shore surf zone are used by many, many walkers, and ocean enthusiasts including swimmers, surfers, divers, and paddle-boarders. Rip-rap, and many other shoreline armoring techniques create hazards and dangerous conditions that can not be fully mitigated. Moreover, strong evidence shows that rip-rap, seawalls, groins, and jetties interfere with the natural transport of coastal sediments and sand, and in many cases accelerate erosion. The Coastal Commission must adopt a long-term philosophy that seeks to emulate a return to the natural cycle of sediment transport from behind our dams, catchment basins, and lagoons. This will serve the dual purpose of protecting the property of bluff top homeowners while maintaining public use of the public resource at the lowest long term cost to society. Please adopt this proactive approach and not a short term reactive coastal armoring program that will not solve the problem. Thank you.

Sincerely,


Gary L. Sirota

Handwritten text, possibly a signature or date, located at the top left of the page.

