

## CALIFORNIA COASTAL COMMISSION

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## RECORD PACKET COPY

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Staff:	VAE - SF
Staff Report:	April 26, 2001
Hearing Date:	May 10, 2001

**APPEAL STAFF REPORT**  
**SUBSTANTIAL ISSUE DETERMINATION**  
**DE NOVO HEARING**

<b>APPLICATION FILE NO.:</b>	A-2-PAC-00-10 and 2-00-009
<b>LOCAL GOVERNMENT:</b>	City of Pacifica
<b>LOCAL DECISION:</b>	Approved
<b>LOCAL PERMIT NO.:</b>	CDP-130-98
<b>APPLICANT:</b>	City of Pacifica
<b>PROJECT LOCATION:</b>	528 to 572 Esplanade Drive, Pacifica, San Mateo County. APNs: 009-131-010, 009-131-030, 009-161-010 through 009-161-150 ( <b>Exhibits 1-3</b> )
<b>PROJECT DESCRIPTION:</b>	Construction of a 1,000-foot-long, 40-foot-wide, 20 to 60-foot-tall rock riprap revetment previously installed under emergency conditions on the face and toe of a coastal bluff.
<b>APPELLANTS:</b>	Coastal Commissioners Wan and Potter
<b>SUBSTANTIVE FILE DOCUMENTS:</b>	See Appendix A.
<b>STAFF RECOMMENDATION:</b>	Substantial Issue Exists; Approval of De Novo Permit with Conditions; Approval of Regular Permit with Conditions

**SUMMARY OF STAFF RECOMMENDATION****STAFF NOTE**

The project is located on the top and face of a coastal bluff and on tidally-influenced property in the City of Pacifica (City) and therefore falls under two coastal development permit jurisdictions. The portion of the project located on the blufftop and bluff face is within the City's coastal

development permit jurisdiction. For this portion of the development, the City's Local Coastal Program (LCP) is the standard of review. Because the project is located between the first public road and the sea and within 300 feet of the inland extent of the beach and the top of the seaward face of the coastal bluff, the standard of review for this portion of the development is also the public access policies of the Coastal Act. The portion of the project on tidally-influenced shoreline is within the Coastal Commission's (Commission's) original coastal development permit jurisdiction. Accordingly, the standard of review for the portion of the project in the Commission's original permit jurisdiction is the policies of the Coastal Act. There are separate motions for the portion of the project in the Commission's appeal jurisdiction and the Commission's retained permit jurisdiction. The Commission must vote separately on each item.

## **SUBSTANTIAL ISSUE**

The staff recommends that the Commission determine that the appeal raises a substantial issue with the consistency of the local government's action with the certified Local Coastal Program (LCP) and the public access policies of the Coastal Act, and that the Commission hold a de novo hearing.

In March, 1998, the City approved an emergency coastal development permit for the construction of the portion of the revetment located within its jurisdiction. In March, 2000, the City approved a coastal development permit (CDP) to permanently authorize the work done under the City's emergency permit. The City's action included approval of the project as built, with no conditions. Part 1 of this report addresses the appeal of the City's permit approval.

The appellants contend that the project as approved by the City is inconsistent with the public access, visual resources, environmentally sensitive habitat areas, marine biological resources, geologic stability, shoreline erosion, and shoreline protection policies of the Local Coastal Program (LCP), and the public access policies of the Coastal Act.

The approved project, like all shoreline protection projects along the California coast, warrants careful review by the Commission. Although the City constructed the approved project under emergency conditions, the scale of the approved project and the potential impacts on coastal resources justify the Commission's need to thoroughly examine the City's action for consistency with the certified LCP and the public access policies of the Coastal Act. The approved project raises concerns of statewide significance, such as the potential loss of sandy beach and environmentally sensitive habitat area and impacts to public rights to access and use of the shoreline, which factor into the Commission's decision to find that a substantial issue exists with respect to the grounds on which the appeal has been filed. Furthermore, the City's approval of the revetment project can be viewed as setting a precedent for future interpretation of the City's LCP, considering the fact that bluffs front about half of the City's 6.3-mile coastline, and revetments and other shoreline protection devices cover a high percentage of the bluff-backed beaches.

The Commission staff analysis indicates that the appeal of the project as approved by the City raises significant questions regarding the approved project's consistency with the policies of the certified LCP as they pertain to the provision of public access, the protection of visual resources, the protection of environmentally sensitive habitat areas and marine biological resources, and the prevention of hazards and shoreline erosion. The analysis further indicates that the appeal raises a substantial issue of the approved project's consistency with the public access policies of the Coastal Act.

The motion to adopt the staff recommendation of substantial issue is found in Section 1.0 on Page 5.

**DE NOVO COASTAL PERMIT APPLICATION AND REGULAR CALENDAR PERMIT APPLICATION: APPROVAL WITH CONDITIONS**

In May, 1998, the Commission granted an emergency permit for the portion of the revetment in the Commission's permit jurisdiction. The emergency permit granted temporary authorization for the revetment, specifying that within 120 days of the date of the emergency permit, the City must apply to the Commission for a regular coastal development permit. In March, 2000, the City submitted a coastal development permit application to the Commission for the permanent authorization of the portion of the revetment in the Commission's permit jurisdiction. Part 2 of this report contains the staff recommendations and the Commission's findings and declarations to support approval of both the portion of the revetment in the Commission's permit jurisdiction and the portion of the revetment in the City's jurisdiction that was appealed to the Commission.

The staff recommends that the Commission approve the coastal development permits for the portions of the revetment located in both the City's permit jurisdiction and the Commission's permit jurisdiction, with the conditions specified in Part 2, Sections 3.3 and 3.4 below.

**Special Condition 1** requires the City to frequently inspect and maintain the project regularly to minimize the risk of hazards and visual impacts associated with the project. Monitoring includes the inspection of the development using specific criteria to identify potential problems.

Maintenance of the revetment includes the removal or redeposit of dislodged rock as soon as possible after displacement occurs and the removal of debris and trash from the revetment.

**Special Condition 1** further requires the submission of a monitoring report at least once a year to evaluate the condition and performance of the revetment and recommend repair and maintenance.

Despite its hazardous nature, City has voluntarily chosen to carry out the proposed project.

**Special Condition 2** therefore requires the City to assume the risk of injury and damage from such hazards in connection with the permitted development, waive any claim of liability against the Commission for such losses, and indemnify and hold harmless the Commission if third parties bring an action against the Commission as a result of any hazards associated with the proposed project.

**Special Condition 3** requires the City to provide public access improvements on the public blufftop property to mitigate the loss public sandy beach caused by the placement of the development. Public access improvements on the blufftop must provide for pedestrians, bicyclists, and persons of limited mobility. **Special Condition 3** additionally requires the City to provide additional opportunities for public passive recreation in the event the City acquires additional property on the blufftop in the project area.

Because the project as constructed includes modifications not authorized by the Commission under the emergency permit, the project is an alleged violation. **Special Condition 4** requires the City to satisfy all prior to issuance requirements within 60 days of Commission action on this coastal development permit application. Failure to comply with **Special Condition 4** may result in the institution of enforcement action under the provisions of Chapter 9 of the Coastal Act.

As conditioned, the staff recommends that the Commission find the proposed development consistent with the policies of the City's certified LCP and the Coastal Act.

The motion to adopt the staff recommendation of approval with conditions for the portion of the development in the City's permit jurisdiction is found in Part 2, Section 3.1 on Page 21. The motion to adopt the staff recommendation of approval with conditions for the portion of the development in the Commission's permit jurisdiction is found in Part 2, Section 3.2 on Page 22.

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## **PART 1 - SUBSTANTIAL ISSUE**

### **1.0 STAFF RECOMMENDATION ON SUBSTANTIAL ISSUE**

The staff recommends that the Commission determine that a substantial issue exists with respect to the grounds on which the appeal has been filed. The proper motion is:

#### **MOTION**

*I move that the Commission determine that Appeal No. A-2-PAC-00-010 raises NO substantial issue with respect to the grounds on which the appeal has been filed under Section 30603 of the Coastal Act.*

#### **STAFF RECOMMENDATION**

Staff recommends a **NO** vote. Failure of this motion will result in a de novo hearing on the application, and adoption of the following resolution and findings. Passage of this motion will result in a finding of No Substantial Issue, and the local action will become final and effective. The motion passes only by an affirmative vote of the majority of the appointed Commissioners present.

#### **RESOLUTION TO FIND SUBSTANTIAL ISSUE**

The Commission hereby finds that Appeal No. A-2-PAC-00-010 presents a substantial issue with respect to the grounds on which the appeal has been filed under Section 30603 of the Coastal Act regarding consistency of the local action with the certified Local Coastal Program and/or the public access policies of the Coastal Act.

### **2.0 FINDINGS AND DECLARATIONS**

The Commission hereby finds and declares:

#### **2.1 Local Government Action**

On March 20, 2000, the City of Pacifica approved Coastal Development Permit CDP-130-98 to permanently authorize a rock revetment installed pursuant to an emergency permit approved by the City on March 9, 1998. The project was approved as built with no conditions. The City's 10-day local appeal period ended on March 30, 2000. No local appeals were filed.

## **2.2 Filing of Appeal**

The Commission received the Notice of Final Local Action from the City of Pacifica on March 22, 2000, and the Commission's appeal period began on March 23, 2000, the first working day following the date that the Commission received the Notice of Final Local Action. In accordance with Section 13110 of the Commission's regulations, the 10-working-day appeal period ran from March 23 to April 6, 2000. On April 5, 2000, within the 10-working day Commission appeal period, the appellants (Commissioners Wan and Potter) filed an appeal. On April 6, 2000, the Commission sent notice of the appeal to the City of Pacifica. Pursuant to Section 30261 of the Coastal Act, the appeal hearing must be set within 49 days from the date that the appeal of a locally issued coastal development permit is filed. The City waived its right to a hearing within 49 days of the filing of the appeal on May 10, 2000. The original appeal hearing date of May 12, 2000, was postponed to allow City staff to respond to the issues raised in the April 20, 2000 Commission staff report.

In accordance with Section 13112 of the Commission's regulations, the City must provide to the Executive Director of the Commission a copy of the file containing all relevant documents and materials regarding the subject permit. On April 6, 2000, Commission staff requested all relevant documents and materials regarding the subject permit from the City. On April 12, 2000, the Commission received a letter from the City confirming that all of the documents which make up the local record, with the exception of the Pacifica Planning Commission's March 20, 2000 meeting minutes enclosed with the letter, had previously been furnished to the Coastal Commission in conjunction with CDP Application No. 2-00-009, mailed on March 22, 2000 for the portion of the project within the Coastal Commission's original permit jurisdiction<sup>1</sup>. The City has since submitted additional information in response to requests for clarification by Commission staff.

## **2.3 Appellants' Contentions**

The Commission received appeals by Commissioners Sara Wan and Dave Potter on April 5, 2000. The appellants assert that the project as approved by the City raises a significant question of conformance with the policies of the City's certified LCP concerning public access, visual resources, environmentally sensitive habitat areas, marine biological resources, geologic stability, hazards, and shoreline protection, and with the policies of the Coastal Act concerning public access. **Exhibit 4** contains the full text of the appellants' contentions. Specifically, substantial issues of consistency have been raised with regards to the City's LCP Land Use Plan (LUP) Policies 2, 11, 12, 16, 18, 24, and 26, and Coastal Act Policies 30210 and 30211. The relevant LCP and Coastal Act policies are listed in their entirety in Appendix B.

## **2.4 Appeal Process**

After certification of local coastal programs, the Coastal Act provides for limited appeals to the Coastal Commission of certain local government actions on coastal development permits, pursuant to Coastal Act Section 30603.

Coastal Act Section 30603 provides, in applicable part, that an action taken by a local government on a coastal development permit application may be appealed to the Coastal

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<sup>1</sup> Because the lower portion of the revetment is located in the Commission's original permit jurisdiction, the City submitted CDP Application No. 2-00-009 to the Commission to authorize the lower portion of the revetment.

Commission for certain kinds of developments, including the approval of developments located within certain geographic appeal areas, such as those located between the sea and the first public road paralleling the sea, or within 300 feet of the mean high tide line or inland extent of any beach or top of the seaward face of a coastal bluff; or in a sensitive coastal resource area or those located within 100 feet of any wetland, estuary, or stream. Furthermore, developments approved by coastal counties may be appealed if they are not designated the "principal permitted use" under the certified LCP. Finally, developments that constitute a major public works or a major energy facility may be appealed, whether they are approved or denied by the local government.

The Esplanade revetment project is located between the sea and Esplanade Drive, the first public road paralleling the sea, and within 300 feet of the mean high tide line and the top of the seaward face of a coastal bluff, and thus meets the Commission's appeal criteria pursuant to Section 30603 of the Coastal Act.

Section 30603 of the Coastal Act limits the grounds for an appeal of a project located between the sea and the first public road paralleling the sea to an allegation that the development does not conform to the standards set forth in the certified LCP or the public access policies set forth in the Coastal Act. In accordance with Section 30603 of the Coastal Act, the appeal of the development raises issues with the project's consistency with the certified LCP and the public access policies of the Coastal Act.

Section 30625(b) of the Coastal Act requires the Commission to hear an appeal unless the Commission determines that no substantial issue is raised by the appeal. If the Commission chooses not to hear an appeal, appellants nevertheless may obtain judicial review of the local government's coastal permit decision by filing petition for a writ of mandate pursuant to Code of Civil Procedure, Section 1094.5.

The term *substantial issue* is not defined in the Coastal Act or its implementing regulations. Section 13115(b) of the Commission's regulations simply indicate that the Commission will hear an appeal unless it "finds that the appeal raises no significant question". In previous decisions on appeals, the Commission has been guided by the following factors:

1. The degree of factual and legal support for the local government's decision that the development is consistent or inconsistent with the certified LCP and with the public access policies of the Coastal Act;
2. The extent and scope of the development as approved or denied by the local government;
3. The significance of the coastal resources affected by the decision;
4. The precedential value of the local government's decision for future interpretation of its LCP; and
5. Whether the appeal raises only local issues, or those of regional or statewide significance.

If the Commission decides to hear arguments and vote on the substantial issue question, proponents and opponents will have three minutes per side to address whether the appeal raises a substantial issue. It takes a majority of the Commissioners present to find that no substantial issue is raised. Unless it is determined that the project raises no substantial issue, the Commission will conduct a full de novo public hearing on the merits of the project. If the Commission conducts a de novo hearing on the appeal, the applicable test under Coastal Act Section 30604 would be whether the development located in the City's permit jurisdiction is in

conformance with the certified Local Coastal Program and with the public access policies of the Coastal Act.

The only persons eligible to testify before the Commission on the substantial issue question are the applicant, persons who made their views known before the local government (or their representatives), and the local government. Testimony from other persons regarding the substantial issue question must be submitted to the Commission or the Executive Director in writing.

## **2.5 Project Location**

The project is located at the face and base of a 60 to 70-foot tall coastal bluff at 528 to 572 Esplanade Drive in the West Edgemar/Pacific Manor neighborhood of the City of Pacifica in San Mateo County (**Exhibits 1 and 2**). The corresponding Assessor Parcel Numbers are 009-131-010, 009-131-030, and 009-161-010 through 009-161-150 (**Exhibit 3**).

The revetment is located both within the City of Pacifica's permit jurisdiction and the Coastal Commission's original permit jurisdiction. The revetment is partially on the bluff face and partially on a public beach at the toe of the bluff.

The land use designation for the property on the beach (APNs 009-131-010 and 009-161-150) is Open Space. The Land Use Plan designates the blufftop and the bluff face behind the residential and formerly residential property (APNs 009-161-010 through -0140) as Low Density Residential. The blufftop and bluff face property (009-131-030) north of the residential property has a Medium Density Residential land use designation. Zoning for the blufftop property is Single-family Residential (R-1), the northernmost blufftop property is Multiple-Family Residential (R-3.1), and property on the beach is Commercial Recreation (C-R). All of the properties are additionally zoned as Coastal Zone Combining District (CZ). The property is surrounded by existing single-family residential development to the east, vacant property zoned multi-family residential to the north, a recreational vehicle park to the south, and public beach and the Pacific Ocean to the west.

## **2.6 Background**

The project site and vicinity are subject to bluff erosion by storm waves. Since the mid-1960s, riprap has been placed at the base of the bluffs in the region to protect blufftop property from periodic but generally minor wave erosion (Griggs and Savoy 1985). About a mile south of the project area, a rock revetment protecting a mobile home park experienced damage from storm waves from 1970 to 1982. In January 1983, large storm waves eroded the bluff at the same mobile home park 100 feet. In 1998, the Executive Director issued an emergency coastal development permit to the City for the placement of approximately 400 tons of two- to eight-ton rock at Rockaway Beach, about two miles south of the project site, for the construction of an approximately 100 linear foot extension of an existing riprap seawall and the replenishment of lost riprap.

City and private property owners have undertaken several shoreline protection projects north of the project area. In 1980, the City installed rock riprap next to a privately-maintained public access stairway to protect a City drainage outfall at Esplanade Drive and Monterey Road, about a quarter mile north of the project site (City of Pacifica 2001). In 1998 and 1999, the property owner of 360 Esplanade Drive constructed an approximately 85-foot-long riprap revetment to



protect an existing apartment building and drainage facilities. The property owner of 380 Esplanade Drive, immediately south of 360 Esplanade, also constructed a riprap revetment in 1998 and installed a 48" storm drain to the beach. These areas of existing or historical shoreline protection around the project site are depicted in **Exhibit 5**.

The project site itself has had rock revetments in place documented as early as March, 1971. After storms in 1982 and 1983 eroded 33 feet of the bluff in the southern portion of the project area, the owners of private property on the 500 block of Esplanade Drive on the top of the bluff created an assessment district in order to construct a 1,650-foot-long revetment with 28,000 tons of rock on the face and base of the bluff in 1984 to prevent erosion and protect existing residences. In 1983, Pacifica's City Council also made an effort to plan for integrated shoreline protection by passing a resolution endorsing a master plan for seawall construction for the area south of Manor Drive (the site of the approved project) to the southern end of Shoreview Avenue, a distance of about a half mile. In 1997, the Executive Director issued Emergency Permit 1-97-84-G to the owners of private property at 528, 532, 536, and 540 Esplanade Drive to construct a 150-foot-long, 12-foot-high, and 1-foot-wide reinforced concrete seawall/bluff retaining wall with a 6-foot-deep foundation at the base of an eroding 60-foot-high coastal bluff to protect four single-family residences. The owner of the residence at 544 Esplanade, immediately south of the aforementioned project, received Emergency Permit 1-98-003-G for the construction of a 50-foot-long extension of the shoreline protection contemplated under Emergency Permit 1-97-84-G. The property owners constructed the foundation and keyway and were in the process of applying for a regular coastal development permit (1-97-065) for a 20-foot-high, 250-foot-long cribblock bluff retaining wall at the time the 1998 storms began.

On February 2, 1998, the State experienced a series of heavy storms and flooding. On February 4, 1998, Governor Wilson declared a state of emergency for the State of California, and on February 9, 1998, President Clinton declared the State of California a major disaster.

The 1998 storms caused 40 to 60 feet of bluff erosion at the project site and left remnants of the destroyed rock revetment scattered across the public beach. In addition to storm wave action, the City cites extreme seawater levels and subsurface groundwater seepage as causes of erosion to the coastal bluffs at the project site. Surface flow from the blufftop may have contributed to bluff erosion as well. The bluff retreat damaged several of the blufftop residences on Esplanade Drive. As a result, during February and March, 1998, the City Building Official determined that ten residences on the seaward side of Esplanade Drive were unsafe to occupy. The City, with Federal Emergency Management Agency (FEMA) funds, purchased the ten condemned residences. On May 6, 1998, the City demolished seven of the ten condemned residences. The remaining three condemned residences were removed a year and a half later, on October 18, 1999. Two residences, 528 and 532 Esplanade Drive, were never condemned and are still privately-owned and occupied. In addition to these two properties, the undeveloped lots at 564 and 568 Esplanade Drive remain in private ownership. The City owns the other eight lots on the seaward side of Esplanade Drive (536, 540, 544, 548, 552, 556, 560, and 572 Esplanade Drive). The City is considering a passive park or similar public open space, including a bicycle lane and/or trail, requiring little or no maintenance as a future use of the blufftop property.

On March 9, 1998, the City approved an emergency permit for the construction of the revetment in the City's coastal permit jurisdiction. After the Commission staff received information requested from the City concerning the emergency project, on May 26, 1998, the Executive Director granted a separate emergency permit for the portion of the same revetment located

seaward of the mean high tide line, within the Commission's original permit jurisdiction (Emergency Permit 1-98-048-G). The purpose of the revetment was to protect Esplanade Drive, utilities, and several remaining homes. Construction of the development began in June 1998 and was completed in October 1998. The City determined that the project is statutorily and categorically exempt from review under the California Environmental Quality Act (CEQA), under Section 15269 (Emergency Projects) and under Section 15302 (Replacement or Reconstruction).

On March 20, 2000, the City approved regular Coastal Development Permit 130-98 for the portion of the project within the City's jurisdiction. This approval permanently authorized the portion of the revetment within the City's jurisdiction constructed under the City's 1998 emergency permit. The City's approval is currently before the Commission on appeal. On March 22, 2000, to fulfill the conditions of the Commission's emergency permit, the City submitted an application to the Coastal Commission to permanently authorize the portion of the revetment in the Commission's jurisdiction.

## **2.7 Project Description**

The City constructed the approved revetment under state- and federal-declared emergency conditions. The Federal Emergency Management Agency (FEMA) funded the shoreline protection project to repair and stabilize the bluff damaged by severe wave action and subsurface water seepage during the 1998 El Niño storms. The approved revetment replaced the previous revetment constructed in 1983 that deteriorated over time by storm waves.

The City constructed the approved revetment to protect privately-owned residences, public property, public utilities, and a public road on the top of the bluff. Two privately-owned residences at 528 and 532 Esplanade Drive are located approximately 40 feet from the edge of the bluff. As described in Section 2.6 above, eight of ten vacant lots on the seaward side of Esplanade Drive (536 to 560 Esplanade Drive, and 572 Esplanade Drive) were purchased by the City and are in public ownership. Overhead electricity and telephone cables are located about 50 feet from the bluff edge on the western side of Esplanade Drive. The City is currently considering relocating the overhead utilities underground on Esplanade Drive. The six-inch water line and eight-inch sewer pipe are located less than ten feet underground and about 55 and 60 feet respectively from the existing face of the bluff. The sewer line serves about 42 lots. Both pipes are located within the 60-foot Esplanade Drive right-of-way. Sixty-six properties convey water to a storm drain pipe under the street. The City believes that the underground utilities were installed during the construction of the original subdivision in the early 1950s.

Esplanade Drive, a public road, has a 60-foot-wide right-of-way. After the construction of the project, the City reconfigured Esplanade Drive as a one-way northbound street. The one-way configuration of Esplanade Drive ranges from 40 to 80 feet from the bluff edge. The City installed a concrete "k-rail" barrier and a five-foot-tall chain-link fence in the former southbound lane, south of the two remaining houses at 528 and 532 Esplanade Drive, to prevent vehicles and the public from entering the blufftop area.

The revetment as approved by the City consists of approximately 23,000 tons of 2- to 8-ton rock, including remnants from the former revetment, placed on geotextile filter fabric (**Exhibit 6**). The large voids between the rocks are filled with stones, ranging in weight from 100 pounds to five tons and averaging about one to two tons, and sand. The revetment as approved by the City

is approximately 1,000 feet in length, 40 feet in width, and varies from 20 to 60 feet in height at an approximate 2:1 vertical slope. The revetment was initially designed to withstand the maximum anticipated wave action associated with a 100-year storm occurrence. The City subsequently constructed the revetment to withstand less than 100-year oceanographic conditions.

## **2.8 Allegations That Raise a Substantial Issue**

The approved project was constructed under emergency conditions that necessitated immediate shoreline protection. However, in approving the final project, the City is required to demonstrate the project's consistency with the certified LCP and with the public access policies of the Coastal Act. Given the size of the revetment, the potential for the significant impacts to coastal resources and public access, and the precedential value that the City's approval of the development has on future interpretations of the certified LCP, the Commission finds that a careful investigation of the approved project is essential to ensure consistency with the policies of the LCP and the public access policies of the Coastal Act.

The following are the appellants' contentions which raise a substantial issue regarding the approved project's conformance with the City's certified LCP or with the public access and recreation policies of the Coastal Act.

### **2.8.1 Shoreline Protection and Alternatives Analysis**

#### **Contention**

The appellants contend that the City's action is inconsistent with LCP Policy 16 because the City did not demonstrate that the revetment is necessary to protect existing structures and is designed to eliminate or mitigate adverse impacts to the local sand supply.

#### **LCP Policy**

LCP Land Use Plan Policy 16 (Coastal Act Section 30235) in relevant part states:

*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.*

#### **Analysis**

The purpose of the approved revetment is to protect Esplanade Drive (a public road), the two remaining residences, City-owned public property on the seaward side of the 500-block of Esplanade Drive, and infrastructure beneath the road from destruction caused by bluff retreat. The findings for the City's approval state that, "The bluff repair is needed to retard further erosion and loss of property." However, the local record does not demonstrate that existing structures are in danger of erosion, analyze potential alternatives to the project to support a finding that the revetment is required to protect the structures, or demonstrate that the approved revetment is designed to avoid or minimize impacts on local shoreline sand supply.

In order for the City to find the approved project consistent with LCP Policy 16, the local record must demonstrate that:

1. structures exist that are in danger from bluff retreat,

2. the placement of a shoreline protection structure such as a rock revetment (as opposed to other measures like subsurface drainage improvements, landscaping, managed retreat, or beach nourishment) is required to protect the existing structure, and
3. the revetment is designed to eliminate or mitigate adverse impacts on local shoreline sand supply.

In response to the first requirement listed above, residences, public utilities, and a public road are structures located on the top of the bluff that are threatened by bluff erosion and retreat. The two residences on the project site are about 40 feet from the edge of the bluff. Above- and below-ground utilities are located between 50 and 60 feet from the bluff, and the current one-way configuration of Esplanade Drive ranges from 40 to 80 feet from the bluff edge. Given that the bluff in this location retreated almost 50 feet in February 1998 alone, existing structures are in danger due to potential bluff retreat.

However, to meet the second requirement, the City must find that the revetment is necessary to protect these existing structures. The local record does not include an analysis of potential alternatives such as managed retreat of the bluff to justify the construction of the approved revetment. Without such analysis, there is a significant question of whether it is necessary to incur the substantial impacts of armoring the shoreline at this location. Although the Commission recognizes that emergency conditions at the project site required immediate remedial action, the Commission also finds that to permanently authorize the constructed project, it is necessary to complete an alternatives analysis in order to determine if the constructed revetment or some other alternative is required to protect the existing structures. The appeal therefore raises a significant question concerning the approved project's consistency with the certified LCP policies for shoreline protection. Consequently, the Commission finds that the appeal raises a substantial issue of the approved project's conformance with LCP Policy 16 because the City did not thoroughly examine potential alternatives to shoreline armoring.

The third requirement of LCP Policy 16 calls for the approved project to be designed to eliminate or mitigate adverse impacts to local shoreline sand supply. The March 20, 2000 City staff report for the project reiterates this requirement by noting that any new protective devices must be evaluated for potential impacts and necessary mitigation to alteration of natural migration and deposition of shoreline sand.

One reason that shoreline protection often results in the significant reduction of sandy beach area is that "fixing" the back of the beach (by placing a permanent shoreline protection structure) inhibits the creation of sand normally produced by bluff erosion to resupply the beach. This is especially important when considering the availability of sandy beach for use by the public and/or plant and animal species. Thus, while the approved project's impacts on local shoreline sand supply is of greatest relevance to the project area and its immediate vicinity, the need to assess such impacts is significant to the entire Pacifica region in that the loss of sand supply in the project area may increase the use of sandy beach in other parts of the City or elsewhere. Given the increasing number of emergency permits and coastal development permit applications for such structures in Pacifica, the City's approval of the project may influence future City actions on shoreline protection projects. It is therefore extremely important that the City's determination of the approved project's consistency with the shoreline protection policies of the certified LCP is supported by substantial evidence in the record for the decision.

There is no evidence that the City evaluated the effects of the approved development to the local shoreline sand supply. Because the local record does not demonstrate that the approved project is designed to eliminate or mitigate adverse impacts to local shoreline sand supply as required by LCP Policy 16, the Commission finds that the appeal raises a substantial issue of the approved project's conformance with the LCP policy for the protection of local shoreline sand supply.

### **Conclusion**

LCP Policy 16 requires the consideration and assessment of potential impacts, alternatives, and mitigation measures in any action involving shoreline protection projects in the City. As discussed above, there are significant questions as to whether feasible alternatives to shoreline protection exist and whether the approved shoreline protection was designed to eliminate or mitigate adverse impacts to local shoreline sand supply. The loss of sandy beach is an issue of significant statewide concern, and warrants review by the Commission. Therefore, the Commission finds that the appeal raises a substantial issue regarding the approved project's conformance with the LCP provisions for shoreline protection.

## **2.8.2 Hazards, Geologic Stability, and Shoreline Erosion**

### **Contention**

The appellants contend that the project as approved by the City is inconsistent with the LCP policy requiring new development to minimize risks to life and property in geologically hazardous areas and to prohibit new development that would contribute to erosion and geologic instability. Specifically, the appellants maintain that the local record does not include an assessment of the approved project's potential erosion impact on the adjacent bluffs and does not assess whether the revetment was properly engineered to protect against further bluff failure.

### **LCP Policy**

LCP Land Use Plan Policy 26 (Coastal Act Section 30253) states in relevant 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.*

### **Analysis**

The approved project is located in an area of documented geologic activity. Structures to protect blufftop development from bluff retreat such as the approved revetment have been constructed and reconstructed ever since subdivisions were established along the Pacifica coast. Like other revetments constructed on the project site in the past, the approved revetment is intended to protect life and property threatened by bluff erosion.

Protecting life and property from hazards associated with bluff erosion is an issue of significant local and statewide concern, and warrants careful consideration under the LCP. Shoreline protection devices such as the approved revetment that are meant to reduce risks to life and property and to address geologic instability may actually cause substantial erosion and scour of the sandy beach, resulting in a significantly altered beach profile and loss of beach (California

Coastal Commission 1999). Shoreline armoring frequently leads to accelerated erosion rates at adjacent unprotected areas of the bluff. The City did not assess whether the approved project will create or contribute to bluff erosion on the project site or in the areas adjacent to the revetment. The lack of such analysis is significant in view of the fact that by April, 2000, only one and a half years after the completion of project construction, rills and gullies had already formed at the site, and the base of the bluffs behind the revetment showed evidence of scouring. The bluffs and beach adjacent to the approved revetment may also be experiencing erosion accelerated by the placement of the rock revetment.

In addition, to ensure that the approved project is stable and does not significantly create or contribute to erosion of the site or surrounding areas, it is necessary to maintain the revetment at the level of protection it was constructed. Frequent maintenance would greatly reduce the potential for decreased stability of the approved project caused by dislodged revetment rocks or trapped debris. Additionally, maintenance allows erosion or other problems on the project site or on the adjacent bluffs to be detected early and addressed before significant erosion and risks to life and property occur. However, the City's action does not provide for maintenance of the revetment. Furthermore, the road on the project site is in disrepair and must be restored to provide vehicular access down the bluff face for maintenance of the revetment as originally intended. As a consequence, the lack of a comprehensive maintenance plan and a maintenance road raises significant questions as to whether the approved project minimizes risks to life and property in an area of high geologic hazard and assures structural integrity and neither creates nor contributes significantly to erosion, geologic instability, or destruction of the site or surrounding area. Therefore, the Commission finds that the appeal raises a substantial issue in regard to the approved project's consistency with the LCP Policy 26 requiring the minimization of hazards and geologic instability.

### **Conclusion**

The City's action is not supported by evidence demonstrating the project's consistency with LCP Policy 26. Conformance with this policy carries significant local and statewide importance. Because the local record does not contain sufficient evidence to fully support the conclusion that the project was properly designed and constructed to prevent the significant creation or contribution to bluff erosion on or adjacent to the project site and to minimize the risk to life and property, the Commission finds that the appeal raises a substantial issue regarding the approved development's conformance with the policy of the certified LCP addressing hazards and shoreline erosion.

### **2.8.3 Public Access**

#### **Contention**

The appellants contend that the approved revetment is inconsistent with the public access policies of the certified LCP and the Coastal Act requiring the provision of maximum access and prohibiting development from interfering with public access to the sea and use of dry sand because the project may significantly interfere with public access along the shoreline.

#### **LCP and Coastal Act Policies**

Coastal Act Section 30210 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.*

LCP Land Use Plan Policy 1 states:

*Maximum access 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 property owners, and natural resource areas from overuse.*

LCP Land Use Plan Policy 2 / Coastal Act 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.*

### **Analysis**

The approved project is located along a stretch of City-owned sandy beach in Pacifica. During most of the year, most of the beach is wide and easily traversed, and the public may walk almost a mile north of the project site. Under favorable conditions at low tide, it is possible to walk on the beach as far south as the northern Sharp Park neighborhood, a distance about three-quarters of a mile. During high tides, the public beach is wet almost up to the revetment, and a rocky point often impairs lateral access to the south of the approved revetment. The area provides a popular beach spot for surfers, fisherpeople, and visitors staying at the recreational vehicle park on the blufftop immediately south of the project area. Tourists frequent the City-owned beach year-round (Devitt, pers. comm.).

The impacts to public access caused by shoreline armoring is an important issue throughout the State. Protecting the public's rights to access and use of the shoreline is one of the fundamental purposes of the LCP and the Coastal Act. Conformance with these policies requires careful consideration of the impacts of the approved development to public access and mitigation for any loss of access opportunities.

The City's findings for the approved project state, "...the project will have no affect [sic] on coastal access, public or private, existing or proposed". However, as approved, the revetment and fill buttress occupy 32,000 square feet of public beach that would otherwise be available for public use and lateral access along the shoreline. This direct loss of public land raises significant questions of consistency with LCP Policies 1 and 2 and Coastal Act Policies 30210 and 30211 requiring the provision of maximum access and prohibiting development from interfering with the public's right of access to the sea. Under winter beach or high tide conditions, the revetment may impede public access along the shoreline. The local record does not contain an analysis of the project's impacts to public access at the project site or the vicinity, and the City's action does not provide mitigation for the loss of public access.

Given the physical displacement of 32,000 square feet of public beach without a description of existing lateral and vertical public accessways in the project area and other relevant information to evaluate the project's consistency with LCP and Coastal Act public access policies, the conclusion that the approved project will not impact public access is not well-supported. Thus, the Commission finds that the appeal raises a substantial issue regarding the

approved project's conformance with the public access policies of the certified LCP and the Coastal Act.

### **Conclusion**

The City's action does not address the impacts of the approved project to public access. Therefore, the Commission finds that the appeal raises a substantial issue with the approved development's conformance with LCP Policies 1 and 2 and Coastal Act Policies 30210 and 30211.

## **2.8.4 Environmentally Sensitive Habitats**

### **Contention**

The appellants contend that the approved project is inconsistent with the LCP policies protecting environmentally sensitive habitat areas and marine biological resources because the local record does not contain an assessment of whether the project site may provide habitat for sensitive animal or plant species.

### **LCP Policies**

LCP Land Use Plan Policy 18 (Coastal Act Section 30240) states:

*Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of such habitat areas.*

Zoning Code Ordinance 9-4.4403 (Habitat Preservation) states in relevant part:

...

(b) *Required Survey. A habitat survey, prepared by a qualified biologist or botanist, may be required to determine the exact location of environmentally sensitive habitat areas and to recommend mitigation measures that minimize potential impacts to the habitat. This survey shall be submitted to and approved by the Director pursuant to Section 9-4.4304, Coastal Development Permit Procedures and Findings, for all new development that meets one (1) or more of the following criteria:*

- (1) The project is located within an environmentally sensitive habitat area as documented in the LCP Land Use Plan, or through the Director's on-site investigation and review of resource information; or*
- (2) The project site is or may be located within one hundred (100) feet of an environmentally sensitive habitat area and/or has the potential to negatively impact the long-term maintenance of the habitat.*

...

### **Analysis**

During March and April, 1998, prior to construction of the revetment, the City consulted with the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (DFG), the U.S. Army Corps of Engineers, the U.S. National Marine Fisheries Service, and the Gulf of the Farallones National Marine Sanctuary. USFWS staff stated that the project



site likely did not impact peregrine falcon, bald eagle, and red-legged frog, or other species listed in the Endangered Species Act and did not involve stream alteration. Therefore, no further consultation with USFWS was necessary. DFG staff stated that because the project did not alter streams, the project required no further involvement from DFG. The Army Corps of Engineers did not indicate that the project impacted wetland or other environmentally sensitive habitat areas or species. The Marine Fisheries Service staff stated that the agency's responsibility is to protect anadromous marine fish and shellfish and did not find the project to adversely impact these resources, and no further consultation was necessary. The project was determined to be outside the National Marine Sanctuary's jurisdiction. Thus, as of 1998, the agencies responsible for the environmental protection of sensitive habitat areas determined that the project did not impact the sensitive resources each agency is charged with protecting in a manner contrary to each agency's controlling authority.

The nature of the emergency did not allow a thorough assessment of biological resources prior to the construction of the approved project. However, in accordance with LCP Policy 18, the City's subsequent action on the regular CDP permanently authorizing the revetment must include a complete evaluation of whether the revetment adversely impacts environmentally sensitive habitat areas and must consider if project modifications or mitigation measures are necessary to address any impacts that are identified. Pursuant to Zoning Code Ordinance 9-4.4403(b), which implements the certified LUP habitat policies, such an evaluation, necessary to support any determination that the approved development is consistent with LCP Policy 18, must be prepared by a qualified biologist or botanist.

The sandy beach and coastal bluff regions from San Francisco to Half Moon Bay provide habitat for the Pacific coast population of western snowy plover (*Charadrius alexandrinus nivosus*), a threatened species under the federal Endangered Species Act. The National Park Service in the *Draft Snowy Plover Management Plan of 1998* has designated a portion of Ocean Beach in San Francisco as snowy plover management area. In the *Final Rule of the Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover* dated December 7, 1999, the Fish and Wildlife Service designated a segment of the Half Moon Bay State Beaches in Half Moon Bay as critical habitat for the western snowy plover. Roosting and foraging habitat exists for the plover on part of Pacifica State Beach, about three miles south of the approved project (Crabtree 2001). Although not commonly, plover nest on bluff-backed beaches (U.S. Fish and Wildlife Service 1999) such as that found at the approved project site. Wintering plover occur on urban and bluff-backed beaches. Because of the documented presence of the plover on sandy beach areas nearby, it is critical to evaluate whether the site of the approved project currently contains environmentally sensitive habitat for the western snowy plover.

In addition to western snowy plover, the approved project site may currently include habitat for bank swallow (*Riparia riparia*), a state-listed threatened species under the California Endangered Species Act. The bank swallow nests in burrows in freshly-eroded steep banks near water. Such nesting habitat exists five miles north of the project site at Fort Funston in San Francisco. There, the National Park Service has seasonally and permanently closed portions of the habitat area to protect nesting swallow in the seaside cliffs. The bluff at the site of the approved project may also contain habitat for the bank swallow.

The City's March 20, 2000 staff report states that any new shoreline protection device must be evaluated for potential impacts to coastal resources and necessary mitigation such as

protections for threatened areas. The report further states that the revetment and site conditions do not apply to or do not conflict with any protection of threatened areas. In the report, the City determined, "The proposal will not have significant adverse effects, either individually or cumulatively, on coastal resources." The City states in subsequent correspondence to the Commission staff that "the presence of endangered species or habitat is undocumented, unsubstantiated and highly improbable", noting that a collapsing bluff does not provide habitat for swallow, and that the absence of dune vegetation does not provide suitable habitat for snowy plover. The City states that neither stable cliff nor well-vegetated, isolated dune habitat have been known to exist on the project site in recent memory. However, a current assessment of the existing habitat and the project's potential impacts to such habitat by a qualified biologist to confirm these observations prior to the City's approval of the project was not prepared, contrary to Zoning Code Ordinance 9-4.4403(b).

The approved project may generate impacts to sensitive species. Shoreline protection may alter beach topography and sand transport and affect the ability of plover to nest or feed. The presence of heavy equipment on the sandy beach during the construction of the approved project may have disturbed the potential habitat of plover or other sensitive species. The noise generated by project construction may have also adversely impacted foraging, roosting, or nesting activities by species like the plover or swallow. In addition, the approved revetment may be occupying portions of beach or bluff face used by sensitive species. Lastly, the placement of a new rocky habitat may support rats, squirrels, and other animals that could prey on sensitive species.

The City did not assess whether the project site contains environmentally sensitive habitat areas before permanently authorizing the project. The Commission thus finds that the appeal raises a significant question regarding the approved project's conformance with LCP Policy 18.

### **Conclusion**

A large proportion of the Pacifica shoreline is already armored, and more shoreline armoring is likely to be proposed in the future. The Pacifica shoreline also provides habitat for sensitive species such as the western snowy plover. Such habitat may be significantly impacted by shoreline protection projects. Because of the proliferation of shoreline protection projects throughout the State, this is an issue of statewide significance. Thus, the protection of environmentally sensitive habitat areas is among the most important requirements of the City's LCP. The City's determination that the approved project is consistent with LCP Policy 18 is not supported by a thorough and current assessment of the site's biological resources. Because of the sensitive nature of the resources at risk, a more careful analysis of potential impacts is warranted. Therefore, the Commission finds that the appeal raises a substantial issue in regard to the approved development's conformance with LCP Policy 18.

## **2.8.5 Visual Resources**

### **Contention**

The appellants contend that the approved project is inconsistent with LCP policies protecting visual resources in the coastal zone because such a large-scale revetment is not visually compatible with the surrounding area and may have significantly altered the bluff face.

### **LCP Policies**

LCP Land Use Plan Policy 24 (Coastal Act Section 30251) states:

*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 public views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*

### **Analysis**

The City's March 20, 2000 staff report states that the approved project will not impact views along the coast and "will have limited, if any, visual consequences". However, the sheer magnitude of the project impacts the scenic quality of the bluffs as viewed from the public beach at the toe of the revetment. The approved project is a 1,000-foot long, 40-foot wide, 20 to 60-foot high rock revetment. The permanent placement of 23,000 tons of large rock and the construction of the fill buttress and maintenance access road will significantly change the appearance of the bluff and beach and are not compatible with the natural surroundings inconsistent with the requirements of LCP Policies 24 and 26. Such natural coastal landforms are some of the most scenic areas of the coast and should be protected as a resource of regional importance.

In addition to the visual impacts generated by the scale of the approved revetment, debris and trash that collect in the gaps of the rocks further degrade the scenic qualities of the shoreline. Storm events or deterioration over time may dislodge rocks from the revetment, spreading them across the beach. Erosion of the fill buttress and access road over time may further degrade the scenic view of the shoreline. Regular maintenance and upkeep is required to ensure that the approved project removes debris, removes and replace scattered rock, and repairs erosion of the fill buttress and access road. However, the City's action does not provide for such maintenance. As a result, exposed geotextile fabric and geogrid currently shows on the bluff face, and the revetment contains a large amount of debris (**Exhibit 7**).

### **Conclusion**

The large extent of development approved by the local government raises a significant question in regard to the project's conformance with the LCP policies pertaining to the protection of public visual resources. Because the approved revetment would permanently alter the appearance of the bluff face, the revetment is not compatible with the surrounding natural areas. While these impacts cannot be avoided due to the nature of the development, they can be minimized by appropriate maintenance. However, the City's action for the approval of the development does not provide for such maintenance. Therefore, the Commission finds that the appeal raises a substantial issue with respect to the project's conformance with the LCP provisions regarding the protection of visual resources.

## **2.9 Allegations That Do Not Raise a Substantial Issue**

The following is a contention of the appellants that does not raise a substantial issue regarding the project's conformance with the City's certified LCP or with the public access policies of the Coastal Act.

### **2.9.1 Marine Biological Resources**

#### ***Contention***

The appellants contend that the project as approved may adversely affect marine biological productivity, inconsistent with the LCP policies requiring the protection of marine resources.

#### ***LCP Policies***

LCP Land Use Plan Policy 11 (Coastal Act Section 30230) states:

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

LCP Land Use Plan Policy 12 (Coastal Act Section 30231) states:

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

#### ***Analysis***

Significant changes to the natural shoreline processes could affect intertidal habitats. However, the Commission's staff biologist observes that a sandy beach of varying width exists in front of the approved revetment during the year, and that intertidal habitats are not directly affected by the placement of the revetment. Furthermore, the natural seasonal variation in beach profile has a much greater effect on intertidal habitat at this location than the minor influence of the revetment.

#### ***Conclusion***

Because the placement of the approved revetment on the beach does not interfere with the productivity of marine resources, the Commission finds that the appeal does not raise a substantial issue regarding the approved project's conformance with the policies of the certified LCP protecting marine biological productivity.

## **PART 2 – DE NOVO REVIEW OF PROJECT IN COMMISSION'S APPEAL JURISDICTION AND PERMIT OF PROJECT IN COMMISSION'S ORIGINAL PERMIT JURISDICTION**

### **STAFF NOTE**

If the Commission finds that the appeal addressed in Part 1 above raises a substantial issue with respect to the conformance of the development as approved by the City of Pacifica with the policies of the certified LCP and the public access policies of the Coastal Act, the Commission must conduct a de novo review for the portion of the project located in the City's permit jurisdiction and as proposed by the applicant. The Commission must also review a coastal development permit application for the portion of the same project located in the Commission's original permit jurisdiction. The following staff recommendation and findings (Part 2 of this staff report) are for both the de novo review of the portion of the project located in the City's permit jurisdiction and the permit application for the portion of the project located in the Commission's original permit jurisdiction. There are separate motions for the portion of the project in the Commission's appeal jurisdiction and the Commission's retained permit jurisdiction. The Commission must vote separately on each item. Because the de novo review and the original Commission jurisdiction permit have two different standards of review (see Section 4.1 below), the findings in Section 4.0 below incorporate both standards of review.

Although the project spans two jurisdictions and must be reviewed as two separate coastal development permit applications, the development functions as a single inseverable structure. Since review of the impacts of the portion of the project located in one jurisdiction without the analysis of the impacts of the project in the other jurisdiction would be impractical, the entire project is recommended for Commission action at one time.

### **3.0 STAFF RECOMMENDATIONS**

#### **3.1 Coastal Development Permit No. A-2-PAC-00-010**

The staff recommends that the Commission approve Coastal Development Permit No. A-2-PAC-00-010 subject to the conditions in Sections 3.3 and 3.4 below.

#### ***Motion:***

*I move that the Commission approve Coastal Development Permit No. A-2-PAC-00-010 subject to conditions 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 the certified LCP and the public access and recreation policies of Chapter 3 of the Coastal Act. 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.

### **3.2 Coastal Development Permit No. 2-00-009**

The staff recommends that the Commission approve Coastal Development Permit No. 2-00-009 subject to the conditions in Sections 3.3 and 3.4 below.

***Motion:***

*I move that the Commission approve Coastal Development Permit No. 2-00-009 subject to conditions 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. 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.

### **3.3 Standard Conditions**

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

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

### 3.4 Special Conditions

1. Monitoring and Maintenance.

A. By May 1 of every year for the life of the structure and as required under the provision of Special Condition 1(B) below, the permittee shall submit a monitoring report that has been prepared by a licensed geologist, or civil or geotechnical engineer.

1. Each monitoring report shall contain the following:
  - a. An evaluation of the condition and performance of the approved shoreline protection device, including an assessment of whether any weathering or damage has occurred that could adversely impact future performance of the device,
  - b. An analysis of erosion trends, annual retreat, or rate of retreat of the bluff based upon measurements and in conformance with the approved monitoring plan,
  - c. A description of any migration or movement of rock that has occurred on the site, and
  - d. Recommendations for repair, maintenance, modifications, or other work to the device, including methods and materials to be used.
2. If a monitoring report contains recommendations for repair, maintenance, or other work, the permittee shall contact the Coastal Commission North Central Coast District Office to determine whether such work requires a coastal development permit. Any recommendations that involve development as defined in Section 30106 of the Coastal Act shall require a Commission-approved amendment to this CDP.
3. If a monitoring report concludes that the shoreline protection structure or any portion of the aforementioned structure is unsafe for use, the permittee shall, within 90 days of submitting the report, apply for an amendment to this coastal development permit to remedy the hazard, which may include removal of the threatened portion of the shoreline protection device.

B. The permittee shall examine the revetment at least once before the beginning of the rainy season, at least once six months following the beginning of the rainy season, and immediately after all major storms as conditions permit. The permittee shall look for the following signs of potential revetment failure or impacts to coastal resources:

1. Excessive scour in front of the revetment following significant storm events,
2. Dislodged rocks or stones seaward of the revetment,
3. Gaps or exposed underlayer material,
4. Slumping or rotation of revetment, and
5. Settlement of rock into underlying sand.

If the permittee finds that any condition listed above exists at the project site, the permittee shall hire a licensed geologist, or civil or geotechnical engineer to prepare a monitoring report as described in Special Condition 1(A) above.

- C. The permittee shall remove, redeposit, or reposition any rock or material that becomes dislodged or displaced from the approved shoreline protection as soon as possible after such displacement occurs. The permittee shall contact the Coastal Commission North Central Coast District Office immediately to determine whether such activities require a coastal development permit.
  - D. The permittee shall remove any materials not explicitly authorized pursuant to this coastal development permit, including but not limited to debris, trash, or other materials from the shoreline protection device and shall take all necessary measures to discourage the placement of such material on the project site.
  - E. The permittee shall inspect the 6-inch perforated pipe placed under the fill buttress at the base of the bluff face at least once a year and maintain the proper function of the pipe by cleaning the pipe with a snake and/or water pressure, if appropriate.
  - F. The permittee shall employ Best Management Practices (BMPs) to prevent erosion and geologic instability of the fill buttress. The BMPs shall include but are not limited to:
    - 1. Installation of erosion control fabric,
    - 2. Vegetation of fill buttress on blufftop using native plant species adapted to the project site conditions,
    - 3. Installation of signs and/or barriers to prohibit access onto the fill buttress,
    - 4. Prohibition of any concentrated flows of surface water from natural drainageways, graded swales, downspouts, or other sources, and
    - 5. Stabilization of the face of the buttress using bioengineering techniques when feasible.
  - G.
    - 1. The permittee shall maintain the access road constructed on the project site in a condition that:
      - a. Allows access for vehicles and heavy equipment from Esplanade Drive to the base of the bluff for maintenance purposes,
      - b. Does not contribute to erosion of the bluff, and
      - c. Does not exhibit signs of erosion.
    - 2. In no case shall the permittee pave the access road.
2. Assumption of Risk, Waiver of Liability and Indemnity.
- A. By acceptance of this permit, the applicant on behalf of (1) itself, (2) its successors and assigns, and (3) any other holder of the possessory interest in the development authorized by this permit, acknowledges and agrees:
    - 1. that the site may be hazardous due to waves, storm waves, flooding, erosion, bluff retreat, and surface and subsurface drainage;
    - 2. that the revetment, fill buttress, and maintenance access road pose a hazard to the public;



3. to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development;
  4. unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and
  5. to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amount paid in settlement arising from any injury or damage due to such hazards.
- B. *Prior to the conveyance of property that is the subject of this permit***, the applicant shall execute and record a deed restriction, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition. The deed restriction shall include a legal description of the applicant's entire parcel(s). The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.
3. Public Access.
- A. *Prior to the issuance of the coastal development permit***, the applicant shall submit, for the review and approval of the Executive Director, a plan for the provision of public access improvements on the City-owned property at the top of the bluff of the project site at APNs 009-161-030 through 009-161-090 and 009-161-120 through 140, currently consisting of approximately 24,000 square feet, generally depicted on **Exhibit 8**.
1. A licensed geologist or geotechnical engineer shall determine:
    - a. the net developable area, as defined in the Pacifica Local Coastal Program Land Use Plan, of the property to accommodate public access purposes, and
    - b. the development setback from the edge of the bluff sufficient to protect the public access improvements for the design life of such improvements.
  2. The plan shall demonstrate that the City-owned public property on the top of the bluff provides lateral access for pedestrians, bicycles, and persons of limited mobility.
  3. The public access improvements shall be sited and designed for accessibility by people of limited mobility to the maximum extent feasible.
  4. The public access improvements shall be sited and designed for compatibility with the natural character of the shoreline.
  5. The plan shall include a full-size and reduced copy of the public access plan drawn to scale showing the public access improvements and a schedule or timetable for installation.
  6. The public access improvements shall include, at a minimum, the following components:

- a. a lateral access trail at least eight (8) feet wide and separated from the public road (Esplanade Drive), with the inland edge of the trail at least 25 feet from the occupied blufftop residences. The trail shall qualify as a Class I bikeway.
  - b. overlook point(s).
  - c. benches.
  - d. signage identifying the location of vertical and lateral public accessways, bicycle routes, destination areas, environmentally sensitive habitat, and hazardous conditions. The signage shall use appropriate color, size, form, and material to be compatible with the natural appearance and character of the shoreline.
7. The chain-link fence along the 500-block of Esplanade Drive shall be removed, and a new fence shall be located as close to the bluff edge as practicable while still providing for public safety. The new fence shall be of an open design, compatible with the natural character of the site, and shall not obstruct views.
  8. The fence separating all or portions of APN 009-161-140 from the adjacent City-owned property shall be removed. Any new fence proposed to separate City-owned from the adjacent private property at APN 009-074-030 shall require a coastal development permit.
  9. The permittees shall landscape the blufftop public access area using appropriate native vegetation.
- B. If the permittee acquires any additional property on the blufftop at APNs 009-161-010, 009-161-020, 009-161-100, and/or 009-161-110, all of which are generally depicted on **Exhibit 8**, the permittee shall submit, for the review and approval of the Executive Director, a plan for the provision of public access improvements so that at least 8,000 square feet of the 13,500 square feet of total property that can be acquired is improved, consistent with the requirements of Special Condition 3.A.
- C. The permittee shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.
4. Condition Compliance.
- A. *Within 60 days of Commission action on this coastal development permit application*, or within such additional time as the Executive Director may grant for good cause, the applicant shall satisfy all requirements specified in the conditions hereto that the applicant is required to satisfy prior to issuance of this permit. Failure to comply with this requirement may result in the institution of enforcement action under the provisions of Chapter 9 of the Coastal Act.

#### **4.0 FINDINGS AND DECLARATIONS**

The findings contained in the substantial issue portion of the staff recommendation are hereby incorporated by reference as if set forth in full.

#### 4.1 Standard of Review

For the de novo review of the portion of the project located in the City's permit jurisdiction, the standard of review is the policies of the City's certified LCP and the public access and public recreation policies of the Coastal Act. For the portion of the project located in the Commission's original permit jurisdiction, the standard of review is the policies of Chapter 3 of the Coastal Act. Because the City's Land Use Plan (LUP) adopts verbatim the policies of the Coastal Act, each LUP policy corresponds to a Coastal Act policy and is referenced in the findings as a Land Use Plan Policy / Coastal Act Policy.

#### 4.2 Background

See discussion in Part 1, Section 2.6 above for a detailed account of events leading to the Commission's de novo consideration of the portion of the proposed project located in the City's coastal development permit jurisdiction and the coastal development permit for the portion of the proposed project located in the Commission's original permit jurisdiction.

Since the City's action on the proposed project on March 20, 2000, the City has provided additional information requested by Commission staff. This information consists of ownership descriptions and geotechnical reports in the local record at the time of City approval but not submitted to the Commission, and new information pertaining to existing utilities and infrastructure within the project site, design changes, erosion rates, maintenance, biological resources, City correspondence with State and federal agencies, analysis of project alternatives, public access, and visual resources.

#### 4.3 Project Description

Part 1, Section 2.7 above describes the project as originally proposed by the City.

The Commission staff received the emergency permit application from the City for the revetment on March 20, 1998, and issued Emergency Permit 1-98-048-G on May 26, 1998. All of the twelve original single-family residences on the seaward side of the 500 block of Esplanade Drive were standing at the time the City submitted the emergency permit application. Before the Executive Director issued the emergency permit, the City condemned and removed seven houses in 1998. The City removed three more houses from the bluff in 1999. Two single-family residences remain and are still occupied. These remaining homes are approximately 40 feet from the bluff edge, but are not immediately threatened.

The emergency permit states that the City proposed to:

*Construct a rock revetment to protect Esplanade Drive and utilities as well as several remaining homes by placing approximately 23,000 tons of 2 to 8-ton rock (including remnants from the former rock revetment at the site to be reused and imported rock) on formational material covered with geotextile fabric, approximately 1,000 feet in length 40 feet wide, 20 to 60 feet high, and at a vertical slope of approximately two horizontal to one vertical.*

The Executive Director and the City issued the emergency permits based on the work as described above to protect remaining residences, public property, above-ground and underground utilities, and a public road all located on the top of the bluff from dangers associated with erosion of the coastal bluff.

The project as constructed varies somewhat from the project described in the original plans approved under the emergency permit. As constructed, the revetment varies from the plans approved under the emergency permit as follows:

1. Decreased Revetment Crest Width The revetment crest width was reduced from 12 feet to 6 feet at the 26-foot Mean Sea Level elevation, resulting in an approximately 15% decrease in the volume of rock approved under the emergency permits.
2. Changed Revetment Stone Size The April 2, 1998 *Engineering Assessment Report* by the City's engineering consultant states that the weight of the armor stone (the stone placed in the outer layers of the revetment) selected for design is in the range of eight to ten tons. Although the contractor originally could not obtain sufficient quantities of eight to ten-ton revetment rock locally for the entire armor layers and the keyway, the contractor eventually located a quarry supplying 8-ton and larger stone. These stones were used to construct the keyway to support the revetment and most of the first armor layer. Five to seven-ton stone was used in the first armor layer at elevations above approximately 18 feet Mean Sea Level (MSL). Five-ton armor stone was also placed on the tallest portions of the revetment, at or above 24 feet MSL. With the project engineer's approval, the contractor used six to eight stone in the second armor layer. The size of the rocks was estimated visually.
3. Decreased Revetment Length The revetment as constructed is approximately 700 feet long, 300 feet shorter than approved under the emergency permits.
4. Decreased Revetment Height The revetment as constructed is about 20 feet in height. The originally-proposed revetment was described as 20 to 60 feet tall. The taller height included the engineered fill buttress and the underground foundation of the revetment.
5. Deletion of Hydraugers. Hydraugers are perforated pipes inserted into a hillside in order to improve drainage of surface and near-surface water on potentially unstable slopes (Lawrence Berkeley Lab 1996). The plan approved under the emergency permits shows 29 100-foot-long hydraugers installed into the bluff along the length of the revetment to increase the stability of the bluff. The hydraugers were never installed. Because the City purchased the blufftop properties and was not planning to reconstruct the single-family residences on the bluff, the hydraugers were eliminated from the plan.
6. Addition of Fill Buttress. During winter storms, a small cove formed at the southern end of the proposed project site. The City constructed an approximately 50-foot-tall fill buttress on the face and at the base of the bluff to replace the material lost in this area and to stabilize the access road for maintenance purposes. The buttress construction consists of the placement of stones ranging in weight from 100 pounds to six tons and drainrock on Franciscan greenstone bedrock. Filter fabric was placed over the drainrock, and 11,000 cubic yards of fill, excavated during the construction of the revetment keyway was compacted to a 1.5:1 horizontal-to-vertical slope. The fill buttress extends the blufftop seaward by about ten feet. A six-inch perforated PVC pipe, surrounded by more drainrock runs laterally through the buttress about two feet above the stone and drainrock base. The pipe discharges to the revetment at the south end of the buttress and opens at the north end of for maintenance. The development was not included in the project plans approved under the emergency permits.

7. Construction of Access Road Although not shown on the plans approved under the emergency permits, the City constructed an access road from Esplanade Drive down the bluff face to the beach. The road was constructed during the excavation of the keyway and revetment for future maintenance and access to the beach by the City and thus was not used to access the site during the construction of the revetment. The road consists of an approximately 13-foot-wide and 80-foot-long unpaved slope and is located at the southern end of the revetment. The City constructed the access road by cutting the upper portion of the bluff and placing fill at the base of the bluff and on the revetment (a portion of the fill buttress) to create a 1.5:1 slope.
8. Drainage Improvements on Esplanade Drive The as-built plans show an expanded system of drainage inlets from the intersection of Esplanade and Avalon Drives to the project area designed to convey street runoff to the base of the revetment.
9. Placement of base rock, concrete barrier, and fill on blufftop The project includes the placement of 15,000 square feet of base rock within the Esplanade Drive right-of-way, 420 linear feet of concrete k-rail barrier on the west side of the Esplanade Drive about 40 feet from the bluff edge, and 1,300 cubic yards of fill on blufftop parcel south of intersection of Esplanade and Avalon Drives immediately west of the concrete k-rail barrier.

To construct the revetment, a keyway was excavated at the base of the bluff into Franciscan greenstone bedrock with a proposed minimum depth of five feet and minimum width of ten feet. Filter fabric was placed in the keyway and covered with 10- to 12-ton rock. Most rock placed on the first and outermost armor layer weighed from 8 to 10 tons, with some stones up weighing up to 20 tons. Five- to seven-ton stones were placed in the first armor layer above about 18 MSL. The second armor layer consisted mainly of six- to eight-ton stone. The innermost stone ranged in weight from 100 pounds to 5 tons. Rock used to construct the revetment was angular in shape, with the shortest dimension not exceeding one-third of the longest dimension, and made mainly of metaconglomerate, welded volcanic tuff, and graywacke sandstone.

#### **4.4 Geologic Stability and Shoreline Erosion**

##### ***Issue Summary***

As proposed, the project includes modifications to the original plans. Changes in the proposed project design reduce the original anticipated level of bluff protection from the ability to withstand 100-year oceanographic conditions to less than 75-year oceanographic conditions. However, the project was constructed under emergency conditions to protect an eroding coastal bluff. The proposed project has successfully prevented further erosion of the bluff and does not create or contribute significantly to erosion or geologic instability of the site or its surroundings as required by LCP Policy 26 / Coastal Act Section 30253. Therefore, the Commission finds that the proposed project conforms to the policies of the certified LCP and Coastal Act that assure structural integrity and geologic stability.

##### ***LCP and Coastal Act Policies***

LCP Land Use Plan Policy 26 / Coastal Act Section 30253 in relevant part states:

*New development shall:*

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

...

### **Discussion**

The design of the proposed revetment was originally based on 100-year oceanographic recurrence interval conditions (that is, the oceanographic conditions anticipated to occur once every 100 years based on the data on record). The City's engineering consultant assessed the oceanographic and geologic conditions of the site to develop the design criteria for the revetment in the pre-construction *Engineering Assessment Report* dated April 2, 1998. Based on conditions such as nearshore bathymetry, maximum possible still water elevation, wave height, beach slope, and bedrock foundation scour depth, to withstand a 100-year oceanographic condition event, the engineering consultant recommended the construction of the revetment with 10-ton armor stone and a 14-foot crest width at the 26-foot MSL elevation. The engineering consultant also noted that a revetment designed to withstand 50-year oceanographic conditions would have a crest width of 12 feet at 26 MSL and an armor layer of five-ton stone. To withstand 75-year oceanographic conditions, a crest width of 13 feet and armor stone size of about eight tons is needed. The report states that "an armor stone size of 8 to 10 tons was selected for design".

As listed in Section 4.3 above, the revetment as constructed varies from the plans approved under the emergency permits. The effects of these changes on the stability of the proposed project are described below.

The revetment as constructed consists of 8- to 10-ton rock in the first armor layer and a crest width of six feet at the 26-foot MSL elevation. Some stones up to 20 tons in weight were placed in the first armor layer. The engineering consultant concluded that the reduction in crest width

*...may result in a small amount of water striking the bluff during an extreme (greater than 100-year recurrence interval) storm event. However, because the top of revetment is at elevation +26 MSL the water will have very little energy to erode the unprotected face cliff above the revetment. (Skelly 1998)*

The revetment contains smaller armor stone in the second armor layer. The City's engineering consultant states that the use of smaller-than-specified armor stones in the second armor layer will not affect the performance of the revetment. The engineering consultant further remarks that the use of 5 to 7 ton stones as the first armor layer at elevations above +18 MSL is acceptable at elevations above +18 MSL because water forces are greatly reduced at elevations above +16 MSL. However, according to the City's engineering consultant, the use of smaller stones in the second armor layer and in the first armor layer at the top of the revetment may result in additional maintenance as a result of an increase in frequency of dislodged stones movement under extreme storm conditions.

As proposed, the City's engineering consultant opines that the revetment should withstand 75-year oceanographic conditions, but will likely suffer some damage under 100-year oceanographic conditions. The Commission staff engineer has reviewed the engineering reports and plans for the as-built project and determines that the revetment provides adequate shoreline

protection. The Commission staff engineer emphasizes, however, that as-built, the revetment requires more maintenance than a revetment designed to withstand 75-year or 100-year oceanographic conditions because it is designed to withstand less severe oceanographic conditions and will be subject to a greater frequency of dislodged stones.

Hydraugers intended to provide subsurface drainage of the bluff were not installed as part of the project. The City acknowledges that the use of hydraugers would increase the stability of the exposed bluff above the top of the revetment. However, the hydraugers were intended to improve the stability of the bluff to allow for the rebuilding of houses on the blufftop and were not considered essential to protect the adjacent public street or infrastructure. Since the City bought all but four of the blufftop properties and contemplates the provision of passive public access instead of the construction of new houses on the blufftop, the hydraugers were eliminated from the plan. The Commission notes that in addition to the fact that the revetment will not be utilized to protect new residential development, the proposed revetment without hydraugers will not prevent the revetment's ability to protect the bluff.

As proposed, the revetment generally extends from 528 Esplanade Drive south to the portion of the bluff jutting seaward, a distance of approximately 700 feet. The revetment keyway has a minimum width of ten feet and a minimum depth of five feet to ensure stability of the structure. The keyway ties into the existing bluff by curving inward at the northern end. This engineered design provides an angle to the revetment that eliminates wave uprush reflected from the revetment onto the adjacent unprotected bluffs. At the southern end, the keyway is anchored into the Franciscan greenstone bedrock where the bluff forms a relatively erosion-resistant point. Thus, the design reduces the potential for the revetment to significantly create or contribute to erosion or geologic instability of the surrounding bluff.

As proposed, the fill buttress and the access road partially built on the buttress are properly engineered and do not create or contribute to further erosion of the bluff. The City's engineering consultant supervised the construction of the fill buttress to ensure adherence to design specifications. Compaction tests were conducted to certify that the fill was compacted to a minimum of 90% of the maximum dry density of the material. Furthermore, the buttress was designed and constructed at a 1.5:1 slope to preserve the maximum amount of in-place bluff material (Cotton Shires & Associates 1998). Because the buttress replaces lost bluff material, the buttress acts as an extension of the bluff that prevents further bluff erosion from occurring.

The intent of the proposed project is to reduce erosion of the bluff at the project site. Based on review of the geotechnical information provided by the City, the Commission staff engineer concurs with the City's engineering consultant that the design of the project is sufficient to achieve this purpose. Furthermore, the Commission staff engineer affirms that the proposed project assures stability and structural integrity, and neither creates nor contributes significantly to erosion, geologic instability, or destruction of the site or the surrounding area, consistent with the requirements of LCP Land Use Plan Policy 26 / Coastal Act Section 30253. Thus, the Commission finds that the proposed project is consistent with LCP Policy 26 / Coastal Act Section 30253.

### **Conclusion**

The proposed revetment was constructed to prevent further erosion of a coastal bluff. By decreasing bluff retreat at the project site, the revetment protects two remaining private residences, a public road, public blufftop property, and public-serving utilities from damage or

destruction. The information presented by the City demonstrates that the proposed project will not create further erosion or instability of the bluff. Therefore, as proposed, the Commission finds that the project assures stability and structural integrity and neither creates nor contributes significantly to erosion, geologic instability, or destruction of the site or the surrounding area and is consistent with LCP Policy 26 / Coastal Act Section 30253.

#### 4.5 Shoreline Protection and Alternatives Analysis

##### **Issue Summary**

The proposed revetment is the least environmentally damaging feasible alternative that protects existing structures in danger from bluff retreat. The geotechnical information provided by the City considers all the necessary criteria for shoreline protection required by LCP Land Use Plan Policy 16 / Coastal Act Section 30235 and indicates that the proposed project is required to protect existing structures and is designed to eliminate or mitigate impacts on local shoreline sand supply. However, the proposed project does not conform with the requirements of LCP Zoning Code Ordinance 9-4.4406 to minimize impacts on existing lateral access and provide maintenance. Therefore, **Special Condition 1** requires the City to maintain the revetment to remove or redeposit dislodged rock from the beach. As conditioned, the Commission finds that the proposed project conforms with the LCP and Coastal Act policies for development on the shoreline.

##### **LCP and Coastal Act Policies**

LCP Land Use Plan Policy 16 / Coastal Act Section 30235 states in applicable 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.*

LCP Zoning Code Ordinance 9-4.4406 (Shoreline Protection) states in relevant part:

...

*(c) Development standards. The following standards shall apply to all new development along the shoreline and on coastal bluffs.*

- (1) alteration of the shoreline, including diking, dredging, filling, and placement or erection of a shoreline protection device, shall not be permitted unless the device has been designed to eliminate or mitigate adverse impacts on local shoreline sand supply and it is necessary to protect existing development or to serve coastal-dependent uses or public beaches in danger from erosion or unless, without such measures, the property at issue will be rendered undevelopable for any economically viable use;*

...

- (3) Required shoreline protection devices shall be designed and sited to consider and reflect:*

- (i) maximum expected wave height;*



- (ii) *estimated frequency of overtopping;*
  - (iii) *normal and maximum tidal ranges;*
  - (iv) *projected erosion rates with and without a shoreline protection device;*
  - (v) *impact on adjoining properties;*
  - (vi) *design life of the device;*
  - (vii) *maintenance provisions, including methods and materials; and*
  - (viii) *alternative methods of shoreline protection, including "no project".*
- (4) *the impact on beach scouring and sand replenishment shall be minimized;*
  - (5) *water runoff from beneath existing seawalls shall be minimized;*
  - (6) *existing unauthorized rubble or protective devices shall be removed prior to the approval of additional development in such areas; and*
  - (7) *a geotechnical engineer shall certify that the shoreline protection device will withstand storms comparable to the major winter storms of 1982 and 1983 along the California coast.*

...

### **Discussion**

In reviewing requests for shoreline protection, the Commission must assess both the need to protect existing private residential development and public utilities and the potential adverse impacts to public resources associated with the construction of bluff protection. A number of adverse impacts to public resources are associated with the construction of shoreline protective devices. These include the loss of public beach displaced by the structure, the "permanently" fixing the back of the beach that halts the landward migration of the bluff and beach, the narrowing and potentially elimination of beach in front of the structure, a reduction or elimination of sand contribution to the beach from adjacent bluffs, sand loss from the beach due to wave reflection and scour, accelerated erosion on adjacent unprotected properties, and visual impacts associated with the construction of a shoreline protection device on the natural bluffs.

As established in Part 1, Section 2.8.1, the proposed revetment is necessary to protect existing structures from erosion. The policies of the certified LCP and the Coastal Act further require the design of any shoreline protective device to be the least environmentally-damaging alternative, and to be the most protective of shoreline processes. After the City's action had been appealed to the Commission, the City provided the Commission with an alternatives analysis for construction of the revetment.

The City considered the no project alternative and construction of a seawall as potential alternatives to the proposed development. The no project alternative would include the removal and relocation of homes, utilities on blufftop, and Esplanade Drive, and removal of revetment. The relocation of the blufftop infrastructure would incur significant costs and take several months to accomplish. The cost of removing the existing revetment is estimated at more than \$2,000,000. The City concluded that the excessive cost of this alternative renders the no project alternative infeasible.

The City states a steel reinforced concrete vertical seawall would be a very effective means of stabilizing the entire bluff. The City describes a seawall at the project site to reach 40-45 feet MSL (about 20 feet taller than the existing revetment) to retain the unstable bluff behind it. The cost of such a seawall is estimated at about \$3,000,000. With the removal of the existing revetment at about \$2,000,000, the total construction cost would be about \$5,000,000. No funding is available for the City to remove the revetment and construct a seawall. The City concluded that the excessive cost of this alternative renders the vertical seawall alternative infeasible. Furthermore, the construction of the wall would require significantly more modification of the existing landform due to the size of the footing excavation and the necessary drilling of stabilization into the bluff. Additional resource impacts would likely occur during the removal of the revetment. Also, the vertical seawall reflects almost all of the incoming wave energy. The reflected energy may interact with incoming wave energy and may exacerbate erosion on unprotected adjacent portions of shoreline. In comparison, the proposed revetment dissipates about 40-50% of the incoming wave energy and causes fewer impacts to adjacent bluffs and beach. Accordingly, the City does not consider a vertical seawall to be a feasible less environmentally-damaging alternative because of excessive cost constraints and the impacts to the bluffs and other coastal resources.

The Commission finds that the history of the project site and the Pacifica shoreline in general provide evidence that shoreline protection is necessary to protect existing blufftop development in the project area. Given the constraints posed by the construction of a vertical seawall and the infeasibility of the no project alternative, the Commission finds that the proposed revetment is the most feasible, least environmentally damaging alternative to protect existing structures from dangers associated with bluff retreat. Therefore, the Commission finds that the revetment is required to protect existing structures. Although the need for shoreline protection has been documented, the policies of the LCP and Coastal Act further require the determination of whether the proposed project alters natural shoreline processes. If significant adverse impacts are identified, the project must mitigate or eliminate adverse effects on local shoreline sand supply.

Any revetment that attempts to stabilize bluffs and halt natural bluff retreat may significantly alter natural shoreline processes, since the bluffs are a source of material that makes up the beach substrate. The inability for the bluff to nourish the sand supply with the installation of a revetment can lead to progressive loss of sand on the beach.

The proposed revetment prevents storm waves from hitting the bluff toe, thereby preventing landward retreat of the entire bluff. However, the proposed revetment does not prevent the gradual erosion of the upper portion of the bluff by wind and rain. Thus, the upper bluff continues to supply material to the beach. Since the proposed revetment covers approximately 20 feet of the 60- to 70- foot tall bluffs, the surrounding beaches will experience only a minor loss to the local sand supply. Furthermore, in quantifying total sand supply in the project area, the City's consulting engineer indicates that the bluff consists mainly of greenstone bedrock, relic dune, and alluvium. The bedrock weathers to clay and silt and does not contribute sand to the beach. The relic dune contains about 90% sand but is only about 10 feet thick. Alluvium in the bluff is about 30 feet thick and weathers to gravel and 35% sand. Based on an estimated bluff retreat rate of two feet per year, the shoreline behind the revetment contributes about 335 cubic yards of sand to the beach per year. In comparison to the potential longshore sand transport of about 100,000 cubic yards annually, the sand lost from the local sand supply is

insignificant. The City has also indicated that the primary sources of local sand for the beach are Milagra and Big Inch Creeks. Therefore, as proposed, the project is consistent with LCP Land Use Plan Policy 16 / Coastal Act Section 30235 requiring shoreline protection structures to mitigate or eliminate adverse impacts to local shoreline sand supply.

LCP Zoning Code Ordinance 9-4.4406 lists specific information that the City needs to consider in the design and siting of the revetment, including provisions for maintenance and the methods and materials used. The City proposes to maintain the revetment every five to ten years. Maintenance entails replacing or repositioning dislodged rock. If required, the City proposes to have an engineer evaluate the condition and performance of the revetment, and identify and quantify impacts on the adjacent unprotected shoreline, with a summary report prepared annually. The report, if required, would provide recommendations for maintenance, repairs, and modifications to the revetment as needed. The City proposes to monitor the project by taking photographs and measurements of the revetment to document changes.

The City's proposed maintenance is not detailed or frequent enough to assure adequate upkeep of the revetment. In addition, it is not clear that the City will monitor and maintain the revetment unless required to do so. Thus, **Special Condition 1** requires the City to inspect the revetment after all major storm events and at least twice a year to look for specific signs of potential revetment failure or impacts to coastal resources. If the City finds signs of potential failure, a monitoring report must be prepared that includes recommendations for repair or maintenance of the project. **Special Condition 1** also requires the City to submit a monitoring report every year for the life of the structure to evaluate the condition and performance of the revetment, to analyze erosion trends of the bluff, and to recommend repair, maintenance, modifications, or other work to the revetment. If the recommended measures constitute development under the Coastal Act, a Commission-approved CDP amendment is required.

**Special Condition 1** further requires the City to remove, redeposit, or reposition rock that becomes dislodged from the revetment, remove debris and trash from the revetment, and clean the 6-inch perforated pipe under the fill buttress. Best Management Practices must be used to maintain the fill buttress. In addition, the City must maintain the access road in a non-erosive condition to allow maintenance activities to occur. These monitoring and maintenance measures are necessary to ensure that the proposed project minimizes the risk to life and property.

### **Conclusion**

Bluff retreat of the project area threatened a public road, public utilities, public property, and private residences. An analysis of alternatives to the proposed revetment demonstrates that the revetment is the least environmentally-damaging feasible alternative method to protect these structures and is therefore required to protect the existing structures. As conditioned, the proposed project will not significantly alter natural shoreline processes or impact the local shoreline sand supply. Pursuant to **Special Condition 1**, the City is required to maintain the revetment in fulfillment of Zoning Code LCP Zoning Code Ordinance 9-4.4406. Therefore, the Commission finds that as conditioned the proposed project is consistent with LCP Land Use Plan Policy 16 / Coastal Act Section 30235 and LCP Zoning Code Ordinance 9-4.4406.

## 4.6 Hazards

### ***Issue Summary***

To minimize the risk of hazards associated with the project, **Special Condition 1** requires the City to inspect and maintain the revetment regularly. Maintenance of the revetment includes the removal or redeposit of dislodged rock as soon as possible after displacement occurs and the removal of debris and trash from the revetment. The City must also maintain the fill buttress and maintenance access road. **Special Condition 1** further requires the submission of a monitoring report at least once a year that evaluates the condition and performance of the revetment and makes recommendations for the structure's repair and maintenance. As conditioned, the Commission finds that the proposed project conforms with the LCP and Coastal Act policies for the minimization of risks and assurance of geologic stability in areas of high geologic hazard.

Although intended to protect private property and public infrastructure from hazards associated with bluff erosion, the proposed revetment and associated development may create hazards to the public. For example, if not properly maintained, rock from the revetment may tumble into the surf zone where it would be hazardous to beach users or surfers. Sloughing or erosion of the maintenance access road or the fill buttress may fall on people at the base of the bluff or pose a safety risk to people on the blufftop. Despite its hazardous nature, City has voluntarily chosen to carry out the proposed project. The Commission therefore imposes **Special Condition 2** requiring the City to assume the risks of development, waive any claim of liability against the Commission for such losses, and indemnify and hold harmless the Commission if third parties bring an action against the Commission as a result of any hazards associated with the proposed project.

### ***LCP and Coastal Act Policies***

LCP Land Use Plan Policy 26 / Coastal Act Section 30253 in relevant part states:

*New development shall:*

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

### ***Discussion***

To minimize hazards caused by the proposed project, the City proposes to monitor and maintain the revetment and associated development. The City submitted to the Commission information on monitoring and maintenance of the project dated October 16, 2000. In the submittal, the City states that the revetment will require maintenance every five to ten years consisting of the proper replacement of stones as they settle or become dislodged. The City proposes that if required, an annual monitoring report would be prepared by an engineer specializing in coastal processes and would "evaluate the condition and performance of the revetment, and identify and quantify impacts on the adjacent unprotected shoreline". The monitoring report, if required, would provide recommendations for maintenance, repairs, and modifications to the revetment as needed. In addition, the City proposes to monitor the project by taking photographs and measurements of the revetment to document changes.

The monitoring and maintenance proposed by the City is not detailed or frequent enough to assure that erosion or geologic instability caused by the proposed revetment will be detected in time for the City to make repairs. In addition, it is not clear that the City will monitor and maintain the revetment unless required to do so. Moreover, the City does not include provisions for maintaining the fill buttress or the maintenance access road. As a result, the proposed project does not adequately minimize the risk to life and property in an area of high geologic hazard as required by LCP Policy 26 / Coastal Act Policy 30253.

To reduce the potential for hazards, the Commission imposes **Special Condition 1** to require the City to inspect the revetment after all major storm events and at least twice a year to look for specific signs of potential revetment failure or impacts to coastal resources. If the City finds signs of potential failure, a monitoring report must be prepared that includes recommendations for repair or maintenance of the project. If the recommended measures constitute development under the Coastal Act, a Commission-approved CDP is required. **Special Condition 1** requires the City to submit a monitoring report every year for the life of the structure to evaluate the condition and performance of the revetment, to analyze erosion trends of the bluff, and to recommend repair, maintenance, modifications, or other work to the revetment.

**Special Condition 1** further requires the City to remove, redeposit, or reposition rock that becomes dislodged from the revetment, remove debris and trash from the revetment, and clean the 6-inch perforated pipe under the fill buttress. Best Management Practices must be used to maintain the fill buttress. In addition, the City must maintain the access road in a non-erosive condition to allow maintenance activities to occur. These monitoring and maintenance measures are necessary to ensure that the proposed project minimizes the risk to life and property.

Despite the monitoring and maintenance requirements imposed by **Special Condition 1**, the revetment, fill buttress, and associated development may still constitute potentially hazardous development. The proposed project may create dangerous situations for the public using the beach or the top of the bluff. For instance, rock from the revetment may dislodge and move onto the beach or into the surf zone and become hazardous to beach users or surfers. Fill from the maintenance access road or fill buttress may slough and endanger blufftop users or fall on people at the base of the bluff below. However, the applicants have voluntarily chosen to implement the project despite the risk of hazards. The Commission therefore finds it necessary to impose **Special Condition 2** to require the City to assume the risks of any losses associated with the proposed development, waive any claim of liability on the part of the Commission for such losses, and indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand hazards.

### **Conclusion**

The proposed development may pose hazards to people on the blufftop or on the beach. To assure that the project minimizes such risks, **Special Condition 1** requires the City to frequently monitor and maintain the proposed revetment, fill buttress, and access road.

Because the applicants propose potentially hazardous development, **Special Condition 2** requires the City to assume the risks of any losses associated with the proposed development. The Commission finds that as conditioned, the project minimizes risks to life and property in areas of high geologic hazard, consistent with LCP Policy 26/Coastal Act Policy 30253.

## 4.7 Public Access and Public Recreation

### **Issue Summary**

As proposed, the revetment and fill buttress occupy 32,000 square feet of public sandy beach. The proposed project impedes lateral access along the coast under certain beach profiles and tide conditions. To minimize the proposed project's impacts to lateral public access and public recreation on the beach, **Special Condition 1** requires the City to maintain the revetment, fill buttress, and access road to minimize intrusions of dislodged rock or fill on the public beach. To mitigate for the loss of public beach, **Special Condition 3** requires the City to provide public access improvements on 24,000 square feet of property currently owned by the City. **Special Condition 3** also requires the City to provide additional public access improvements if the City acquires more blufftop property in the future to fully offset the 32,000 square feet of lost public beach. As conditioned, the proposed project is consistent with the LCP and Coastal Act policies protecting public access along the coast and public recreation.

### **LCP and Coastal Act Policies**

Coastal Act Section 30210 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.*

LCP Land Use Plan Policy 1 states:

*Maximum access 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 property owners, and natural resource areas from overuse.*

LCP Land Use Plan Policy 2 / Coastal Act 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.*

LCP Land Use Plan Policy 3 / Coastal Act Policy 30212 states in applicable 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, or,*

...

LCP Zoning Code Ordinance 9-4.4404 (Geotechnical Suitability) states in relevant part:

...

*(b) Required Survey. A geotechnical survey, consistent with the City's Administrative*

*Policy #34 and prepared by a registered geologist or geotechnical engineer, shall be submitted to the Director pursuant to Section 9-4.4304, Coastal Development Permit Procedures and Findings, for all new development located in the following settings:*

- (1) Areas showing evidence of landslides or landslide potential;*
- (2) Areas showing evidence of ground shaking or earth movement;*
- (3) Within fifty (50) feet of a coastal bluff;*
- (4) On all slopes greater than fifteen (15) percent; or*
- (5) Within sand dune habitats.*

...

- (d) Development Standards. The following standards shall apply to new development in areas identified in Section 9-4.4404(b).*

...

- (3) The density of new development shall be based on the net development developable area, as established in the required geotechnical survey;*

...

- (5) Consistent with the City's Seismic Safety and Safety Element, new development shall be set back from the coastal bluffs an adequate distance to accommodate a 100-year event, whether caused by seismic, geotechnical, or storm conditions, unless such a setback renders the site undevelopable. In such case, the setback may be reduced to the minimum extent necessary to permit economically viable development of the site, provided a qualified geologist determines that there would be no threat to public safety and health.*

...

LCP Zoning Code Ordinance 9-4.4406 (Shoreline Protection) states in relevant part:

...

- (c) Development standards. The following standards shall apply to all new development along the shoreline and on coastal bluffs.*

...

- (8) The seawall shall be designed to minimize impacts upon existing lateral and vertical access and in any case shall not result in the blocking of an accessway. In cases where it is not possible to engineer a wall without blocking access, then appropriate mitigation measures shall be incorporated into the design. These measures can include a stairway over the seawall to provide continuous vertical access or a platform over the seawall to provide continuous lateral access.*

LCP Zoning Code Ordinance 9-4.4407 (Public Shoreline Access) states in relevant part:

...

*(b) Development standards. The following standards shall apply to all new access provisions.*

- (1) to provide separation between shoreline access and residential uses and to protect the privacy and security of residents and homes, any required access easements shall comply with the following setbacks, where feasible:*
  - (i) the inland edge of lateral shoreline trails shall be at least twenty-five (25) feet from any occupied or proposed residence. However, in the event a 25' access buffer will not provide adequate lateral public access in compliance with the access provisions of the Coastal Act or with the Access Component of the LCP Land Use Plan, a narrower access buffer may be required. In no event shall the lateral accessway extend any closer than 10' from the residence in question; and*

...

- (3) public shoreline access improvements such as trails, ramps, railings, viewing areas, restrooms, and parking facilities shall be sited and designed to be accessible to people of limited mobility to the maximum extent feasible;*
- (4) public shoreline access improvements such as trails, ramps, railings, viewing areas, restrooms, and parking facilities shall be sited and designed to be compatible with the natural character of the shoreline;*
- (5) public shoreline access signage shall identify access location, destination areas, environmentally sensitive habitat, and hazardous conditions, and be compatible with the natural appearance and character of the shoreline by using appropriate color, size, form, and material; and*

...

- (7) with respect to lateral bluff top access, the easement shall be adjusted inland from the current bluff edge if it recedes inland, but in no event shall the trail be closer than ten (10') feet to an occupied or proposed residence. Such an inland adjustment shall not occur in the event it would prohibit private use of a site or would render use or development of the site economically infeasible.*

### **Discussion**

As described in Part 1, Section 2.8.3 above, the coast in the proposed project area is popular and draws greater-than-local users. Formalized public vertical access to the City-owned beach is available at two points in the vicinity of the project area. A wooden stairway extends from Esplanade Drive to the beach and is located about 0.4 miles north of the proposed project area. Another accessway is located approximately 0.25 miles south of the project area on Palmetto Avenue. A paved 20-space public parking lot at this location leads to a dirt path that ends on the top of riprap and the culverted Milagra Creek.

On the blufftop of the project site, a five-foot-tall chain-link fence is located about 40 feet from the bluff edge. Slats in the lower two feet of fence serve to prevent sand from blowing onto the



street. A concrete k-rail barrier fronts the one-way Esplanade Drive about 60 feet from the edge of the bluff. Aside from the placement of base rock within the Esplanade Drive right-of-way and fill placed south of the intersection of Esplanade and Avalon Drives west of the k-rail barrier, there are no other improvements to the blufftop in the location of the former residences.

At low tides, the public can traverse the beach from the northern boundary of the City almost to the Pacifica pier. The proposed project area falls between these two points and constitutes an important link for lateral access along the coast. At high tides, much of the beach at the proposed project site is covered in water, with water sometimes reaching the revetment. Although a portion of coastal bluff juts out south of the project area and may limit lateral passage by the public during high tide, lateral public access along the beach is available under most conditions.

As constructed, the revetment extends approximately 40 feet seaward of the base of the bluff. With a length of about 700 feet, the revetment occupies about 28,000 square feet of public beach, directly reducing the amount of beach available for public access and recreational use. The fill buttress in the southern part of the project site covers an additional approximately 4,000 square feet of public beach. Thus, the proposed development will result in the direct loss of approximately 32,000 square feet of public beach. The area lost may have provided the only lateral access available in front of the revetment during high tides and winter beach conditions. In addition, the revetment will affect the beach profile and decrease the area available for public use by reducing the beach seaward of the ordinary high water mark. Rocks falling or migrating further on the beach and into the surf zone may exacerbate those impacts. Because the proposed revetment will result in significant adverse impacts to the public's ability to laterally access the beach, the proposed project does not conform with the LCP and Coastal Act policies for public access and public recreation.

LCP Zoning Code Ordinance 9-4406(c)(8) entitled "Shoreline Protection" uses the term *seawall* in its requirement for shoreline development to provide, when not possible to avoid blocking access, the incorporation of appropriate mitigation measures into the design. Because the City uses *seawall* interchangeably to describe other shoreline protection devices, including revetments, in documents such as the General Plan and the City's May 26, 1998 City Council Summary Report giving City staff direction on the construction of the revetment, the ordinance applies to the proposed project.

To minimize impacts to public access on the beach, **Special Condition 1** requires the City to maintain the development to keep material from the revetment or fill buttress from falling onto the beach, thereby minimizing the proposed development's impact on lateral public access and public recreation. Under **Special Condition 1**, the City must remove any rock that migrates from the revetment further onto the beach or into the surf zone.

**Special Condition 3** requires the City to provide for blufftop public access improvements and mitigate the loss of sandy beach due to the construction of the proposed revetment and fill buttress. The requirements of **Special Condition 3** are consistent with the LCP and City's plans to establish lateral access on the blufftop. The City's Land Use Plan acknowledges the potential removal of blufftop residences due to bluff retreat on the 500-block of Esplanade Drive and contemplates, if conditions permit, the provision of public access and viewpoints on the top of the bluff in the event the homes are removed. As noted in the City's March 20, 2000 staff report, the blufftop lots "will not be redeveloped, except possibly for public open space and/or passive

recreational improvements (benches, etc...)" Furthermore, the City has communicated with Commission staff in correspondence dated October 13, 2000 that "City acquisition of the 8 vacant bluff top properties, for purposes of preservation and possibly passive use in the future, will add to the public's ability to access and enjoy unobstructed panoramic views of the shoreline and Pacific Ocean." Since the City is currently planning a bike land or trail at the top of the bluff such as the plan provided with City correspondence with the Commission dated March 26, 2001 (**Exhibit 9**), and the proposed revetment will result in significant adverse impacts on the public's ability to laterally access the beach, the Commission finds that the project presents an opportunity to provide public access where such a need is already recognized.

The provision of blufftop lateral access is also consistent with the March 2000 Pacifica Bicycle Plan, approved by the City Council in 2000. The bike plan states that south of the intersection of Esplanade and Manor Drives (that is, at the project site), the bikeway shifts off-street onto an unpaved trail surface and continues to the south end of Esplanade Drive. The previous bikeway on Esplanade Drive was a Class III bike route that was unstriped and part of the road shared with motor vehicle traffic. The plan identifies the need to close the gap in the existing north/south bicycle route in the area south of Manor Drive with a Class I, 8-foot-wide bikeway with 5,600 square feet of paved path. The California Department of Transportation *Highway Design Manual* defines a Class I bikeway as a path that "provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with crossflow minimized". The Class I bikeway contemplated is the top priority in the plan's list of Bicycle Facilities Improvements and Priorities. The plan proposes that the existing dirt trail on the west side of Esplanade Drive would be paved to connect with additional Class I bikeway contemplated through the recreational vehicle park south of the project area to the parking lot and vertical accessway on Palmetto Drive. The plan also calls for signage improvements in this area.

Accordingly, to mitigate the loss of about 32,000 square feet of public beach and the significant adverse impacts of the proposed revetment on the public's ability to laterally access the beach, **Special Condition 3** requires the City to provide public access improvements on the approximately 24,000 square feet of City-owned property on the blufftop. In addition, **Special Condition 3** requires that if the City acquires additional property at APNs 009-161-010, 009-161-020, 009-161-100, and 009-161-110 adjacent to the property currently owned by the City, the City shall also provide up to 8,000 square feet of additional public access and public passive recreation improvements on the acquired property. By providing for the provision of at least 24,000 and up to 32,000 square feet of improved public access, **Special Condition 3** is adequate to offset the loss of 32,000 square feet of public beach covered by the proposed development. The public access improvements include a trail for pedestrians, persons of limited mobility, and bicycles separated from Esplanade Drive, signage, overlook point(s), benches, native landscaping, and the removal of the concrete k-rail barrier, chain link fence on the 500-block of Esplanade Drive, and fence separating APN 009-161-140 from the adjacent City-owned property. The inland edge of the trail must be at least 25 feet from the occupied blufftop residences. The required signage must identify the location of vertical and lateral public accessways, bicycle routes, destination areas, environmentally sensitive habitat, and hazardous conditions. The public access improvements shall be sited and designed for compatibility with the natural appearance and character of the shoreline. **Special Condition 3** also requires the City to submit the public access plan depicting the required public access improvements and a schedule for the construction to the Executive Director for review and approval.

The provision of public access improvements on the blufftop further requires the removal of the chain-link fence along the 500-block of Esplanade Drive. The five-foot-tall, 550-foot-long chain-link fence currently impedes access to the top of the bluff. To protect public safety, **Special Condition 3** requires the installation of a new fence as close to the bluff edge as feasible. The new fence shall be of an open design, compatible with the natural character of the site, and shall not obstruct views.

**Special Condition 3** requires the removal of the wooden fence that separates all or portions of APN 009-161-140 from the adjacent City-owned property. This parcel is the southernmost blufftop property in the project area. Although the City now owns the property, it is fenced in with the recreational vehicle park south of the project area. The removal of the fence facilitates use of the City-owned property by the public. Any new fence proposed to separate the recreational vehicle park from the City-owned property shall require a coastal development permit.

The City currently owns about 24,000 square feet of the blufftop property formerly occupied by single-family residences. **Exhibit 8** shows the locations of City-owned and private property in the project area. To allow for public access improvements on the blufftop consistent with public safety needs, **Special Condition 3** requires a licensed geologist or geotechnical engineer to determine the net developable area of the blufftop property. The City defines *net developable area* in the Land Use Plan as "the portion of a site determined by a geologist to remain useable throughout the design life of the project and determined to be adequate to withstand a 100-year hazard event". **Special Condition 3** also requires a licensed geologist or geotechnical engineer to determine the development setback from the edge of the bluff sufficient to protect the public access improvements for the design life of the improvements.

The remaining property on the top of the bluff in private ownership totals approximately 13,500 square feet comprised of 4,500 square feet of vacant property and about 9,000 square feet of property on which two residences are located. **Special Condition 3** requires the City to provide public access improvements on up to 8,000 square feet of the blufftop properties currently in private ownership in the event that the City acquires the properties in the future. As required by **Special Condition 3**, a licensed geologist or geotechnical engineer must determine the net developable area and development setback of any blufftop property acquired, and the City must submit a public access improvement plan for these properties. As conditioned, the 24,000 square feet of City-owned property and the 8,000 square feet contemplated for future acquisition total 32,000 square feet, the same area of public beach covered by the revetment.

The provision of public access and passive recreation improvements required by **Special Condition 3** mitigates the loss of public recreation uses on the beach caused by the occupation of public beach by the proposed development. Although the mitigation would ideally require the City to provide public access equal in place and manner to that lost (that is, public access on the beach), the Commission finds that the requirements of **Special Condition 3** to provide public shoreline access improvements on the top of the bluff is related to the impacts of the proposed revetment on the public's ability to use the beach. Because many blufftop areas in Pacifica are in private ownership and inaccessible to the public, the provision of public access improvements at the project site allows for one of the few opportunities to walk along the open blufftop in the City. Therefore, the requirements of **Special Condition 3** appropriately mitigate the loss of sandy beach caused by the construction of the proposed revetment and fill buttress.

### **Conclusion**

The proposed project will occupy 32,000 square feet of public beach and interfere with lateral public access along the shoreline. **Special Condition 1** requires the City to minimize the impact to lateral access by maintaining the revetment to remove dislodged rock from the surf zone. The provision of public access improvements on the blufftop property as required by **Special Condition 3** is adequate to offset the encroachment of the revetment on public beach. Therefore, the Commission finds that as conditioned, the proposed development is consistent with the public access and public recreation policies of the City's LCP and the Coastal Act.

## **4.8 Environmentally Sensitive Habitats and Marine Biological Resources**

### **Issue Summary**

Because the city constructed the revetment under emergency conditions, there was not sufficient time to conduct a thorough assessment of potential impacts to sensitive marine and terrestrial habitats. However, in 1998, the City did consult with State and federal agencies, including the California Department of Fish and Game and the U.S. Fish and Wildlife Service prior to constructing the revetment. None of these agencies expressed concerns regarding potential significant impacts to sensitive habitats at that time. After the project was appealed to the Commission, and consistent with the Zoning Code requirement to obtain a biological survey, the City conducted a more complete reconnaissance of biological resources in the area. This study found no evidence of sensitive habitat in the project area. Therefore, based on the biological survey required by the certified LCP, the Commission finds that the proposed development will not impact environmentally sensitive habitat areas or marine biological resources and is consistent with the LCP and Coastal Act policies in place to protect them.

### **LCP and Coastal Act Policies**

LCP Land Use Plan Policy 18 states:

*Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of such habitat areas.*

Zoning Code Ordinance 9-4.4403 (Habitat Preservation) states in relevant part:

...

(c) *Required Survey. A habitat survey, prepared by a qualified biologist or botanist, may be required to determine the exact location of environmentally sensitive habitat areas and to recommend mitigation measures that minimize potential impacts to the habitat. This survey shall be submitted to and approved by the Director pursuant to Section 9-4.4304, Coastal Development Permit Procedures and Findings, for all new development that meets one (1) or more of the following criteria:*

(3) *The project is located within an environmentally sensitive habitat area as documented in the LCP Land Use Plan, or through the Director's on-site investigation and review of resource information; or*

- (4) *The project site is or may be located within one hundred (100) feet of an environmentally sensitive habitat area and/or has the potential to negatively impact the long-term maintenance of the habitat.*

...

Coastal Act Section 30240 states:

- (a) *Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
- (b) *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

### **Discussion**

In correspondence with Commission staff on April 19, 2000 and October 16, 2000, the City states that it consulted with the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (DFG), U.S. Army Corps of Engineers, U.S. National Marine Fisheries Service, and the Gulf of the Farallones National Marine Sanctuary before the construction of the project in 1998. The City states that the agencies' representatives did not express concerns with the proposed revetment. In subsequent communication with the City dated January 17, 2001, the USFWS reaffirms that the project does not adversely affect federally-listed species.

On October 13, 2000, consistent with the requirement in Zoning Code Ordinance 9-4.4403 to obtain a biological assessment from a qualified biologist, the City submitted to the Commission a June 30, 2000 biological assessment of the project site by Ecosystems West, the City's biological consultant. A literature search of special-status plant and wildlife species known to occur or with the potential to occur in the project area revealed that the site does not contain suitable habitat for any special, rare, threatened, or endangered species. The assessment included a site reconnaissance by the consultant, conducted by visually examining the bluff face and beach area. The consultant did not observe any special-status plants or wildlife in the project area during the reconnaissance. The assessment states that the bluff in the area of the project contains a seeping sandstone layer, and that the bluff face exhibits rills and slides from erosion. Because the bluff consists of extremely soft sandstone, and because the bluff lacks ledges or crevices, the consultant concludes that it is unlikely that the bluff ever supported habitat for cliff nesting species. Furthermore, the assessment states that the federally threatened western snowy plover requires light-colored sand beaches with semi-protected dunes for nesting, and that it is unlikely plovers nest in the project vicinity because the beach is a dark color and contains no dune habitat.

Based on the information obtained through a biological assessment prepared by a qualified biologist, the proposed project does not adversely impact environmentally sensitive habitat areas. Since the proposed project site does not contain environmentally sensitive habitat areas and is not adjacent to any such areas, the project is consistent with Land Use Plan Policy 18, Coastal Act Section 30240, and Zoning Code Ordinance 9-4.403 which prohibit the disruption of habitat values.

### **Conclusion**

The biological assessment of the project site found no evidence that the project site contains habitat for special status plants or wildlife. The biological assessment furthermore did not record any occurrences of environmentally sensitive species on the project site or on adjacent property. Therefore, as proposed, the project will not adversely impact environmentally sensitive areas, consistent with LCP Policy 18/Coastal Act Policy 30240.

## **4.9 Visual Resources**

### **Issue Summary**

The proposed project alters the natural landform and does not blend into the natural setting of the surrounding bluffs and beach. To minimize the visual impact of the proposed development, **Special Condition 1** requires the applicant to frequently and thoroughly monitor and maintain the revetment to identify potential problems, remove displaced revetment rocks from the beach, and remove debris from the revetment. As conditioned, the impacts of the proposed development to the scenic qualities of the coast will be mitigated to the maximum extent feasible.

### **LCP and Coastal Act Policies**

LCP Land Use Plan Policy 24 / Coastal Act Section 30251 states:

*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 public views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*

LCP Zoning Code Ordinance 9.4-4408 (Coastal View Corridors) states in relevant part:

...

(b) *Development standards. The following standards shall apply to new development within coastal view corridors.*

- (1) *structures shall be sited in order to minimize alteration of natural topography and landforms, tree removal, and grading only to the extent necessary to construct buildings and access roads;*
- (2) *structures shall be sited on the least visible area of the property and screened from public view using native vegetation, as feasible;*
- (3) *structures shall incorporate natural materials and otherwise shall blend into the natural setting;*

...

- (5) *landscape screening and restoration shall be required to minimize the visual impact of the new development; and*

...

### **Discussion**

The proposed revetment, fill buttress, and access road significantly alter the appearance of the beach and shoreline. Some of the smaller rocks have already shifted and scattered seaward. Litter and debris such as shopping carts and concrete blocks with rebar sticking out are noticeable on the revetment. Rilling and erosion of the access road and fill buttress further degrade the natural look of the shoreline. **Exhibit 7** illustrates the visual impact of the proposed project.

A vertical seawall can be colorized and textured to match the existing bluffs in ways that are not possible with rock. Such techniques have been successful in other coastal areas, such as the Del Monte Forest Area of Monterey County. However, as discussed in Section 4.5, a vertical seawall is not a feasible less environmentally-damaging alternative because of excessive costs constraints and impacts to coastal resources.

To minimize the visual impacts of the proposed development, the Commission imposes **Special Condition 1** to require the City to inspect and maintain the revetment on a regular basis. **Special Condition 1** requires the City to remove, redeposit, or reposition rock that becomes dislodged from the revetment as soon as possible after displacement occurs. The condition also requires the removal of debris, trash, and any unpermitted material from the revetment. The City must take all actions necessary to discourage the placement of such material on the project site. In addition, the City must prevent any sloughing or erosion that would make the fill buttress and access road unsightly. These measures will minimize the significant adverse visual impacts of the proposed project the scenic quality of the coastal area to the maximum extent feasible. Therefore, the Commission finds that as conditioned, the proposed development is consistent with the visual resource protection policies of the Pacifica LCP and the Coastal Act.

### **4.10 Alleged Violation**

Development consisting of the construction of the revetment, fill buttress, maintenance access road, and other associated improvements has taken place without the benefit of a regular coastal development permit from the Commission. Although development has taken place prior to submission of this permit application, consideration of the application by the Commission for the portion of the development located in the Commission's original permit jurisdiction has been based solely upon the policies of the Coastal Act. Approval of the permit does not constitute a waiver of any legal action with regard to the alleged violation, nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal development permit.

## **5.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

Section 13096 of the California Code of Regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, 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 effects which the activity may have on the environment.

The Commission incorporates its findings on Local Coastal Program and Coastal Act consistency at this point as if set forth in full. As discussed above, as conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, that would substantially lessen any significant adverse impacts that the development may have on the environment. Therefore, the Commission finds that the proposed project has been conditioned to mitigate the identified impacts and can be found consistent with Local Coastal Program and Coastal Act requirements to conform to CEQA.

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**EXHIBITS**

1. Regional map
2. Vicinity map
3. Assessor parcel map
4. Appeal by Commissioners Wan and Potter
5. Existing or historic shoreline protection in vicinity of project
6. Site plan
7. Photos of project site showing visual impact of proposed project
8. Assessor parcel map showing City and private property ownership
9. March 26, 2001 letter from David Carmany, City Manager, to Steve Scholl with enclosed plans for blufftop improvements.

**CORRESPONDENCE**

1. February 13, 2001 letter from James Vreeland Jr., Mayor, to Sara Wan.

**APPENDIX**

Appendix A – Substantive File Documents



## APPENDIX A: SUBSTANTIVE FILE DOCUMENTS

California Coastal Commission 1998. Staff report, CDP application A-3-PSB-98-049 (Tokyo Masuiwaya California Corporation), October 15, 1998.

California Coastal Commission 1999. *Beach Erosion and Response Guidance Document*, December, 1999.

Carmany 2001. Letter from David Carmany, City Manager, to Steve Scholl, March 26, 2001.

City of Pacifica, 1998a. Application for Emergency Permit, March 20, 1998.

City of Pacifica, 1998b. Council Agenda Summary Report. March 9, 1998.

City of Pacifica, 1998c. Minutes of the City Council, March 9, 1998.

City of Pacifica, 1998d. Minutes of the City Council, May 26, 1998.

City of Pacifica, 2000a. Address list of parties notified of project.

City of Pacifica, 2000b. Application for Coastal Development Permit, March 22, 2000.

City of Pacifica, 2000c. Assessor Parcel Numbers of properties within 100 feet of the project.

City of Pacifica, 2000d. Disaster Response & Recovery at Esplanade Avenue, Pacifica Fire Department Building Division, February 2000.

City of Pacifica, 2000g. Grant memo regarding Planning Commission approval, March 21, 2000.

City of Pacifica, 2000h. Minutes of the Planning Commission, March 20, 2000.

City of Pacifica, 2000i. Notice of Action. March 21, 2000.

City of Pacifica, 2000j. Notice of Exemption for California Environmental Quality Act (CEQA) Process to Office of Planning and Research and Office of County Clerk, March 21, 2000.

City of Pacifica, 2000k. Notice of Hearing on Proposed Permit, March 10, 2000.

City of Pacifica, 2000l. Notice of Pending Permit, posted March 22, 2000.

City of Pacifica, 2000m. Planning Commission Staff Report, March 20, 2000.

City of Pacifica, 2000n. Project plans, 11" x 17".

City of Pacifica, 2000o. Property owner list and location map.

City of Pacifica, 2000p. Property ownership documents.

City of Pacifica, 2000q. Reduced site plan,

City of Pacifica 2001. General Plan. Updated March 2001.

Clinton 1998. Letter from President Clinton to James Witt, Director, Federal Emergency Management Agency re: Declaration of major disaster in the State of California, February 9, 1998.

Cotton, Shires, & Associates 1998a. Summary Report of Earthwork Observations, Esplanade Avenue Coastal Protection Project. October 1998.

- Cotton, Shires, & Associates 1998b. Vicinity Map, General Notes, Specifications and List of Sheets, Esplanade Avenue Coastal Protection Project, As-Built Plans. October 26, 1998.
- Cotton, Shires, & Associates 2000. Response to Coastal Commission Appeal & Supplemental Information Request, October, 2000.
- Cotton, Shires, & Associates 2001. Letter from Ted Sayre, Supervising Engineering Geologist, and Patrick Shires, Principal Geotechnical Engineer, to Scott Holmes, January 17, 2001.
- Crabtree 2000a. Letter from Michael Crabtree, City Planner, to Chris Kern, April 19, 2000.
- Crabtree 2000b. Letter from Michael Crabtree, City Planner, to Steve Scholl. May 4, 2000.
- Crabtree 2000c. Letter from Michael Crabtree, City Planner, to Steve Scholl. May 9, 2000.
- Crabtree 2001. Letter from Michael Crabtree, City Planner, to Virginia Esperanza re: Pedestrian Walkway CDP-2-00-041. February 1, 2001.
- Cull 2000. Letter from Rebecca Cull, Wildlife Biologist, EcoSystems West Consulting, to Ted Sayer re: biological review and impact assessment of Esplanade Avenue Revetment Project, June 30, 2000.
- Esperanza 2000a. Letter from Virginia A. Esperanza to Scott Holmes and Ken Solomon, City of Pacifica, April 20, 2000.
- Esperanza 2000b. Letter from Virginia A. Esperanza to Ken Solomon, June 6, 2000.
- Esperanza 2000c. Letter from Virginia A. Esperanza to Ken Solomon, November 15, 2000.
- Federal Emergency Management Agency 1998. Damage Survey Report, March 5, 1998.
- Federal Emergency Management Agency 1999. Damage Survey Report, March 19, 1999.
- Fong 1998. Letter from Calvin C. Fong, U.S. Army Corps of Engineers, to Ken Solomon, April 2, 1998.
- Griggs and Savoy 1985. Griggs, Gary and Lauret Savoy, editors. *Living with the California Coast. Chapter 11, San Francisco to Año Nuevo* by Kenneth Lajoie and Scott Mathieson. Durham, North Carolina: Duke University Press, 1985.
- John Northmore Roberts & Associates 2000. Pacifica Bicycle Plan. March 2000.
- Lawrence Berkeley Lab 1996. 1996 Site Environmental Report for Ernest Orlando Lawrence Berkeley National Laboratory
- Miller 2001. Letter from Karen Miller, Chief, Endangered Species Division, U.S. Fish and Wildlife Service, to Ken Solomon, January 17, 2001.
- San Francisco Bay Regional Water Quality Control Board, 1998. Letter from Loretta K. Barsamian to Ken Solomon, April 10, 1998.
- Scholl 2000. Letter from Steve Scholl to Michael Crabtree, City Planner, June 23, 2000.
- Scholl 2001. Letter from Steve Scholl to David Carmany, City Manager, March 6, 2001.
- Silva 2000. Letter from Betty Silva, State Lands Commission, Division of Environmental Planning and Management, to Ken Solomon, March 14, 2000.

Smith 2000. Letter from Nanci Smith, Public Land Management Specialist, State Lands Commission, to Chris Kern, February 15, 2000.

Solomon 2000a. Letter from Ken Solomon, Senior Planner, to Chris Kern, March 22, 2000.

Solomon 2000b. Letter from Ken Solomon, Senior Planner, to Chris Kern, April 11, 2000.

Solomon 2000c. Letter from Ken Solomon, Senior Planner, to Steve Scholl, October 13, 2000.

Solomon 2000d. Letter from Ken Solomon, Senior Planner, to David Wright (U.S. Fish and Wildlife Service) and Robert Floerke, California Department of Fish and Game, November 30, 2000.

Solomon 2001a. E-mail memo from Ken Solomon, Senior Planner, to Carl Wilcox, California Department of Fish and Game, January 8, 2001.

Solomon 2001b. Letter from Ken Solomon, Senior Planner, to Steve Scholl, January 18, 2001.

Solomon 2001c. Letter from Ken Solomon, Senior Planner, to Steve Scholl, January 23, 2001.

U.S. Fish and Wildlife Service 1999. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover; Final Rule. 50 CFR Part 17, Federal Register Volume 64, Number 234, December 7, 1999.

Vreeland 2001. Letter from James Vreeland Jr., Mayor, to Sara Wan, February 13, 2001.

Wilson 1998. Proclamation of a State of Emergency by Governor Pete Wilson, February 4, 1998.

Personal communication:

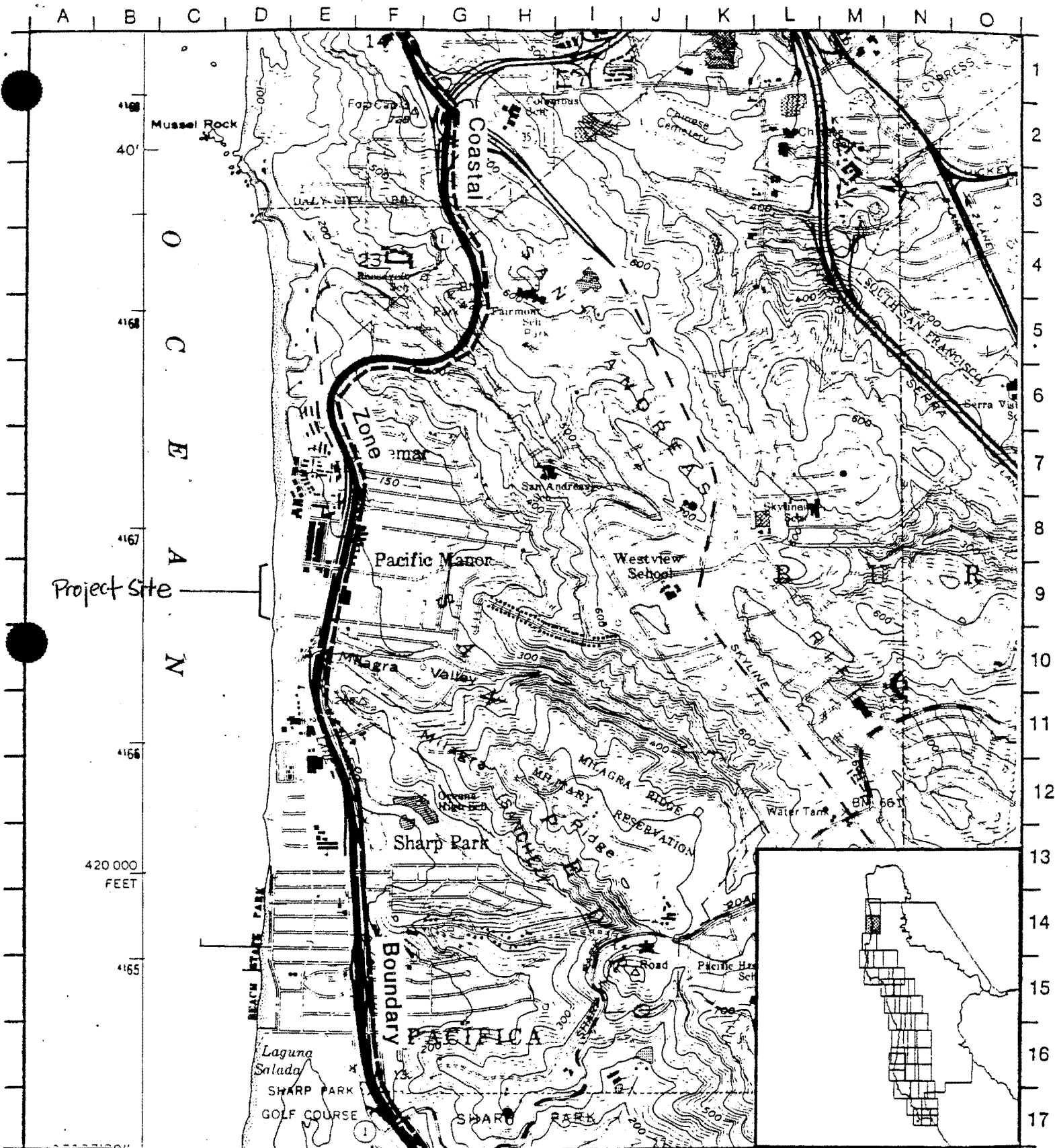
Mary Devitt, 567 Esplanade Drive, April 18, 2001.

Scott Holmes, Director of Public Works.

Rebecca Lave, John Northmore Roberts & Associates, April 26, 2001.

Ken Solomon, Senior Planner.





California Coastal Commission

County of San Mateo

EXHIBIT NO. 1

APPLICATION NO.

A-2-PAC-00-010

and 2-00-009

CITY OF PACIFICA

Regional map

1000 0 2000  
feet



Sheet 2 of 35

FIC

SITE

PACIFICA

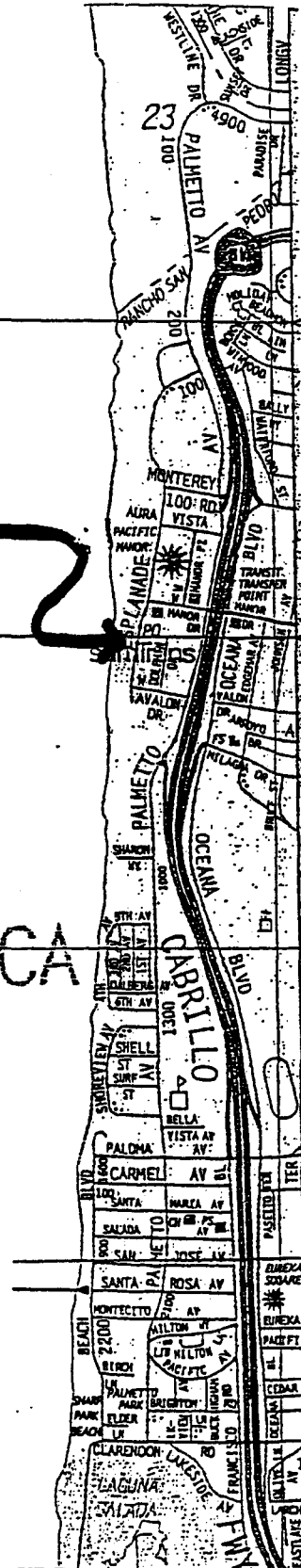
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EXHIBIT NO. 2

APPLICATION NO.  
A-2-PAC-00-010

and 2-00-009  
CITY OF PACIFICA

Vicinity map



Attachment 3

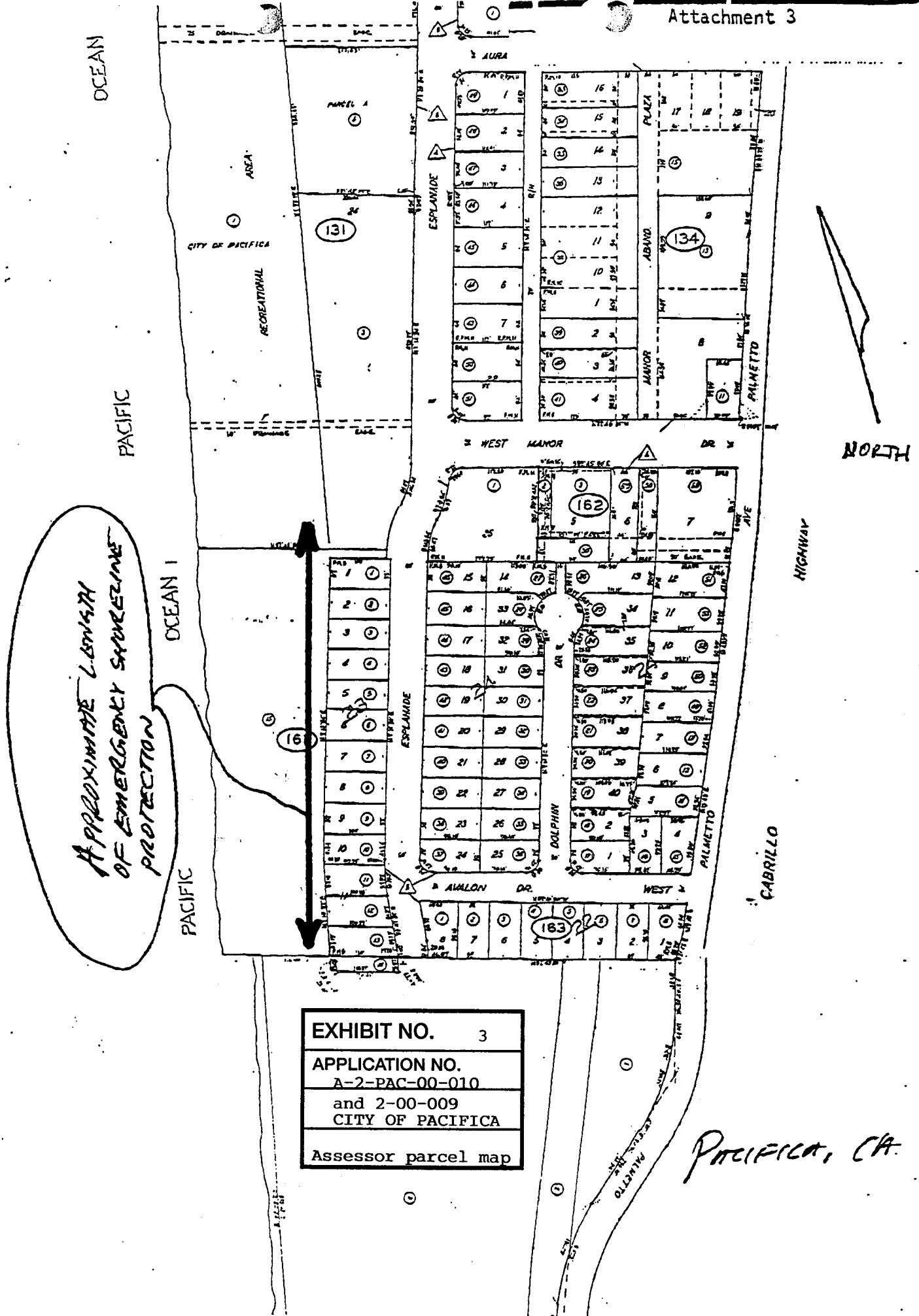


EXHIBIT NO.	3
APPLICATION NO.	A-2-PAC-00-010
	and 2-00-009
	CITY OF PACIFICA
Assessor parcel map	

PACIFICA, CA.

**CALIFORNIA COASTAL COMMISSION**

NORTH CENTRAL COAST DISTRICT  
45 FREMONT, SUITE 2000  
SAN FRANCISCO, CA 94105-2219  
VOICE AND TDD (415) 904-5260  
FAX (415) 904-5400



April 5, 2000

TO: Peter Douglas, Executive Director

FROM: Sara Wan, Chair  
Dave Potter, Vice Chair

EXHIBIT NO.	4
APPLICATION NO.	A-2-PAC-00-010
	and 2-00-009
	CITY OF PACIFICA
Appeal by Comm. Wan and Potter (Apr 5)	

SUBJECT: Appeal of City of Pacifica Local Coastal Permit CDP-130-98  
(Esplanade Revetment)

## 1.0 LOCAL APPROVAL

Commissioners Wan and Potter are appealing the City of Pacifica's approval of Local Coastal Development Permit CDP-130-98. The City of Pacifica approved Coastal Development Permit CDP-130-98 to permanently authorize a portion of an approximately 1,000-foot long, 40-foot wide and 20 to 60-foot high rip-rap revetment installed under emergency authorization to protect existing structures from bluff failure in 1998. The revetment straddles the coastal development permitting jurisdictional boundary of the City and the Coastal Commission. The City recently submitted a CDP application to the Commission for the portion of the revetment that is located seaward of the Mean High Tide Line. The City-approved project does not include any modifications to the revetment as originally constructed under the emergency permits.

Since the time that emergency work was authorized, 10 of the 12 homes threatened by the bluff failure have been demolished. FEMA provided funding to the City to purchase these lots. The City now owns 11 vacant bluff-top lots between Esplanade Drive and the revetment. The City contemplates that this area will be designated for low intensity passive recreational use in the future.

## 2.0 REASONS FOR APPEAL

The approved development raises a substantial issue of conformance with the policies of the certified City of Pacifica LCP concerning public access, visual resources, environmentally sensitive habitat areas, marine biological resources, hazards and shoreline protection projects and with the coastal access policies of the Coastal Act.

### 2.1 Public Access

The approved project may significantly interfere with the public access along the shoreline raising a substantial issue of conformance with LUP Policy 2 and Coastal Act Section 30211.

### 2.2 Visual Resources

The approved project is a 1,000-foot long 20 to 60-foot high rock revetment. Few shoreline protection projects in the State are as massive as this. This comprises a significant alteration of



the face of the bluff raising a substantial issue of conformance with LUP Policies 24 and 26 which restrict the alteration of natural land forms along cliffs and bluffs.

### **2.3 Environmentally Sensitive Habitat and Marine Biological Resources**

Prior to construction of the revetment, the project site may have provided habitat for cliff swallows, snowy plovers, and/or other sensitive animal or plant species. The City's findings contain no assessment of whether the project site may contain environmentally sensitive habitat areas or whether the project may adversely affect marine biological resources. This raises a substantial issue under LUP Policies 11, 12, and 18.

### **2.4 Hazards/Shoreline Erosion**

The approved project was constructed under emergency conditions. It is not clear in the findings for the City's approval whether the revetment was properly engineered to protect against further bluff failure. The City's findings do not include an assessment of whether the approved project will accelerate bluff erosion in the areas adjacent to the revetment. This uncertainty raises a substantial issue of conformity with LUP Policy 26.

### **2.5 Shoreline Protection/Alternatives Analysis**

Policy 16 of the Land Use Plan (LUP) allows construction of revetments and other shoreline protection projects when necessary to protect existing structures. Because 10 of the 12 homes have been removed, a substantial issue is raised whether the approved project conforms with LUP Policy 16. City staff has stated that the purpose of the proposed revetment is to protect Esplanade Drive and infrastructure beneath the road. However, the findings for the City's approval states only that "The bluff repair is needed to retard further erosion and loss of property," and contains no analysis of potential alternatives to support a finding that the revetment is necessary to protect the road or infrastructure.

The approved project also raises a substantial issue under the provision of LUP Policy 16 that specifies that shoreline protection projects to protect existing structures must be designed to eliminate or mitigate adverse impacts to local shoreline sand supply. There is no evidence in the findings that the City considered potential impacts to sand supply.

State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

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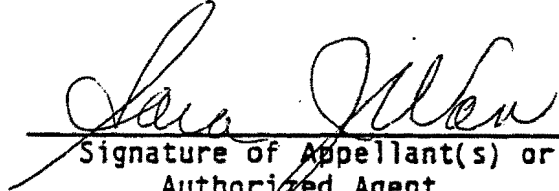
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Note: The above description need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

**SECTION V. Certification**

The information and facts stated above are correct to the best of my/our knowledge.

  
\_\_\_\_\_  
Signature of Appellant(s) or  
Authorized Agent

Date April 5, 2000

NOTE: If signed by agent, appellant(s) must also sign below.

**Section VI. Agent Authorization**

I/We hereby authorize \_\_\_\_\_ to act as my/our representative and to bind me/us in all matters concerning this appeal.

\_\_\_\_\_  
Signature of Appellant(s)

Date \_\_\_\_\_

State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

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SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Dave Pottin

Signature of Appellant(s) or  
Authorized Agent

Date April 5, 2000

NOTE: If signed by agent, appellant(s)  
must also sign below.

Section VI. Agent Authorization

I/We hereby authorize \_\_\_\_\_ to act as my/our representative and to bind me/us in all matters concerning this appeal.

\_\_\_\_\_  
Signature of Appellant(s)

Date \_\_\_\_\_

Revetment at vertical stairway

Revetment, 360 Esplanade

Revetment and storm drainage, 380 Esplanade

**FTC** Revetment at outfall

Revetment, 500 block Esplanade

Revetment at vertical accessway and  
Milagra Creek outlet

Vertical seawall, revetment, and granite,  
Mobile home park

Revetment

Vertical seawall, Beach Boulevard

EXHIBIT NO.	5
APPLICATION NO.	
A-2-PAC-00-010 and 2-00-009	
CITY OF PACIFICA	
Existing or historic pro- tection in pro- ject vicinity	

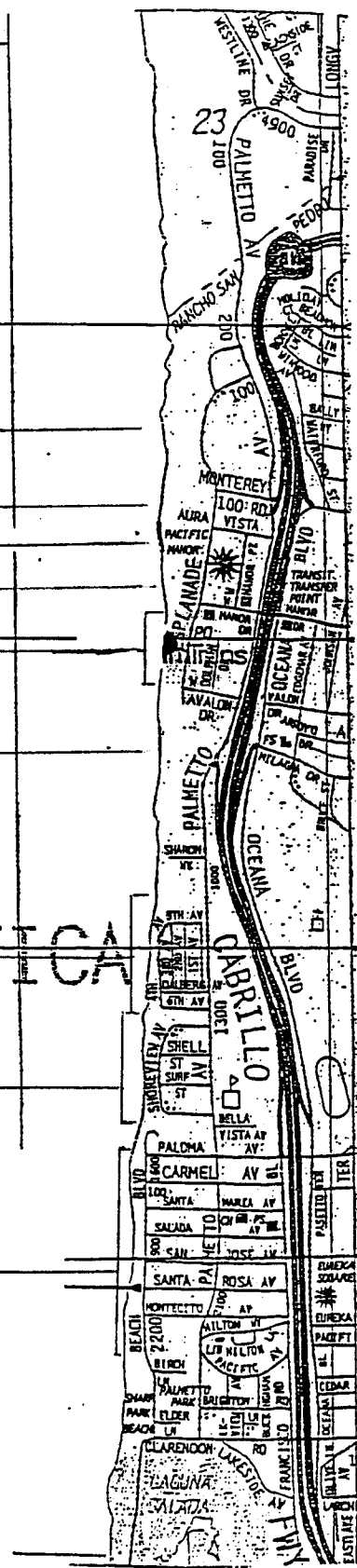
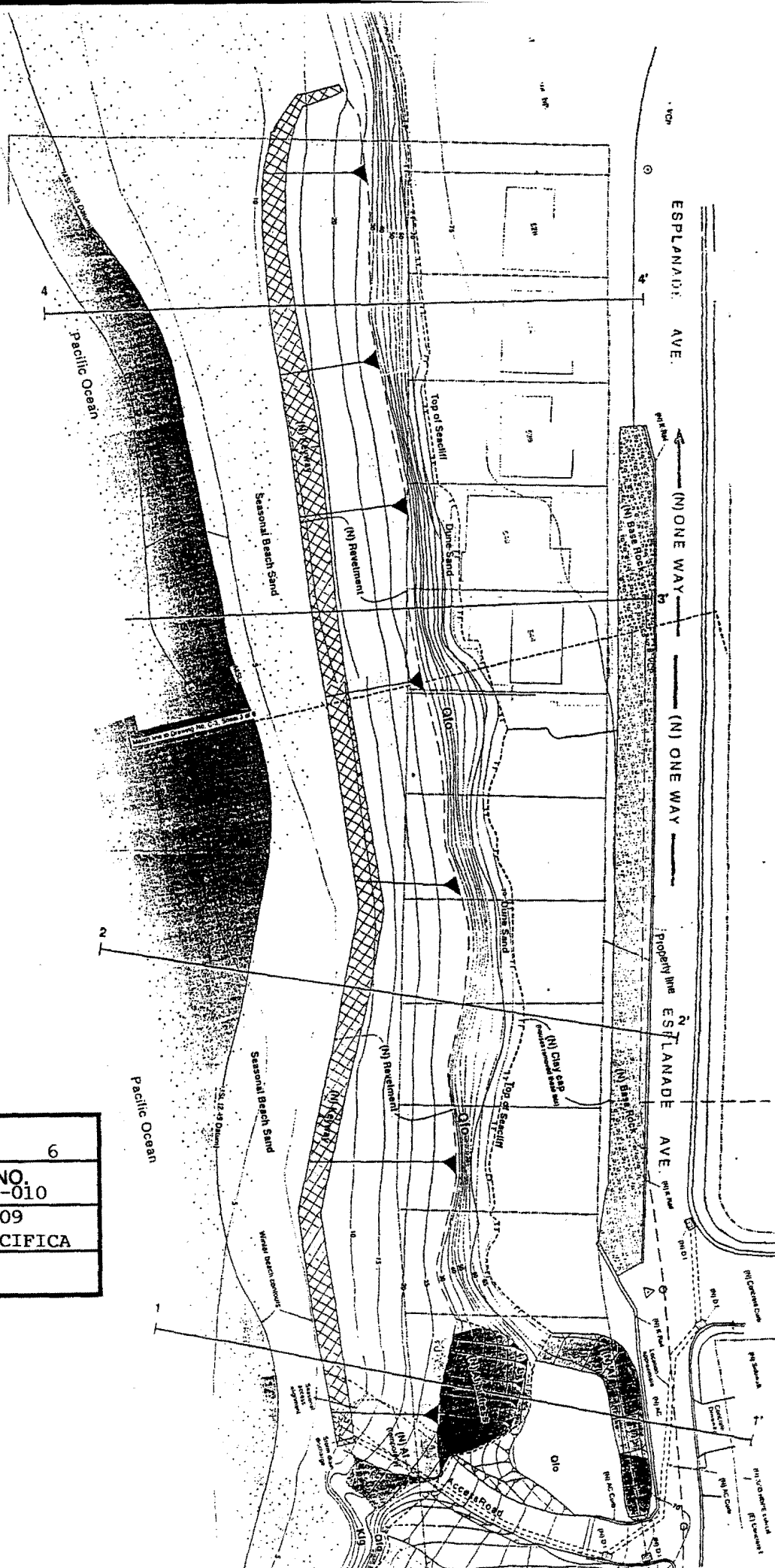


EXHIBIT NO.	6
APPLICATION NO.	A-2-PAC-00-010
	and 2-00-009
	CITY OF PACIFICA
Site plan	



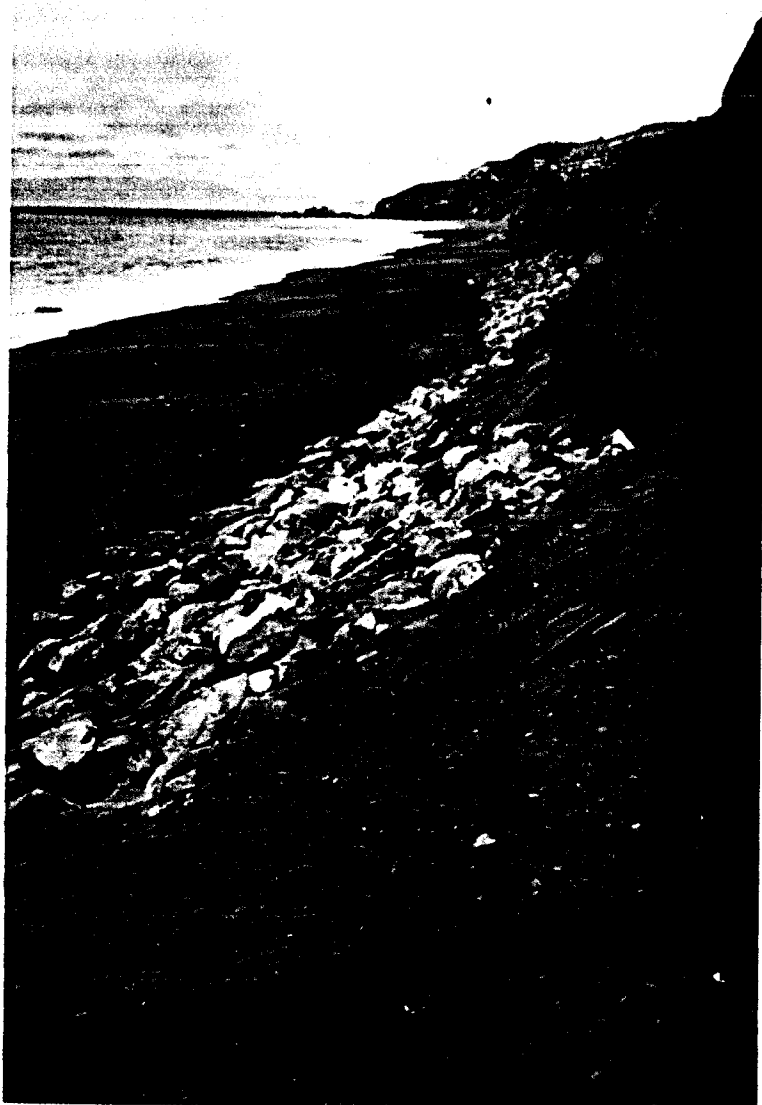


EXHIBIT NO. 7

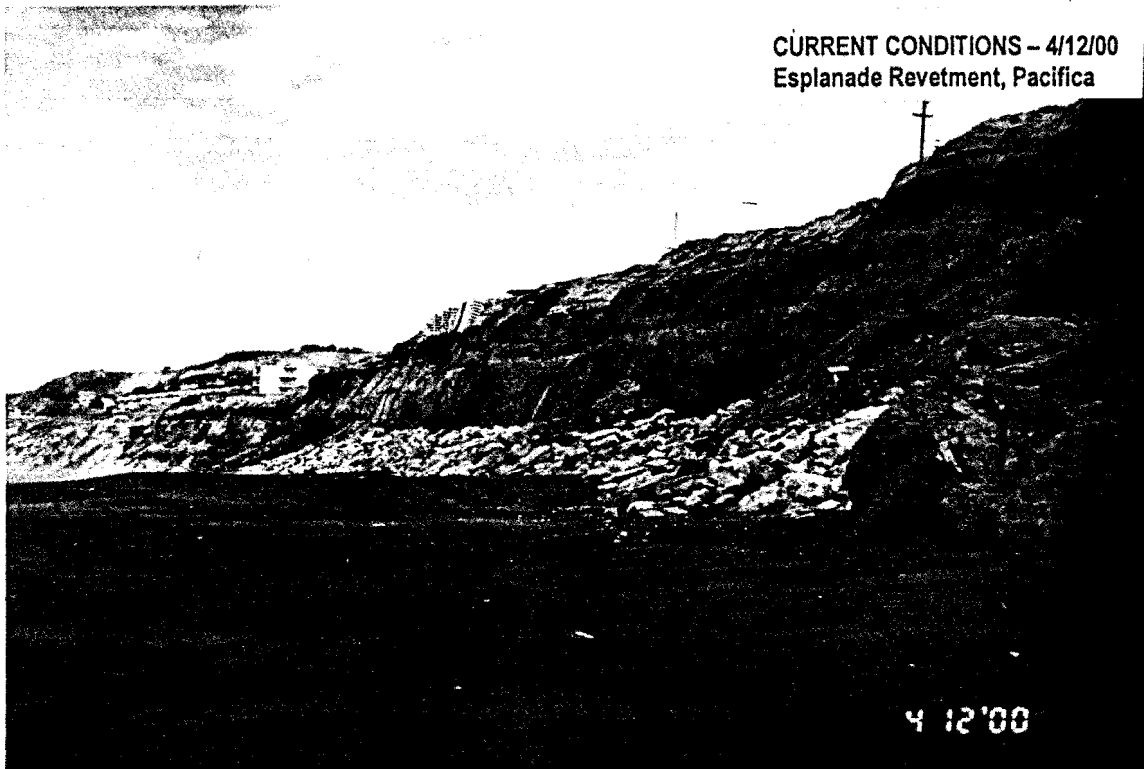
APPLICATION NO.  
A-2-PAC-00-010

and 2-00-009

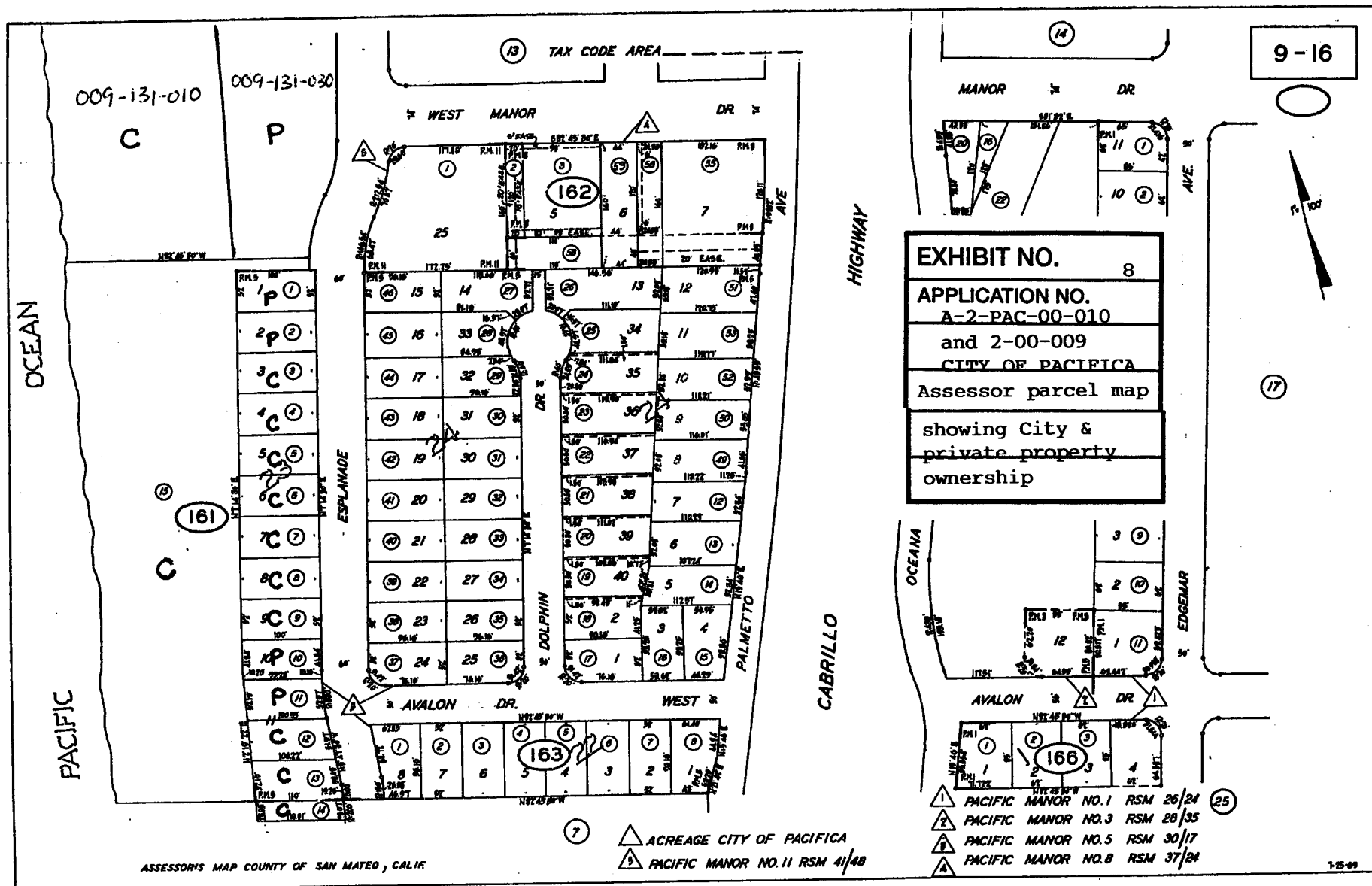
CITY OF PACIFICA

Photos of project  
site showing visual  
impact of proposed  
project

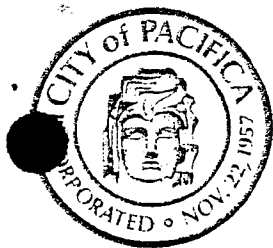
(2 pages)



C = Property owned by City of Pacifica  
P = Property owned by private party







CITY HALL

170 Santa Maria Avenue • Pacifica, California 94044-2506

Telephone (650) 738-7300 • Fax (650) 359-6038

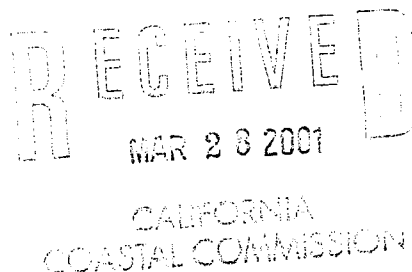
www.ci.pacifica.ca.us

MAYOR  
James M. Vreeland, Jr.

MAYOR PRO TEM  
Barbara A. Carr

COUNCIL  
Maxine Gonsalves  
Peter DeJarnatt  
Calvin Hinton

March 26, 2001



Mr. Steve Scholl  
California Coastal Commission  
45 Fremont, Suite 2000  
San Francisco, CA 94105-2219

Subject: Response to our February 27 meeting and your March 6 letter.

Dear Mr. Scholl:

Thank you for taking the time to meet with us and review the site on February 27<sup>th</sup>. The City is working with the residents along Esplanade for passive use and access to the beach. Beach access is currently possible but not for the faint hearted. It will be difficult to maintain a safe access point at this location due to the height of the bluff, the bank steepness and the wave impact at the bottom of the bluff. However we are open to considering this. The City is currently planning a bike lane and or trail at the top of the bluff.

The revetment was constructed in the manner as shown on the plans. This is reflected in the final as-built drawings. The project report refers to using large rock (8-10 tons as key-way and for shield rock). Smaller rock 4-6 ton were to be used as wall filler behind the shield rock. This was determined to be the only practical method of construction because of the lack of availability of 8 to 10 rock. This was how the system was designed and how the revetment was built. The project report did not make this clear and it appears to have been misinterpreted to as a change made during construction. It should be noted that we exceeded the specifications and placed rock in the 10 to 12 ton range in the keyway and the 6-8 ton range as filler. This is some of the largest rock placed in any revetment along the coast. We also have keyed the rock into bedrock. As a result, the wall has not shifted in the last two winters. There was some concern about the revetment slope. The revetment slope is a minimum of 2:1 and 3:1 in some locations. This is reflected in the as-built drawings. The 1.5:1 slope referred to in the project report is the engineered fill in the south end of the project. The slope is restricted to this value because of the proximity of the road and the location of the revetment.

If I can provide any additional information or be of assistance please contact me at (650) 738-7301.

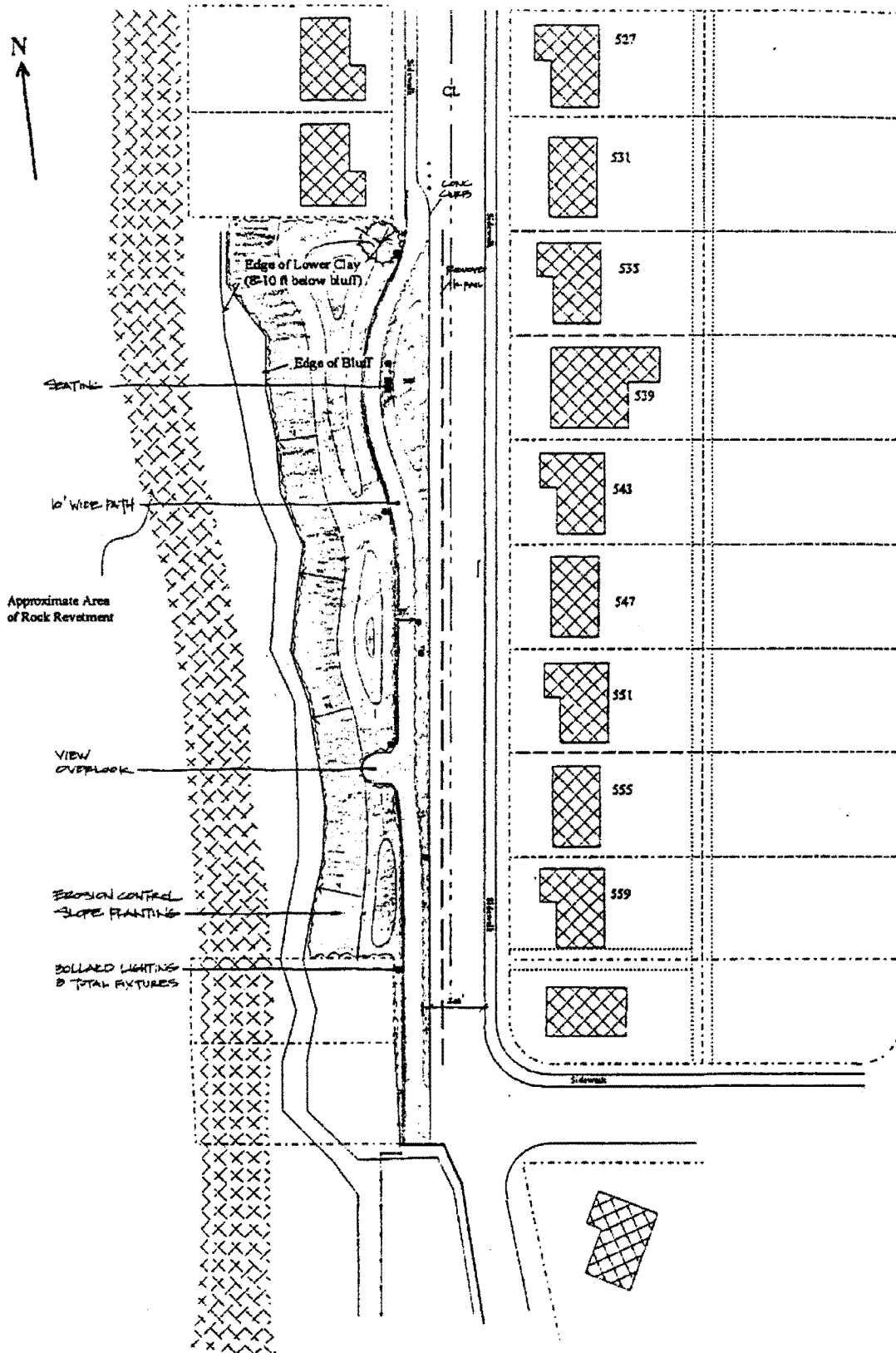
Sincerely,

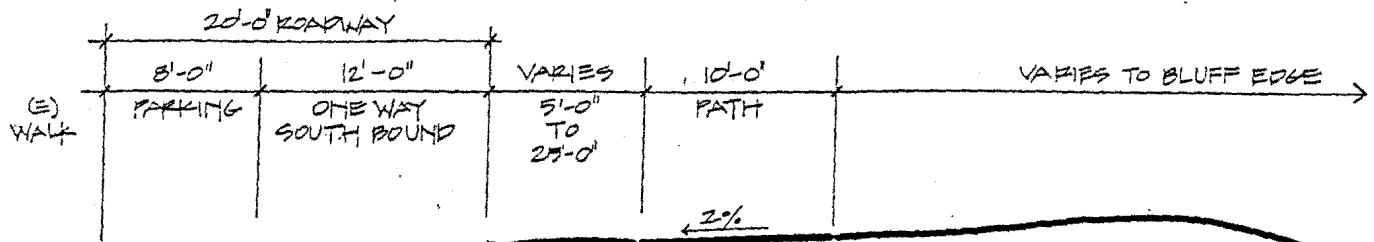
David Carmany  
City Manager

CC City Council/Exec team

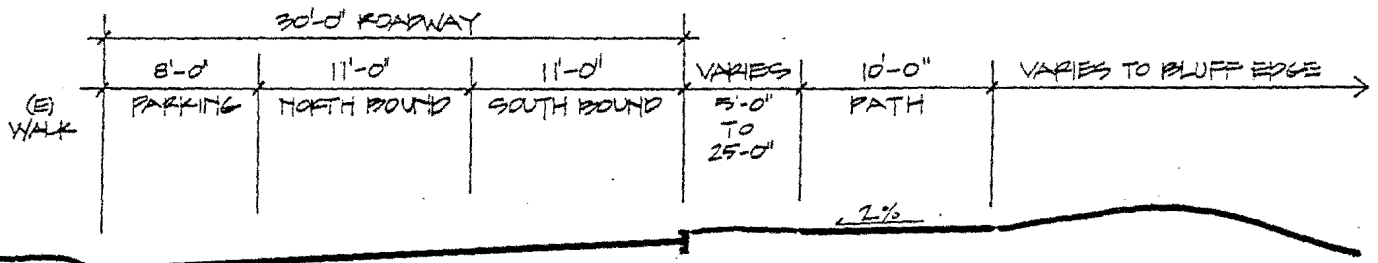
EXHIBIT NO.	9
APPLICATION NO.	A-2-PAC-00-010
	and 2-00-009
	CITY OF PACIFICA
	March 26, 2001
	letter from
	David Carmany, City
	Manager, to Steve
	Scholl with
	enclosed plans for
	blufftop. (3 pages)



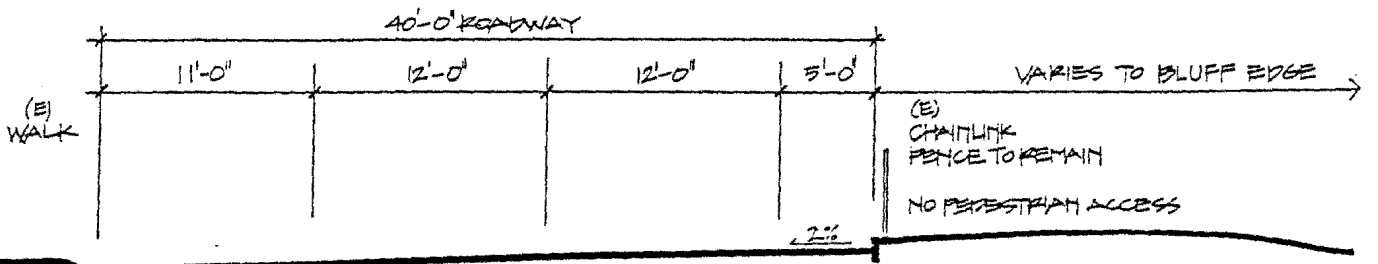




PREFERRED 20' WIDE ROADWAY

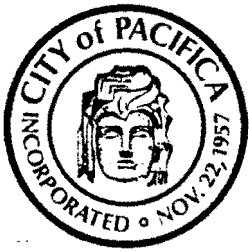


ACCEPTABLE 30' WIDE ROADWAY



UNACCEPTABLE 40' WIDE ROADWAY STAFF PROPOSAL

## ESPLANADE ROADWAY SECTIONS



CITY HALL

170 Santa Maria Avenue • Pacifica, California 94044-2506

Telephone (650) 738-7300 • Fax (650) 359-6038  
www.ci.pacifica.ca.us

**MAYOR**  
James M. Vreeland, Jr.

**MAYOR PRO TEM**  
Barbara A. Ca

**COUNCIL**  
Maxine Gonsalves  
Peter DeJarnatt  
Calvin Hinton

February 13, 2001

RECEIVED  
FEB 16 2001

CALIFORNIA  
COASTAL COMMISSION

Mrs. Sara Wan, Chair  
California Coastal Commission  
45 Fremont, Suite 2000  
San Francisco, CA 94105-2219

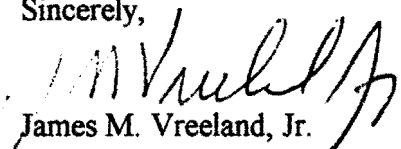
**RE: ESPLANADE REVETMENT, PACIFICA  
APPEAL # A-2-PAC-00-010 AND CDP #2-00-009**

Dear Mrs. Wan:

I look forward to the upcoming hearing for our application for the above referenced project, built approximately two years ago in Pacifica. I'm sure that you will find that the revetment was not only an essential and well-designed emergency measure, but that it has generated only positive impacts to this community and beyond, including the potential to provide public access to the coastal bluffs where none previously existed.

Again, I look forward to our hearing and your favorable support.

Sincerely,

  
James M. Vreeland, Jr.  
Mayor

CORRESPONDENCE 1
APPLICATION NO.
A-2-PAC-00-010 and 2-00-009
CITY OF PACIFICA Letter from
James Vreeland to Sara Wan

cc: City Manager  
Steven F. Scholl, Deputy Director, Coastal Commission