

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
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Filed: 11/02/06
 49th Day: 12/21/06
 180th Day: 5/01/06
 Staff: LF-V
 Staff Report: 11/22/06
 Hearing Date: 12/12/06
 Commission Action:



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STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-06-060

APPLICANT: County of Los Angeles Department of Beaches and Harbors,
 Attn: Paul Wong

PROJECT LOCATION: Zuma Beach, Malibu (Los Angeles County)

APN: 4469-027-901

PROJECT DESCRIPTION: Construction of six (6) approx. 15 ft. high, 20 ft. wide, 200-375 ft. long seasonal sand berms to protect existing facilities along the beach involving approx. 8,555 total cu. yds. of sand.

LOCAL APPROVALS RECEIVED: City of Malibu Planning Department, Local Agency Review Form, September 15, 2006.

SUBSTANTIVE FILE DOCUMENTS: Letter dated August 14, 2006, U.S. Fish and Wildlife Service; Letter dated August 3, 2006, California Department of Fish and Game; Coastal Development Permit No. 4-02-252 (County of Los Angeles Department of Beaches and Harbors).

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **APPROVAL** of the proposed project with **SIX (6) SPECIAL CONDITIONS** regarding (1) timing of operations; (2) operational responsibilities; (3) sensitive species monitoring; (4) assumption of risk; (5) permit expiration; and (6) limitations on construction activities.

I. STAFF RECOMMENDATION

MOTION: *I move that the Commission approve Coastal Development Permit No. 4-06-060 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.

II. STANDARD CONDITIONS

- 1. Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. Interpretation.** Any questions of intent or interpretation of any term or 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.

III. SPECIAL CONDITIONS

1. Timing of Construction

All project operations associated with berm construction, including construction, demolition, operation of equipment, sand removal and placement, or other construction, maintenance, material removal, or activities involving mechanized equipment shall be prohibited on any part of the beach in the project areas from Memorial Day in May to through Labor Day in September to avoid impact on public recreational use of the beach.

2. Operational Responsibilities

It shall be the applicant's responsibility to assure that the following occurs during project operations:

- a. The sand berm shall be constructed in accordance with project plans, subject to the timing restrictions specified in Special Condition No. 1 above.
- b. The sand berm shall be removed (lowered) prior to Memorial Day, subject to the timing restrictions specified in Special Condition No. 1 above. The sand berm shall be graded/lowered to pre-existing beach contours to restore the shoreline and to facilitate recreational use, unless the pre-existing beach contours have already been restored naturally through wave action prior to Memorial Day.
- c. No construction materials, debris, or waste shall be placed or stored where it may be subject to wave erosion and dispersion.
- d. Any and all debris resulting from construction activities shall be removed from the beach immediately.
- e. Equipment shall not be in contact with coastal waters at any time.

3. Sensitive Species Monitoring

- A. The applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director. The applicant shall provide the environmental monitor's qualifications for review by the Executive Director at least two (2) weeks prior to commencement of project activities. The environmental monitor shall conduct a visual survey of the project site, to determine presence and behavior of the Western snowy plover, prior to any excavation, construction, reconstruction, maintenance, or removal activities, associated with the sand berm. Prior to any project activities, the environmental monitor shall examine the beach area to preclude impacts to the federally listed Western snowy plover. No excavation, construction, reconstruction, maintenance, or removal activities shall occur until any and all Western snowy plovers have left the project area or its vicinity. In the event that the Western snowy plover exhibit reproductive or nesting behavior, the applicant shall cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.
- B. By February 25 of each year, the applicant shall obtain the seasonally predicted run schedule for the California grunion, as identified by the California Department of Fish and Game. In the event that excavation, construction, reconstruction, maintenance or removal activities will occur during the seasonally predicted run period and egg incubation period for the California grunion, then the environmental monitor shall document any grunion spawning

activity, and if grunion are present in any lifestage, no excavation, construction, reconstruction, maintenance, or removal activities shall occur during the grunion spawning activity below the semilunar high tide mark.

In the event that the County is required to remove the berms due to the Memorial Day berm removal deadline per Conditions 1 and 2B, but there is a run of California Grunion during that time or corresponding egg incubation periods, the applicant shall not remove any portion of the berms below the semilunar high tide mark until after any run periods and corresponding egg incubation periods.

- C. The environmental monitor shall be present during the excavation, construction, reconstruction, maintenance, or removal activities, of the sand berms. The monitor shall identify, in the field, the location of the wrack line at the time of any construction in order to assure compliance with the provisions of Special Condition No. 6. In the event the environmental monitor concludes that the applicant has violated, or is violating, any special condition of this permit, or if any unforeseen sensitive habitat issues arise, the applicant must cease work. The environmental monitor shall immediately notify the Executive Director if activities outside of the scope of Coastal Development Permit 4-06-060 occur or if habitat is removed or impacted beyond the scope of the work indicated in Coastal Development Permit 4-06-060. If significant impacts or damage occur to sensitive wildlife species, the applicant shall stop all work and be required to submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.

4. Assumption of Risk, Waiver of Liability and Indemnity Agreement

- A. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from storm waves, surges, erosion, and flooding; (ii) 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; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) 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 amounts paid in settlement arising from any injury or damage due to such hazards.
- B. Prior to issuance of the coastal development permit, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

5. Permit Expiration

All sand berms approved and constructed pursuant to CDP No. 4-06-060 shall be removed prior to Memorial Day weekend of each year, unless further authorization has been granted under the Coastal Act. The approval of this project shall expire on Memorial Day 2011, with a provision for the expiration to be extended one additional year, to the Friday immediately preceding Memorial Day weekend in 2012, with the approval of an amendment to this permit. Any construction, excavation, or sediment transport activities after the expiration of this permit will require the issuance of a new coastal development permit or an amendment to this permit.

6. Limitations on Construction Activities

Berm construction activities, including excavation and deposition of sand, and recontouring of sand, shall be implemented in a manner to avoid the removal or disturbance of wrack. All mechanized excavation, and deposition, activities associated with the proposed project shall be restricted to dry sand area only and shall not occur any closer than ten feet landward of the wrack line as identified in the field by the biological monitor just prior to construction or the ordinary high tide line, whichever is further landward. This permit does not allow for the removal of wrack from this area with the exception that debris that is entangled in the wrack, and which poses a clear threat to public safety, may be removed by hand as needed.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION AND BACKGROUND

The County of Los Angeles Department of Beaches and Harbors proposes to construct six 15-foot high by 20-foot wide seasonal winter sand berms along Zuma Beach. The proposed winter berms would be constructed approximately 30 to 135 feet above mean high tide.

The berms will be constructed on Zuma County Beach (Exhibit 1). The berms will be located seaward of Pacific Coast Highway and the Zuma Beach parking lots (Exhibits 2 & 3). The berms in order respectively from northernmost to southernmost location will be approx. 300 ft. in length and situated approx. 110 ft. above the mean high tide line (MHTL), approx. 215 ft. in length and situated approx. 60 ft. above MHTL, approx. 375 ft. in length and situated approx. 135 ft. above MHTL, approximately 250 ft. in length and situated approx. 43 ft. above MHTL, approx. 200 ft. in length and situated approx. 30 ft. above MHTL, and approx. 200 ft. in length and situated approx. 80 ft. above MHTL.

Construction of each sand berm would require approximately 1,111 to 2,083 cubic yards cubic yards sand, depending on the length of the berm. The sand used to construct the berms will be excavated from the dry beach areas surrounding each berm location. The berms would be constructed in early November to late December, depending on storm activity. After storm wave damage the berms would be reconstructed back to the design profile. The berms would be removed between mid-March and before Memorial Day weekend. The berms are intended to protect the County's beach facilities, such as restrooms, bike path, parking lots, and maintenance yards, from severe winter storm wave uprush.

Construction of the each berm will take approximately 2 to 3 days to complete. A front-end loader would grade and shape the berm in accordance with project plans. Construction equipment is stored in existing beach maintenance facilities, therefore, construction staging areas will not be necessary. Periodic reconstruction of a portion(s) of the berm requires pushing sand from the beach back onto the berm with excavators/bulldozers during the low tide periods following the erosion of the berm. Based on past berm construction experience, the County does not anticipate that sufficient damage will occur that would completely destroy the berms or necessitate complete reconstruction. Damage to the berm is caused by waves removing the sand from the berm and spreading it over the beach in front of the berm or washing it out to sea. Based on past berm construction, the applicant estimates that, on average, two reconstruction (maintenance) episodes would be required per winter season.

According to the County, the County has been constructing berms for storm wave protection on these beaches since approximately the 1970's. In April 2003 the Commission approved a request for after-the-fact approval of construction of the six berms, which had already been constructed the previous November (Coastal Development Permit (CDP) No. 4-02-252). The project approved under CDP No. 4-02-252 is identical to the currently proposed project.

The beach, where the six berms are to be constructed, is developed with public beach facilities, such as, parking lots, restrooms, concessions stands and a maintenance facility. Single-family residential and commercial development is located in the immediate area, just inland of Pacific Coast Highway.

B. HAZARDS AND SHORELINE PROCESSES

Section 30235 of the Coastal Act 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. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Section 30253 of the Coastal Act states in pertinent part that 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, 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.***

Section 30235 of the Coastal Act allows for the construction of a shoreline protective device when necessary to protect existing development or to protect a coastal dependent use. In addition, Section 30253 of the Coastal Act mandates that new development provide for geologic stability and integrity and minimize risks to life and property.

The proposed project is for the construction of six sand berms ranging from 200-375 feet long, and 15 feet high. The sand berms will be constructed 30 to 135 feet above mean high tide. The berms will slope down to the existing beach at a constructed slope of approximately 1.5:1 (horizontal to vertical). The berms will be maintained as necessary after wave damage and will be removed (lowered) prior to Memorial Day weekend, following the winter storm season.

Each sand berm will require approximately 1,111 to 2,083 cubic yards of sand. Sand for the berms will be taken from the dry beach areas surrounding each berm. Because the beach is broad, sand can be taken from a large area surrounding each berm, where there will be no appreciable sand elevation change from the excavated areas.

Impacts to the grade of sand donor sites will be minimal, short-term, and imperceptible over time. Impacts will consist of a temporary lowering of the surface elevation of the areas by approximately one foot from the existing elevation. No long-term changes to sand supply are expected because sand from upcoast will be delivered to the area over time and replace sand removed for the project. Also, the quantity of sand removed for the project is relatively small compared to the sand volumes being naturally transported through the area by longshore currents and the change in beach elevations will therefore not be significant or sufficiently long-term to cause discernible impacts.

To ensure that the proposed winter storm wave protection solution at the six sites are and will continue to be protective of coastal resources, **Special Condition No. 5** provides for the expiration of the term of approval on Memorial Day 2011 with a provision for the expiration to be extended for one year, with the approval of an amendment to this permit.

In addition, based on the information submitted by County Department, the proposed development is located in an area of the Coastal Zone that has been identified as subject to potential hazards from wave action during the winter storm season. Although the proposed project will increase the stability of the developed portions of the subject site in relation to wave caused erosion, there remains some inherent risk to development on such sites. The Coastal Act recognizes that certain types of development, such as the proposed project to protect existing park facilities from storm waves, may involve the taking of some risk. Coastal Act policies require the Commission to establish the appropriate degree of risk acceptable for the proposed development and to determine who should assume the risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual's right to use his property. In this case, the property is owned by a public agency and the hazards associated with developing facilities in such a location must be considered in conjunction with the public beach access use that is provided. The Commission finds that it is appropriate to protect the existing public facilities so long as the applicant assumes the risks associated with the unforeseen possibility of liquefaction, storm waves, surges, erosion, and flooding as a condition of approval. Therefore, **Special Condition No. 4** requires the applicant to waive any claim of liability against the Commission for damage to life or property that may occur as a result of the permitted development. The applicant's assumption of risk will demonstrate that the applicant is aware of and appreciates the nature of the hazards which exist on the site and which may adversely affect the stability or safety of the proposed development.

In addition, the proposed project will involve on average approximately 8,555 cubic yards of sand and the use of construction equipment on a sandy beach. As such, the proposed project has the potential to generate debris and/or presence of equipment and materials that could be subject to tidal action on the beach. The presence of construction equipment, building materials, and excavated materials on the subject site could pose hazards to beachgoers or swimmers if construction site materials were discharged into the marine environment or left inappropriately or unsafely exposed on the project site. In addition, such discharge to the marine environment would result in adverse effects to offshore habitat from increased turbidity caused by erosion and siltation of coastal waters. Therefore, in order to ensure that adverse effects to the marine environment are minimized, **Special Condition No. 2**, requires the applicant to ensure that no stockpiling of sand or construction materials shall occur on the beach seaward of the proposed berm locations and that any and all debris resulting from the construction period shall be immediately removed from the sandy beach.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Sections 30235 and 30253.

C. ESHA

Section 30230 of the Coastal Act 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.

Section 30231 of the Coastal Act states:

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

Section 30240 of the Coastal Act states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such 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 such areas, and shall be compatible with the continuance of such habitat areas.

Sections 30230 and 30231 of the Coastal Act mandate that marine resources and coastal water quality shall be maintained and where feasible restored, protection shall be given to areas and species of special significance, and that uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters.

According to the Department of Fish and Game, species of potential concern in the areas of the berms include the federally threatened Western snowy plover (*Charadrius alexandrinus nivosus*) and California grunion (*Leuresthes tenuis*). In addition, new studies have shown the importance of beach wrack to the diversity and abundance of invertebrates, plants, and birds present on sandy beaches and intertidal areas.

1. Western Snowy Plover

The Pacific Coast population of Western snowy plover (*Charadrius alexandrinus nivosus*) are small, sand colored shorebirds that uses sandy beaches for nesting and roosting from southern

Washington to Baja California. The Snowy plover forages on invertebrates in the wet sand, amongst surf-cast kelp, on dry sandy areas above the high tide, on salt pans, on spoil sites, and along the edges of salt marshes, salt ponds, and lagoons (USFWS 2001). Snowy plovers breed primarily above the high tideline on coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. They tend to be site faithful, with the majority of birds returning to the same nesting location in subsequent years (USFWS 2001 citing Warriner et al. 1986). The breeding season for Snowy plovers along the Pacific coast extends from early March to mid-September. The majority of California's wintering Snowy plovers roost and forage in loose flocks on sand spits and dune-backed beaches, with some occurring on urban and bluff-backed beaches, which are rarely used for nesting (USFWS 2001). Roosting Snowy plovers usually sit in small depressions in the sand, or in the lee of kelp, other debris, or small dunes (USFWS 2001 citing Page et al 1995).

The Snowy plover was listed by the U.S. Fish and Wildlife Service (USFWS) as a threatened species in March 1993. Subsequently USFWS designated 180 miles of coastline in California, Oregon, and Washington as critical habitat in 1999. Critical habitat is a specific designation that identifies areas that are essential to conservation of an endangered species. The USFWS has released a *Draft Recovery Plan for the Pacific Coast Population of Western Snowy Plover* (May 2001). Although the birds may forage in the area, Zuma Beach is not considered critical habitat area. According to the Department of Fish and Game (DFG), Snowy plovers do not nest in the vicinities of the proposed berms, and the closest known wintering habitat is the Malibu Lagoon area. Furthermore, due to the high disturbance levels at these beach sites (e.g. people, pets) it is not likely that the birds will frequent the project areas. However, as a precaution, DFG suggests that a qualified monitor be present during construction and removal of the berms, to ensure that if the Snowy plover is present that all construction activity will be temporarily halted until it has been determined that the birds have moved from area.

The proposed temporary berms are not expected to directly impact the Snowy plover once they are in place. However, project activities such as construction, reconstruction, maintenance, and removal of the berm have the potential to adversely impact Snowy plover. Construction of the berms would take approximately 2 to 3 days to complete.

The winter sand berm program includes the reconstruction of the sand berm(s) to the design profile, as necessary, after wave damage. Periodic reconstruction of a portion(s) of the berm requires pushing sand from the beach immediately seaward of the berm back onto the berm with excavators/bulldozers. The proposed winter sand berm(s) will be removed prior to Memorial Day after each winter storm season. Removal of the berm entails lowering the crest elevation of the berms to the same elevation as the surrounding beach elevations.

The project activities potentially impacting wintering Snowy plovers consist of the disturbances associated with construction, reconstruction, and removal of the sand berms, including any associated grading and grooming of the deposition sites to restore natural beach contours. However, sufficient additional resting and feeding areas are abundant in the vicinity and the potential for the project to impact plovers is minimal due to the temporary nature of project disturbance and the species' ability to tolerate 'occasional' human activities.

Potential impacts to wintering Snowy plovers as a result of construction-related project activities constitute a temporary disturbance to the birds. The level of physiological stress to the birds from the project activities is not expected to adversely impact reproduction or survivorship, as would be anticipated from repeated disturbances.

In order to ensure that excavation, construction, maintenance, or removal of the proposed sand berms does not adversely affect the Snowy plovers, **Special Condition No. 3** requires a qualified resource specialist to examine the beach area immediately prior to excavation or berm construction, maintenance, and lowering activities, to identify the presence of these species in order to preclude potential adverse impacts to them. As a result, the resource specialist shall ensure that prior to any excavation, construction, maintenance, or removal activities, there are no Western snowy plovers in the project area or its vicinity. The monitor shall ensure that project activities do not commence until the Snowy plovers have left the project area or its vicinity.

Furthermore, the Commission finds it necessary to limit the project term under **Special Condition No. 5** to expire on Memorial Day 2011 with a provision for the expiration to be extended for one additional year to Memorial Day 2012, with the approval of an amendment to this permit. Furthermore, to ensure that the deposition of material does not create detrimental impacts to beach slope, or subsequently to natural processes of erosion, **Special Condition No. 2** requires the applicant to re-grade the deposition area to pre-existing beach contours prior to Memorial Day.

2. California Grunion

The California grunion is a small fish in the silversides family and is extremely unusual among fish in its spawning behavior. The grunion spawn on the sandy beaches in the project vicinity immediately following high tides from March to August. The eggs are incubated in the sand until the following series of high tide conditions, approximately 10 to 15 days, when the eggs hatch and are washed into the sea. California grunion is a species of concern due to its unique spawning behavior. They are carefully managed as a game species. Project activities within the intertidal zone may disturb adult grunion during the run period and/or may bury incubating grunion eggs.

According to DFG all gently sloping sandy beaches are potential grunion spawning habitat. Berm construction and activity could adversely impact grunion spawning. Relocating sand within the intertidal zone during the spawning season could impact the grunion spawning success by burying any deposited eggs. Therefore, DFG has indicated that ideally berms be removed prior to the start of the grunion spawning season (March). However, DFG in consultation with the Department of Beaches and Harbors, understands that removing the berms too early in the potential storm season will eliminate the protection the berms need to provide. Therefore, to mitigate any potential adverse impact to the grunion and allow the berms to remain for storm protection, DFG recommends that sand removed from the berms be relocated to dry sandy areas above the semilunar high tide mark during the grunion spawning season, and that heavy equipment be prohibited from operating below the high tide mark, including staging and traveling from one location to another.

Excavation for initial construction would not occur during the grunion spawning season; however, it is possible that storms may occur in late March, requiring berm maintenance or re-construction during grunion spawning season; and the berm would be lowered in approximately April or May, during the grunion spawning season. Therefore, the proposed operations have the potential to significantly impact California grunion by excavating or depositing sediment within the intertidal zone during the seasonally predicted protected grunion run period and egg incubation period of April through August.

In order to ensure that excavation, construction, maintenance, or removal of the proposed sand berm does not adversely affect grunion spawning events, **Special Condition No. 3** provides that project activities shall not be allowed on any part of the beach below the semilunar high tide mark when California grunion are present during any run periods and corresponding egg incubation periods. To ascertain the presence of California grunion, **Special Condition No. 3** requires that in the event that excavation, construction, maintenance or removal activities will occur during the seasonally predicted run period and egg incubation period for the California grunion (*Leuresthes tenuis*), as identified by the California Department of Fish and Game, then the resource specialist shall document any grunion spawning activity and if grunion are present, no excavation, construction, maintenance, or removal activities shall occur below the semilunar high tide mark. In the event that the County is required to remove the berms due to the Memorial Day berm removal deadline per **Special Conditions No. 1 and No. 2B**, but there is a run of California Grunion during that time or corresponding egg incubation periods, the applicant shall not remove any portion of the berms below the semilunar high tide mark until after any run periods and corresponding egg incubation periods.

3. Beach Wrack

The Commission finds that regular grooming at beaches can impact the diversity and abundance of invertebrates, plants, and birds present on sandy beaches and intertidal areas. Grooming and beach nourishment can cause removal of kelp washed ashore during high tides and continual removal and disturbance to plants and invertebrates colonizing the sand. A recent study comparing ungroomed and groomed beaches in Santa Barbara and Ventura counties, showed the abundance and species diversity of coastal strand plants to be approximately 15 times higher at ungroomed beaches than groomed beaches¹. Regularly groomed beaches also exhibit reduced richness, abundance, and biomass of many species of invertebrates, including crustaceans and insects². This reduction of invertebrates, in turn, impacts shorebirds, including sandpipers, plover, and sanderlings that feed on crustaceans and insects in the sand.

Wrack, the tangles of kelp and sea grass that wash up onto beaches and settle in large clumps along the tide line, are of particular importance for invertebrate, plants, and birds in the intertidal zone of the beach. A diverse macrofauna, including amphipods, isopods, and insects are found in wrack. According to one study at Southern California beaches, wrack associated macrofauna made up an average of greater than 37% of species on ungroomed beaches and comprised 25% or more of the total abundance on half of those beaches³. The presence and amount of wrack on beaches is, therefore, directly correlated with the abundance and diversity of crustaceans and insects at beaches. The same study also showed reduced presence of western snowy plover and black-bellied plover at beaches in Ventura and Santa Barbara counties where wrack used to be removed regularly as part of beach grooming activities. The

¹ Dugan, Jenifer E. and David M. Hubbard. Effects of Beach Grooming on Coastal Strand and Dune Habitats at San Buenaventura State Beach. Draft Final Report to California Resources Agency, Department of Parks and Recreation, Channel Coast District. Jan. 4, 2003.

² Dugan, Jenifer E., et. Al. Macrofauna Communities of Exposed Sandy Beaches on the Southern California Mainland and Channel Islands.

³ Dugan, Jenifer E., et. Al. The Response of Macrofauna Communities and Shorebirds to Macrophyte Wrack Subsidies on Exposed Sandy Beaches of Southern California. Estuarine, Coastal and Shelf Science 58S pp. 133-148. 2003

presence of wrack on beaches has also been proven to reduce wind driven sand transport at beaches by more than 90%⁴.

While the proposed berm construction project does not specifically include any beach grooming activities, the proposed project does include excavation of dry sand for construction and maintenance of the berms, recontouring or “smoothing” of excavated areas, and recontouring of the deposition sites following berm removal in the spring. While much of the berm construction activities take place well landward of the typical wrack line, given the importance of wrack in beach habitats, it is necessary to ensure that impacts to wrack are avoided. Therefore, in order to avoid potential adverse impacts to sensitive habitat, **Special Condition No. 6** requires that any excavation, deposition, and recontouring associated with the proposed project shall be restricted to dry sand area only and shall not occur any closer than ten feet landward of the wrack line or the ordinary high tide line, whichever is further landward. **Special Condition No. 6** further requires that wrack shall not be removed from the beaches during berm construction activities with the exception that debris that is entangled in the wrack, and which poses a clear threat to public safety, may be removed by hand as needed.

For the aforementioned reasons, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30230, 30231, and 30240 of the Coastal Act.

D. PUBLIC ACCESS AND VISUAL RESOURCES

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.

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.

In addition, Section 30251 of the Coastal Act 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 views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. 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 subordinated to the character of its setting.

⁴ Dugan, Jenifer E. and David M. Hubbard. Effects of Beach Grooming on Coastal Strand and Dune Habitats at San Buenaventura State Beach. Draft Final Report to California Resources Agency, Department of Parks and Recreation, Channel Coast District. Jan. 4, 2003.

Coastal Act Sections 30210 and 30211 mandate that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast. In addition, Coastal Act Section 30251 requires that visual qualities of coastal areas shall be considered and protected, landform alteration shall be minimized, and where feasible, degraded areas shall be enhanced and restored.

The six project sites are located along Zuma Beach. Public access is available along the entire stretch of beach. The proposed project involves the construction of approximately 15-foot high sand berms within areas that have high recreational use during the summer periods. Because of the height of the proposed berms, the berms will obstruct public views of the beach and ocean from areas directly inland of the berms. However, the impact will not be significant since access and viewing will be afforded atop and in front of the berms, the beaches are long and broad providing viewing opportunities up and down coast of the berms, the berms are temporary and will be in place only during the winter months when visitor use is low.

To ensure that maximum access is maintained for the public in the project area, **Special Condition No. 1** requires that all project operations involving mechanized equipment be prohibited on any part of the beach in the project areas from Memorial Day in May through Labor Day in September to avoid impact on public recreational use of the beach. In this way, scheduling operations outside of peak recreational seasons will serve to minimize potential impacts on public access. In addition, to ensure that the berms are removed prior to the peak recreational season, **Special Condition No. 2** requires the applicant to ensure that the beach is returned to pre-existing beach contours to facilitate recreational use, prior to Memorial Day.

The Commission finds that the proposed project, as conditioned, will not significantly impact recreational opportunities and public access at the project site, and therefore the project is consistent with Sections 30210, 30211, and 30251 of the Coastal Act.

E. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application 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 effect that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed above, the proposed development, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures which will minimize all adverse environmental impacts have been required as special conditions. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. The Commission finds that, the proposed project, as conditioned, will not have any significant adverse effects on the environment, within the meaning of the California Environmental Quality Act of 1970. Therefore, the proposed project, as conditioned, has been

adequately mitigated and is determined to be consistent with CEQA and the policies of the Coastal Act.



EXHIBIT NO. 1
CDP APPLICATION NO. 4-06-060
VICINITY MAP



EXHIBIT NO. 2
CDP APPLICATION NO. 4-06-060
SITE PLAN



*SAND BERMS ALONG ZUMA BEACH
NORTH SEGMENT ABOVE, SOUTH SEGMENT BELOW*

