Th7d

CITY OF SOLANA BEACH

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January 6, 2014

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Ms. Deborah N. Lee, District Manager
California Coastal Commission
7575 Metropolitan Drive, Suite 103
San Diego, California 92108

Re: City of Solana Beach Local Coastal Program Land Use Plan Amendment (CCC Item Thu 7d)

Dear Deborah:

As discussed with you and other CCC staff, we are in agreement with most of the suggested modifications to the City's LUP Amendment (LUPA) made by CCC staff. However, the City has identified there are significant problems still remaining with CCC #2, #3, and #4 suggested modifications regarding the use of erodible concrete, without a higher strength facing which can be colored and sculpted to match the native bluff, for seacave and bluff notch infills in the City of Solana Beach.

Originally the City's LUPA was scheduled for a hearing on October 2013. The City received a draft suggesting modifications from the San Diego CCC staff and met with them on October 1, 2013 to discuss the CCC staff's suggested modifications. Due to lack of time remaining until the hearing, City Staff agreed to postpone the hearing until November and work to resolve all remaining issues. The City was supportive of many of the suggested modifications but a few of the proposed changes to Chapter 4 raised issues that required technical discussion involving the CCC Coastal Engineer Lesley Ewing, Geologist Mark Johnson, and the City's Geotechnical Engineer Jim Knowlton of Geopacifica. Sherilyn Sarb suggested City Staff contact CCC's technical staff to discuss and work through the technical issues. A technical meeting to discuss the use of erodible concrete was held on October 9, 2013. A summary of the salient discussion and agreement points are as follows:

Jim Knowlton explained that based on his 30+ years of coastal geotechnical engineering in Solana Beach and surrounding communities, the use of erodible concrete as a sea cave or bluff toe notch fill was used experimentally for a short period of time in the City based on the thinking that it would erode at roughly the same rate as the bluff:

- This was thoroughly vetted during the development of the City's Certified LUP and specifically excluded as an option because it does not perform well when the bluff is subject to constant wave attack as it is in Solana Beach;
- Requires significant maintenance to keep the fill intact and in place;
- Creates a scour condition around and behind the fill which causes the erodible concrete fill to migrate out onto the public beach over time;
- Creates significant aesthetic impacts because it cannot be colored or sculpted to match the natural bluff;
- Is therefore not an adequate or appropriate solution in Solana Beach.

City's Response to STAFF Recommendation

Coastal staff suggested that erodible concrete be used as a preventative device where the clean sand lens is not yet exposed:

- Wanted to include an alternative in the LUP that was not a seawall;
- Acknowledged that it would likely require annual maintenance;
- Indicated that these types of fills would not be subject to mitigation fees;
- Could be covered with higher strength concrete that could be colored and sculpted for a more natural appearance;
- Could be notched into the bluff to prevent its migration onto the public beach.

The outcome of this technical discussion was City Staff agreed to support the use of erodible concrete provided that specific language was added requiring that sea cave and notch fills be notched into the bluff to prevent migration of the concrete fill onto the beach and that the fills are covered using a higher strength concrete which can be colored and sculpted to match the natural bluff as an aesthetic treatment.

On October 17, 2013, City Staff met with key CCC San Diego District Staff and Executive Director Dr. Charles Lester to discuss this and other LUPA policies with the singular goal of working through the remaining issues and confirming the additional revisions CCC staff would make in their staff recommendation.

However, following the technical meeting held on October 9, 2013, CCC staff issued a new draft suggesting modifications that added another notch infill alternative (Figure 1A) using erodible concrete. This option does not include any ability to color match, carve, or otherwise contour the infill to replicate the appearance of the surrounding native sandstone coastal bluff.

City Staff remains opposed to the use of erodible concrete for seacave and notch infills, without a higher strength facing, as proposed by CCC staff in Figure 1A for the following reasons:

1. CCC staff recommended Figure 1A is inconsistent with the City's Certified LUP because it would result in creation of significant and adverse aesthetic and visual impacts on the public beach which is contrary to the City's goals as expressed in the LUP;
2. CCC staff suggested Figure 1A is contrary to the agreement reached by CCC technical staff (Lesley Ewing, Mark Johnson, and City technical consultant Jim Knowlton) in a meeting held on October 9, 2013 in which all parties agreed that the use of erodible concrete could be supported if a layer of higher strength facing was applied enabling the infill to be colored and hand sculpted to match the native bluff;
3. The past experimental use of erodible concrete for seacave and bluff notch infills has been a failure in the City. This practice has been effectively been banned in the City of Solana Beach for more than a decade because the use of erodible concrete has been proven to be an ineffective solution in the City's marine environment. Erodible concrete infills have migrated onto the public beach, provide very little protective benefit, and cannot be colored or sculpted to match the native bluff; and
4. City Staff disagrees with the appropriateness of the erodible concrete infill option (Figure 1A) which had already been fully vetted during the many years of the development of the Certified LUP, was specifically excluded from the range of options allowed in the City, and has been effectively been banned since 2004.

To reaffirm, City Staff will support the use of erodible concrete as shown in (Figure 1B) provided the following:

1. Specific language is retained requiring that sea cave and notch fills be notched into the bluff to prevent migration of the concrete fill onto the public beach;

2. The fills are covered with a layer of higher strength concrete which can be colored and sculpted to match the natural bluff as a key aesthetic treatment to minimize significant adverse visual and aesthetic impacts on the public beach associated with shoreline protective devices.

As you know, we have worked diligently with CCC staff to reach consensus on the provisions of the LUPA where we are not in agreement. We remain hopeful that CCC staff and the Commissioners will support the City's request to reject CCC staff suggested modifications #2, #3, and #4 for the reasons stated above.

We look forward to productively working with you and other CCC staff on this remaining issue. Please contact me at 858-720-2431 if you have any questions.

Sincerely,

David Ott
City Manager

cc: California Coastal Commissioners
Solana Beach City Council
Dr. Charles Lester
Sherilyn Sarb
Eric Stevens
Johanna Canlas

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January 3, 2014

Delivered via email

To: Eric Stevens
California Coastal Commission
7575 Metropolitan Drive Ste 103
San Diego, CA 92108-4402

Re: Item Th7d: Staff Recommendations on the City of Solana Beach Major Amendments SOL-MAJ-1-13 for Commission Meeting of January 9, 2014

Dear Mr. Stevens,

The Surfrider Foundation San Diego County Chapter recognizes beaches as a public resource held in the public trust. Surfrider Foundation is an organization representing 250,000 surfers and beach-goers worldwide that value the protection and enjoyment of oceans, waves and beaches. For the past decade, San Diego Chapter has reviewed and commented on coastal construction projects and policy in San Diego County. We appreciate the opportunity to provide comments to the California Coastal Commission about these important issues.

We are opposed to the Staff Recommendation concerning the amendments proposed to the Solana Beach Land Use Plan (LUP) unless the following changes are made. Justifications for each of our changes are included below in more detail.

1. Sea wall coastal development permit (CDP) lifetime should be limited to 20 years, as was stated in the City's LUP amendment. In addition, at the 5 year monitoring point, the 20 year reauthorization, or any time in between, seawalls that are found to impede access or recreation must be removed or relocated. A policy should be crafted to enforce protection of access and recreation.

2. Erodible concrete is a myth with no data to support the claim that it erodes at the same rate as the bluff. There is also no data that a low pounds per square inch (PSI) fill that may be removed would be effective or has been installed to support the load of the bluffs. Regardless, since infills will fix the bluff drip line instead of allowing the cave to collapse, mitigation is appropriate. The present policies have no mitigation and they also lack scientific evidence of erodibility.

3. Sea walls are not an absolute right. This staff report includes only a restrictive interpretation by citing Coastal Act section 30235 without also citing balancing sections of

Letter of Opposition 29

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the Coastal Act including all aspects of Chapter 3 per 30604c and balancing provision of 30007.5.

1. Permit lifetime should be limited to 20 years and tied to public beach access

The City of Solana Beach has certified its LUP to have a 20 year CDP lifetime (Policy Nos. 4.18, 4.47, 4.48, 4.51, and 4.52). However, Staff has unnecessarily weakened this by recommending that in place of a fixed 20 year authorization period, the timeframe for authorization of permits for new seawalls, or alterations or expansion of existing seawalls, be as long as the structure requiring protection still exists. We oppose this recommendation by staff.

Other parties have objected to the concept of a fixed 20 year permit lifetime as an arbitrary time period. However, the design life of seawalls is not an arbitrary time period, and most seawalls are projected by the applicants and their responsible engineers or geotechnical experts to have design lifetimes of approximately 20 years. This design life is well documented in many documents submitted to the Coastal Commission when Solana Beach blufftop homeowners sought CDPs for seawalls. They document the design life in the methodologies used for calculating mitigation. We believe that 20 years is not arbitrary and that 20 years is fairly equivalent to the design lifetime of a seawall. Additionally, we believe that CDP expiration needs to be tied to the 20 year period OR redevelopment of the property being protected, whichever comes first. The CDP should only be valid until the current structure is redeveloped or the design life of the seawall expires. In the event that the seawall is repaired or modified, a new CDP should be developed, not just an amendment to an existing CDP, as local conditions will likely have changed considerably.

As staff states on p4:

> "One concern regarding a possible future scenario for Solana Beach is, if the entire shoreline is armored and sea level rises, there may no longer be a public beach. In the future, it may no longer be possible to provide adequate mitigation for the impacts that shoreline armoring causes to public beaches."

We agree with staff's assessment that in the future because of seawall armoring and sea level rise there may be no public beach. Because of this scenario, in addition to the 20 year CDP lifetime, CDP lifetime should also be tied to loss of public beach access. As we have pointed out in a previous letter to the Commission (November 14, 2013), blocking access to the shoreline is not permitted under California Coastal Act Section 30604c and the associated Access (California Coastal Act Section 30210-30214) and Recreation (California Coastal Act

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Section 30220-30224) provisions. Without such protection, no findings for consistency with this provision can be made in support of the LUPA.

We do not believe that California Coastal Act Section 30235 provides a right to a shoreline protective device for an existing structure at all cost. California Coastal Act Section 30235 must be balanced with the other provisions of the Coastal Act that require access to the sea. For this reason, and in order to make the LUPA comply with the Coastal Act, the Commission should add an additional special condition similar to our suggested language here "If lateral access to a dry sandy beach seaward of a permitted shoreline protective device is blocked more than 50% of the time, or at 50% of high tides, this should trigger reassessment of the CDP including the need to remove the shoreline protective device and mitigation fees."

Such conditions are typical in a Local Coastal Program (LCP). By way of example the City of Carlsbad has a certified a Coastal Shoreline Development Overlay Zone as a component of its LCP. Within that component are the following provisions:

21.204.060 Requirements for public access.

One or more of the following types of public access shall be required as a condition of development:

A.Lateral Public Access.

1. Minimum Requirements. Developments shall be conditioned to provide the public with the right of access to a minimum of twenty-five feet of dry sandy beach at all times of the year. The minimum requirement applies to all new developments proposed along the shoreline requiring any type of local permit including a building permit, minor land division or any other type of discretionary or nondiscretionary action.
2. Additional Requirements. New developments as specified below shall be conditioned to provide the public with lateral public access in addition to minimum requirements.

a. Applicability.

(1) Seawalls and other shoreline protective devices."

As proposed, the Solana Beach LUPA has no similar provision to Carlsbad to ensure access is possible in shoreline protective device permits. Such a guarantee of public access would also need to be consistent with California Coastal Act 30220 which states that surfing shall be protected:

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> "Protection of certain water-oriented activities: Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses."

In summary, 30604c requires that an LUP and Local Coastal Program (LCP) comply with access policies of the Coastal Act. We have provided a basis to make such a finding. Without our suggested modifications, we do not believe the findings of compliance can be made.

On page 14, in addition to a 5-year monitoring period, monitoring results should include quantitative assessments of whether access is prevented or predicted to be impeded over the monitoring period and what measures must be taken to prevent loss of access and recreation including but not limited to the removing or relocating the seawall at a more landward location. This could also be triggered by the Encroachment/Removal provisions elsewhere in the LUP.

On page 15, upper- and mid-bluff shoreline protective devices (SPD) will be reassessed every 20 years as well, including monitoring every 5 years. Language should be included in the LUP that impacts created by upper- and mid-bluff SPD will trigger removal or other mitigation based on the degree of the impacts.

On page 34, a scenario is presented as follows:

> "There may be circumstances where existing shoreline armoring cannot be immediately removed when no longer needed to protect the threatened structure that it was constructed to protect."

This type of scenario emphasizes the importance of regular reassessment of seawalls and SPDs to prevent this situation from happening in the first place.

2. Erodible concrete lacks scientific evidence of erodibility and seacave notchfills should be mitigated

We object to the staff's suggested addition to Chapter 4 Hazards and Shoreline Bluff Development (page 10):

> "Infill/Bluff Stabilization – Seacave/Notch Infill (See Appendix B Figure 1A) – This first solution is designed to address sea caves and undercut portions of the lower dense sandstone bluff where the clean sand lens is not yet exposed. If left uncorrected, the sea cave/undercut will eventually lead to block failures of the lower sandstone, exposure of the clean sand lens and landward bluff retreat. This failure exposes the clean sand lens of

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the upper bluff terrace deposits triggering rapid erosion and landward retreat of the upper bluff, which eventually endangers the structures at the top of the bluff. If treated at this stage, the Bluff Retention Device will minimize the need for a future higher seawall and future upper bluff repair. This alternative is not designed as a structural wall, is not reinforced, does not include tiebacks, and uses only erodible concrete which shall erode at the same erosion rate as the surrounding natural bluff material. The infill is required to maintain a textured and colored face mimicking the existing bluff material. Erodible concrete seacave/notch infills are not subject to the sand supply mitigation, public access and recreation mitigation, encroachment/removal agreement, or authorization timeline policies of the LUP."

Concrete has not been demonstrated to erode. In order for concrete to be removed without backhoes or similar equipment, it must be designed to be removed with minimal disruption. Literature from standard setting organizations (ACI 229R-99 from the American Concrete Institute as approved in 2005 http://www.azmag.gov/Documents/pdf/cms.resource/ACI229_-_CLSM46175.pdf) offers the following:

"4.3.7 Excavatability— The ability to excavate Controlled Low Strength Material (CLSM) is an important consideration on many projects. In general, CLSM with a compressive strength of 0.3 MPa (50 psi) or less can be excavated manually. Mechanical equipment, such as backhoes, are used for compressive strengths of 0.7 to 1.4 MPa (100 to 200 psi) (Fig. 4.1). The limits for excavatability are somewhat arbitrary, depending upon the CLSM mixture. Mixtures using high quantities of coarse aggregate can be difficult to remove by hand, even at low strengths. Mixtures using fine sand or only fly ash as the aggregate filler have been excavated with a backhoe up to strengths of 2.1MPa (300 psi). When the re-excavatability of the CLSM is of concern, the type and quantity of cementitious materials is important. Acceptable long-term performance has been achieved with cement contents from 24 to 59 kg/m3 (40 to 100 lb/yd3) and Class F fly ash contents up to 208 kg/m3 (350 lb/yd3). Lime (CaO) contents of fly ash that exceed 10% by weight can be a concern where long-term strength increases are not desired. Because CLSM will typically continue to gain strength beyond the conventional 28-day testing period, it is suggested, especially for high cementitious-content CLSM, that long-term strength tests be conducted to estimate the potential for re-excavatability. In addition to limiting the cementitious content, entrained air can be used to keep compressive strengths low."

No known installation with a mix in the PSI ranges specified has been built in Solana Beach. It would seem appropriate to create a standard instead of accepting anecdotal claims of engineers in saying the concrete erodes at the same rate as the bluffs.

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Homogeneous fills do not mimic erosion rates in heavily faulted and geologically heterogeneous bluffs. Seacave notchfills have the same impact in fixing the back beach. Some seacaves for example are up to 80 feet deep. The filling of these seacaves prevents 80 feet of beach from being created when the cave collapses. Other caves/notches proposed for filling are on the order of 4-15 feet. Given that the driplines of these caves notches remain in place, the net effect is fixing the beach at the dripline. Furthermore, if a the seacave notchfill is consistently maintained, it will have the same overall impact as a seawall in terms of fixing the back beach. Hence mitigation fees should be assessed for seacave notchfills, much as they are for seawalls.

On p 13, we object to the following language in the LUP:

> "The Seacave/Notch Infill shall be designed and constructed...
> 3. To serve its primary purpose which is to delay the need for a larger coastal structure, *and designed to be removable*, to the extent feasible, provided all other requirements under the LCP are satisfied..." (emphasis added)

In addition to our comments above about CLSM, no evidence is in the record other than anecdotal claims that notch and cave fills will be designed to be removed or will have impacts different from a seawall.

On p 36, staff states the following:

> "Suggested modifications require that Figure 1A be modified to consist solely of erodible concrete and not include a high strength concrete face on the seaward portion of the infill. A seacave/notch infill that uses only erodible concrete may be more difficult to treat aesthetically than an infill with a higher strength concrete face, but it will permit the bluff to continue to erode landward resulting in the creation of additional beach area. While an erodible concrete seacave/notch infill may require the need for increased monitoring and maintenance by the property owner to ensure it is functioning as designed, than would be otherwise required with a structural armoring device, the benefits of not fixing the back of the beach, while at the same time forestalling a catastrophic bluff collapse and the possible exposure of the clean sand lens make erodible concrete seacave/notch infills worthwhile."

Again we object to language references 'erodible concrete'. See our previous comments on erodible concrete including the lack of evidence that such infills are designed to erode at the same rate as the bluff when filling caves 80 ft deep or even several feet deep. The bluffline is projected back to the dripline with fills and therefore does not erode at the same rate as the bluff.

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3. Restrictive interpretation of the Coastal Act

On page 18, staff lists only Sections 30235 and 30253 as 'Applicable Coastal Act Policies'. Similarly, on page 31, staff states the following:

> "Section 30235 only authorizes shoreline protection devices when necessary to protect an existing structure in danger of erosion, and shoreline protective devices are no longer authorized by Section 30235 after the existing structures they protect are redeveloped, no longer present, or no longer require armoring. Although shoreline armoring in this case cannot be found consistent with all other applicable provisions of the Coastal Act, *Coastal Act provision 30235 mandates that shoreline armoring shall be approved when required to protect existing structures if specified criteria are met.*" (emphasis added)

We object to this exclusive use of 30235 to mandate shoreline armoring, without also bringing up provisions of the Coastal Act which balance 30235, including all aspects of chapter 3 per 30604c:

> "Every coastal development permit issued for any development between the nearest public road and the sea or the shoreline of any body of water located within the coastal zone shall include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3 (commencing with Section 30200)."

30235 is not an override provision. It should be read in conjunction with the other Chapter 3 policies of the Coastal Act. Blocking access to the shoreline is not permitted under California Coastal Act Section 30604c and the associated Access (California Coastal Act Section 30210-30214) and Recreation (California Coastal Act Section 30220-30224) provisions. Without such protection, no findings for consistency with this provision can be made in support of the LUPA and the specific policies mentioned above.

The balancing provision of 30007.5 should also be cited. When there is a question of protecting Coastal resources, California Coastal Act 30007.5 should be used as the guiding principle for all of our comments.

> "...conflicts may occur between one or more policies of the division....in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources...."

The discussion of 30235 on page 31 shows that staff are still requiring a restrictive interpretation of this Coastal Act section (but they give the reverse scenario for when there

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would be a seawall and no structure to protect, which they could easily fix with language requiring "up to" a 20 year authorization to protect the structure).

This restrictive interpretation of the seawall provision of the Coastal Act may also impair flexibility in future Coastal Commission decisions. It would be wiser and more congruent with the intent of the new Sea Level Rise guidance document to allow for a more flexible interpretation of 30235 that allows for permit conditions such as the City-proposed 20 year authorization period. In fact, on pages 20-21 of the staff report, the Coastal Commission recognizes the need to be pro-active in the face of sea level rise and notes Appendix C of the guidance document includes adaption of measures like "allowing permits to be re-opened after a specified time to assess effectiveness in light of sea level rise or in the event that the structure may no longer be useful or appropriate in the future". And yet, in this very Staff Recommendation, Staff backs away from such a proactive measure by allowing for a longer permit authorization period for seawall, and therefore less flexibility.

In addition to our objections above, we would like to support the following changes:

1. We support the change recommended by staff that minor clarifications be made to Policy 2.60.5 to ensure that all of the private stairways which currently encroach on public beach area are subject to the requirements of the LUP to convert to public stairways if the stairways are replaced or redeveloped in the future.

2. We support the inclusion of section 4.18 of the LUP:

> "Policy 4.18: A legally permitted bluff retention device shall not be factored into setback calculations. Expansion and/or alteration of a legally permitted bluff retention device shall include a reassessment of the need for the shoreline protective device and any modifications warranted to the protective device to eliminate or reduce any adverse impacts it has on coastal resources or public access, including but not limited to, a condition for a reassessment and reauthorization of the modified device in 20 years pursuant to Policy 4.52."

Sincerely,

Jim Jaffee
Co-chair of the Beach Preservation Committee
San Diego County Chapter of the Surfrider Foundation
Resident of Solana Beach

Kristin Brinner

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Beach Preservation Committee Member
San Diego County Chapter of the Surfrider Foundation
Resident of Solana Beach

Julia Chunn-Heer
Policy Manager
San Diego County Chapter of the Surfrider Foundation

The Surfrider Foundation is a non-profit grassroots organization dedicated to the protection and enjoyment of oceans, waves and beaches through a powerful activist network. Founded in 1984 by a handful of visionary surfers in Malibu, California, the Surfrider Foundation now maintains over 50,000 members and 90 chapters worldwide. For an overview of the San Diego Chapter's current programs and events, log on to our website at http://sandiego.surfrider.org/ or contact us at info@surfridersd.org or (858) 622-9661.

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December 20, 2013

Th7d

TO: COMMISSIONERS AND INTERESTED PERSONS

FROM: SHERILYN SARB, DEPUTY DIRECTOR, SAN DIEGO COAST DISTRICT
DEBORAH LEE, DISTRICT MANAGER, SAN DIEGO COAST DISTRICT
ERIC STEVENS COASTAL PROGRAM ANALYST, SD COAST DISTRICT

SUBJECT: STAFF RECOMMENDATION ON CITY OF SOLANA BEACH MAJOR AMENDMENT SOL-MAJ-1-13 for Commission Meeting of January 9, 2013

SYNOPSIS

This item was first brought forward to the Commission at its November, 2013 hearing. At the hearing, the Commission denied certification of the Land Use Plan Amendment (LUPA) as submitted by the City. The Commission subsequently continued the hearing on the item to consider the adoption of suggested modifications and the recently issued Draft Sea Level Rise Guidance Document.

The subject Land Use Plan Amendment (LUPA) was submitted and filed as complete on August 27, 2013. At the November 2013 Commission meeting, the applicant verbally agreed to a one-year time extension. Thus, the date by which the Commission must take action is November 25, 2014.

The subject submittal consists of amendments to only the Land Use Plan portion of the City's LCP. Future certification of an Implementation Plan will be required to fully certify the City's LCP.

SUMMARY OF LUP AMENDMENT

The proposed LUP Amendment (LUPA) #SOL-MAJ-1-13 (Coastal Bluff Development) would amend portions of the recently certified Land Use Plan (LUP) policies and text. The majority of the changes are to Chapter 4 (Hazards and Shoreline/Bluff Development). In addition, the City has proposed changes to portions of Chapter 2 (Public Access and Recreation), Chapter 5 (New Development), Chapter 7 (Public Works), and Chapter 8 (Definitions).

Exhibit 1 shows all of the changes that are proposed by the City to LUP Chapters 2, 4, 5, 7, and 8.

The City proposes to modify the existing LUP policies (Policy Nos. 4.18, 4.47, 4.48, and 4.51) that mandate a 20 year authorization for shoreline armoring by changing the starting date of the 20 year authorizing to the building permit completion certification date rather than the date of the CDP approval. The City is also proposing changes to the LUP policy that establishes the 20 year authorization period for bluff retention devices (Policy 4.52). The existing policy requires that an analysis be done at the end of the 20 year authorization period to determine the continued need for the device and the potential for removal, based on factors that include changed geologic site conditions relative to sea level rise, the age, condition, and economic life of the principal structure on the bluff top and whether the principal structure was existing prior to the implementation of the Coastal Act. The City's changes require an applicant to also analyze the need for repair and maintenance of the bluff retention device in addition to the possibility for removal.

The policy, as revised by the City, would require that the analysis of the device after the 20 year authorization period be based on changed geologic site conditions relative to beach replenishment activities, however, reference to sea level rise and whether the existing structure existed prior to the implementation of the Coastal Act have been removed. Lastly, the City proposes that the applicant only show that the device will "minimize further alteration of the natural landform of the bluff" in place of the current language that requires an applicant to show that the device will "avoid further alteration of the natural landform of the bluff."

In addition, the City has proposed a change to the Land Use Provisions section in Chapter 4 relating to relocation of the threatened portions of existing bluff top homes. The proposal clarifies that for threatened bluff top structures, modification to the building footprint and its foundation further inland "…must be analyzed as a potentially feasible alternative…" in place of the current LUP language that states the option "…will be considered a feasible alternative…" In addition, the City proposes to add language to further clarify the intent of the existing certified LUP relating to the City's preference that mid and upper bluff retention systems only be utilized to protect existing structures in danger from erosion, if all feasible alternative to mid and upper bluff protection have first been excluded.

In Chapter 4, the City also proposes to allow the use of Public Access/Recreation fees for beach replenishment projects if no near term public access/recreation project can be identified and to allow the use of Sand Replenishment fees for Public Access/Recreation projects if no near term sand replenishment project can be identified. In addition, Public Access/Recreation fees are proposed to be allowed to fund a specific improvement project in lieu of a deposit into the Shoreline District Account.

The proposed changes to Chapter 2 of the LUP relate primarily to existing private stairways on the bluff face. The City's changes clarify the options for private stairways if they are proposed to be redeveloped in the future, and include a possible conversion to public stairways. The proposed changes to Chapter 5 of the LUP require that the policies of the LUP be consistent with the Constitution of the State of California and the United States and clarify that existing non-conforming structures not located between the sea and first public road paralleling the sea can be maintained and repaired so long as the

improvements do not increase the degree of non-conformity. The proposed change to Chapter 7 of the LUP was merely to remove any mention of port facilities, due to the fact that the City does not have a port facility within its boundaries. The City's changes to Chapter 8 of the LUP relate to the definition of bluff top redevelopment and propose to replace the reference to interior load-bearing walls in the definition to major structural components, and that alteration to the major structural components are not additive between individual major structural components. In addition, the City proposes to add a definition for "Caisson Foundation" and for "Cantilever"; however, the City is not proposing any changes to existing policies relating to these types of development.

The proposed changes to Chapter 4 also include a change to Exhibit Nos. 4-1 through 4-5, which show the approximate bluff edge, 25' setback, 40' setback, and the Geologic Setback Line (GSL). The proposed change replaces the current description of the Geologic Setback Line (GSL) in the key for each exhibit. The description currently states "*=RECOMMENDED COASTAL COMMISSION SETBACK (40' + 75yrs @ .4ft/yrs).*" The proposed new language states "*=GSL (APPROX.) GSL – GEOLOGIC SETBACK LINE; ACTUAL GEOLOGIC SETBACK LINE TO BE DETERMINED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN POLICY SECTION 4.25 OF THE CITY OF SOLANA BEACH LUP*."

Exhibit Nos. 4-1 through 4-5 of the certified LUP can be accessed via the following webpage on pages 3-7. A high speed internet connection is recommended to view this site. In addition, reduced black and white versions of Exhibit Nos. 4-1 through 4-5 are included as Exhibit 2 to this report.

http://solana-beach.hdso.net/LCPLUP/LCPLUP-Chapter4.pdf

SUMMARY OF STAFF RECOMMENDATION

At the last hearing, the Commission denied the proposed LUP amendment as submitted. Staff is recommending approval of the LUP amendment with suggested modifications.

The City's LUP amendment, as submitted, relates almost entirely to the single family homes and condominium complexes on the bluff top, at or near the bluff edge, along the shoreline in the City of Solana Beach. The City's LUP, as certified by the Commission, identifies the elements of a comprehensive shoreline management plan for the City of Solana Beach. In terms of an overview, the following modifications are needed to approve the LUP amendment consistent with the Chapter 3 policies of the Coastal Act. The outstanding issues and concerns are cited here, along with a brief summation of proposed modifications:

- Staff is recommending that minor clarifications be made to Policy 2.60.5 to ensure that all of the private stairways which currently encroach on public beach area are subject to the requirements of the LUP to convert to public stairways if the stairways are replaced or redeveloped in the future (Suggested Modification 1).

- Subsequent to the certification of the City's LUP, it became apparent that some uncertainty remained regarding the intent of the LUP policies related to seacave and notch infills. The modifications suggested by staff to the description of seacave/notch infill and the related policy do not change the intent of the certified LUP. The changes are proposed to provide additional clarity regarding the options available to address coastal bluff stability (Suggested Modifications 2, 3, and 4).

- Replacement text stating "encroachment/removal agreement" has been made to the LUP in all places where "encroachment/removal agreement" or "encroachment agreement" is used. This change addresses a concern by the City that encroachment agreements are only required where private development occurs on public property or in the public right-of-way, while a removal agreement can be required where private development occurs on private property (Suggested Modification 5).

- It has been the experience of the Commission that when the mid and upper coastal bluff is reconstructed with a geogrid structure, hydroseeding alone is not an effective method to vegetate the bluff. Staff is recommending that, consistent with standard Commission practice on CDPs, container planting be used in addition to hydroseeding of coastal bluffs, following construction of mid and upper bluff geogrid structures (Suggested Modification 6).

- The vast majority of the seawalls, if not all the seawalls in Solana Beach, are located on either City-owned beach or public tidelands. In addition, the majority of the bluff area in Solana Beach seaward of the bluff edge and to the north of Fletcher Cove is also publicly-owned land. One concern regarding a possible future scenario for Solana Beach is, if the entire shoreline is armored and sea level rises, there may no longer be a public beach. In the future, it may no longer be possible to provide adequate mitigation for the impacts that shoreline armoring causes to public beaches.

  A long-term goal to address sea level rise would be to provide for removal of existing shoreline armoring when the development requiring protection no longer exists or has been moved further landward, to allow the bluff to naturally erode landward and create additional public beach area. In association with new development or redevelopment, pursuant to the current LUP, the applicant must waive any rights to new or additional protective devices. This requires an acknowledgment by the property owner that the residence will be removed incrementally as portions become threatened, rather than rely on protective devices that alter the natural landform of the public bluff and prevent formation of the public beach.

The proposed LUP amendment has provided an opportunity to more clearly address the potential redevelopment of properties in Solana Beach with particular attention to establishing a linkage between any existing protective device and the existing residential structure it was designed to protect. A key component of the approved LUP is that existing shoreline armoring must be reassessed every 20 years and that the shoreline armoring is subject to an encroachment removal agreement approved by the City.

Staff is recommending that in place of a fixed 20 year authorization period, that the timeframe for authorization of permits for new seawalls, or alterations or expansion of existing seawalls, be as long as the structure requiring protection still exists. Also the property owner would be required to provide mitigation for impacts, including but not limited to, public access and sand supply, for 20-year mitigation periods. Reassessment of the approved protective structure would occur at the end of the original and subsequent 20-year mitigation periods.

As revised, the policies would provide a way to address inherent uncertainties, including those related to the lifetime of development being protected by the armoring, changed circumstances and mitigation requirements. As modified, through waiver of any rights to new protective structures upon redevelopment of the property and the encroachment removal agreement from the City, removal of existing seawalls and seawalls that may be constructed in the future remains a viable option in the future to assure the use of the entire public beach is not lost as a result of continued sea level rise and the shoreline armoring that protects private bluff top structures (Suggested Modifications 7-11).

- The City has proposed amendments to the existing definition of 'Bluff Top Redevelopment' to remove reference to interior load-bearing walls and instead to focus on major structural elements of the home. Suggested modifications clarify that alterations are cumulative for individual major structural components and that additions are also cumulative over time. The City also proposes to add a definition of 'Cantilever' to the LUP to allow a maximum 10 foot western cantilever to bluff top development provided that the foundational support is located landward of the geologic setback line/rear yard setback. The Commission supports the City's proposed 'Cantilever' addition. However, a suggested modification replaces the term "rear yard setback" with "bluff edge setback (minimum 40 feet)" in order to clarify the definition and be consistent with the certified LUP (Suggested Modifications 12 and 13).

Exhibit 3 includes all of the changes that are proposed by the City and all of the suggested modifications by Staff shown within the entirety of Chapter 4 of the LUP.

The appropriate resolutions and motions begin on Page **9**. The suggested modifications begin on Page **10**. The findings for approval of the Land Use Plan Amendment if modified, begin on Page **17**.

ADDITIONAL INFORMATION

Further information on the Solana Beach LUP amendment SOL-MAJ-1-13 may be obtained from Eric Stevens, Coastal Planner, at (619) 767-2370.

PART I. OVERVIEW

A. LCP HISTORY AND SUBMITTAL

The City of Solana Beach is within the area that was covered by the County of San Diego Local Coastal Program, which covered the north central coast of San Diego County including the areas of Solana Beach, Leucadia, Encinitas, Cardiff, and other unincorporated communities.

The County LCP Land Use Plan, which comprised approximately 11,000 acres, was approved by the San Diego Regional Coast Commission on March 13, 1981. Subsequently, on May 21, 1981, the State Commission certified the LUP with suggested modifications. After three resubmittals, the Commission certified the LUP on August 23, 1984. On September 26, 1984, the Commission certified, with suggested modifications, the Implementation Plan portion of the County's LCP. Subsequently, the County resubmitted for Commission review the Implementation Plan incorporating the Commission's previously suggested modifications, with the exception of that portion of the plan dealing with the coastal bluff areas. On November 22, 1985, the Commission voted to certify the Implementation Plan for the County, except for coastal bluff lots affected by the Coastal Development Area Regulations, where certification was deferred.

On July 1, 1986 and October 1, 1986, the Cities of Solana Beach and Encinitas incorporated, reducing the remaining incorporated area of the County within the coastal zone to less than 2,000 acres. Because of these incorporations, the County indicated that it did not plan to assume coastal permit-issuing authority for the remaining acreage, and the County LCP never became "effectively certified."

The Commission, Commission staff, and the City of Solana Beach then collaborated to develop a Land Use plan for over a decade. At the Commission meeting of March 7, 2012, the Commission reviewed the City of Solana Beach LUP. In its action, the Commission denied as submitted, then approved the land use plan with suggested modifications that cover a broad range of topics, and include such things as standards for bluff top development, additional definitions, clarifications in language to ensure protection for visitor-serving commercial uses, overnight accommodations, environmentally sensitive habitat, visual resources, water quality, and shoreline sand supply. The LUP includes a comprehensive set of policies that address proposals for improvements to and redevelopment of the existing homes located along the blufftop, including long-term shoreline and blufftop development standards that deter the complete armoring and hardening of the City's bluffs, require alternatives analysis and site reassessment when considering any approval or reauthorization of lower, mid or upper bluff protective work; restrict additions and improvements to non-conforming structures that perpetuate an inappropriate line of development in a hazardous location; and clarify what legitimate repair/maintenance activities can continue on non-conforming blufftop residences. Revised findings were adopted by the Commission on June 14, 2012.

The Land Use Plan was subsequently adopted by the Solana Beach City Council on February 27, 2013 with all of the suggested modifications approved by the Commission.

The Solana Beach City Council then approved an amendment to the Land Use Plan at a hearing on May 22, 2013, which is now before the Commission for review (Exhibit 4).

The current submittal is comprised in a binder, entitled Draft Amendment Local Coastal Program Land Use Plan City of Solana Beach, and dated July 11, 2013; the binder includes two separate documents incorporating proposed LUP changes. The first document incorporates changes to the LUP that were circulated for a 6-week public comment period and approved by the Council on May 22, 2013 and the second document incorporates the changes approved by the Council and additional changes to the LUP made by the City Manager subsequent to Council adoption of the LUP. On September 11, 2013 the Council passed a resolution which authorized the City Manager to revise or amend the LUP amendment language and also mandated that any suggested modifications adopted by the Commission would not take effect until such time that the LUP amendment returned to the Council for Council approval (Exhibit 5). Following the Council's resolution, on September 12, 2013, the City provided Commission staff with proposed LUP amendment language incorporating both the changes approved by the Council and additional changes proposed by the City Manager. On October 24, 2013, the City provided updated proposed LUP amendment language that consisted of the deletion of various changes that had been proposed in the previous submittal. As a result of the Council's action on September 11, 2013, the Commission will review the proposed LUP amendment provided by the City on October 24, 2013 that includes both the changes approved by the Council on May 22, 2013 and the subsequent changes made by the City Manager (Exhibit 1).

B. STANDARD OF REVIEW

The standard of review for land use plans, or their amendments, is found in Section 30512 of the Coastal Act. This section requires the Commission to certify an LUP or LUP amendment if it finds that it meets the requirements of Chapter 3 of the Coastal Act. Specifically, it states:

Section 30512

> *(c) The Commission shall certify a land use plan, or any amendments thereto, if it finds that a land use plan meets the requirements of, and is in conformity with, the policies of Chapter 3 (commencing with Section 30200). Except as provided in paragraph (1) of subdivision (a), a decision to certify shall require a majority vote of the appointed membership of the Commission.*

Therefore, the Commission shall take action by a majority vote of the appointed membership of the Commission.

C. PUBLIC PARTICIPATION

The City has held City Council meetings with regard to the subject amendment request. All of those local hearings were duly noticed to the public. Notice of the subject amendment has been distributed to all known interested parties.

PART II. LOCAL COASTAL PROGRAM SUBMITTAL - RESOLUTIONS

Following a public hearing, staff recommends the Commission adopt the following resolution and findings. The appropriate motion to introduce the resolution and a staff recommendation are provided just prior to the resolution.

I. MOTION: ***I move that the Commission certify the Land Use Plan Amendment for the City of Solana Beach if modified in accordance with the suggested modifications set forth in the staff report.***

STAFF RECOMMENDATION: CERTIFICATION IF MODIFIED AS SUGGESTED:

Staff recommends a **YES** vote on the motion. Passage of the motion will result in certification with suggested modifications of the submitted land use plan amendment and the adoption of the following resolution and findings. The motion passes only by an affirmative vote of a majority of the appointed Commissioners.

RESOLUTION TO CERTIFY SUBMITTED LAND USE PLAN AMENDMENT IF MODIFIED AS SUGGESTED:

The Commission hereby certifies the Land Use Plan Amendment for the City of Solana Beach and finds for the reasons discussed herein that, if modified as suggested below, the Land Use Plan Amendment will meet the requirements of and conform to the policies of Chapter 3 of the California Coastal Act. Certification of the plan if modified as suggested below 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 plan on the environment, or 2) there are no further feasible alternatives or mitigation measures which could substantially lessen any significant adverse impact which the Land Use Plan Amendment may have on the environment.

PART III. SUGGESTED MODIFICATIONS

Staff recommends the following suggested modifications to the proposed Land Use Plan amendment be adopted. The **bold underline** sections represent language that the Commission suggests be added, and the ~~**bold strikethrough**~~ sections represent language which the Commission suggests be deleted from the language as originally submitted. Language shown in underline and ~~strikethrough~~ represents the language that the City proposes to change through the LUPA.

Language shown in **~~bold underline and bold strikethrough~~** is a change proposed by the City and deleted by Commission. LUP Policy numbers are also shown in **bold underline**, but are not Commission changes. Some headings are also shown in **bold**, but are not Commission changes.

Chapter 2 Public Access and Recreation

1. Policy 2.60.5 shall be revised as follows:

Policy 2.60.5: Upon application for a **coastal development** permit for the replacement of a private beach stairway or replacement of greater than 50% thereof, private beach accessways **shall ~~may~~** be converted to public accessways where feasible and where public access can be reasonably provided. The condition to convert the **private** stairway to a public stairway **shall ~~may~~** only be applied where all or a portion of the stairway utilizes public land **, private land subject to a public access deed restriction** or **private land subject to** a public access easement.

Chapter 4 Hazards and Shoreline Bluff Development

2. The following paragraph shall be added prior to the first bullet point on page 13:

- **Infill/Bluff Stabilization – Seacave/Notch Infill (See Appendix B Figure 1A) – This first solution is designed to address sea caves and undercut portions of the lower dense sandstone bluff where the clean sand lens is not yet exposed. If left uncorrected, the sea cave/undercut will eventually lead to block failures of the lower sandstone, exposure of the clean sand lens and landward bluff retreat. This failure exposes the clean sand lens of the upper bluff terrace deposits triggering rapid erosion and landward retreat of the upper bluff, which eventually endangers the structures at the top of the bluff. If treated at this stage, the Bluff Retention Device will minimize the need for a future higher seawall and future upper bluff repair. This alternative is not designed as a structural wall, is not reinforced, does not include tiebacks, and uses only erodible concrete which shall erode at the same erosion rate as the surrounding natural bluff material. The infill is required to maintain a textured and colored face mimicking the existing bluff material. Erodible concrete seacave/notch infills are not subject to the sand supply mitigation, public access and recreation mitigation, encroachment/removal agreement, or authorization timeline policies of the LUP.**

3. "Figure 1A" shall be added as the first figure in Appendix B of the LUP (Reference Exhibit 6, provided by the City on 10/24/2013). However, the figure shall be modified to depict a seacave/notch infill that consists solely of erodible concrete with comparable erosion parameters as the adjacent bluff and shall not include a higher strength concrete face on the seaward portion of the infill. The figure shall be re-titled "Preferred Solution – Seacave/Notch Infill"

4. The description of 'Infill/Bluff Stabilization' on page 13 shall be revised as follows:

- **Infill/Bluff Stabilization – Lower Seawall (See Appendix B Figure 1)** – This ~~**first**~~ solution is designed to address sea caves and undercut portions of the lower dense sandstone bluff where the clean sand lens is not yet exposed. If left uncorrected the sea cave/undercut will eventually lead to block failures of the lower sandstone, exposure of the clean sand lens and landward bluff retreat. This failure exposes the clean sand lens of the upper bluff terrace deposits triggering rapid erosion and landward retreat of the upper bluff, which eventually endangers the structures at the top of the bluff. If treated at this stage, the bluff retention system will minimize the need for a future higher seawall and future upper bluff repair. This stabilization method is designed as a structural wall and will be reinforced, have structural tiebacks into the sandstone bedrock and will be required to have a textured face mimicking the existing material.

5. At the request of the City, on pages 15 and 31 of Chapter 4 of the LUP, "encroachment removal agreement" shall be modified to instead state "encroachment /removal agreement" and on page 34 of Chapter 4 the LUP, "encroachment agreement" shall be modified to instead state "encroachment /removal agreement".

6. The last sentence of the description of 'Seawall and Upper Bluff Repair' on page 13 shall be revised as follows:

- …The lower seawall is textured to simulate the existing bluff material and the upper soil is similar to the existing soil and is hydro-seeded **and planted with container plantings consisting of** ~~**with**~~ native, drought tolerant, non-invasive, and salt tolerant vegetation.

7. Policy 4.18 shall not be deleted, as proposed by the City, and the original policy shall instead be revised as follows:

Policy 4.18: A legally permitted bluff retention device shall not be factored into setback calculations. Expansion and/or alteration of a legally permitted bluff retention device shall include a reassessment of the need for the shoreline protective device and any modifications warranted to the protective device to eliminate or reduce any adverse impacts it has on coastal resources or public access, including but not limited to, a condition for a reassessment and reauthorization of the modified device ~~**in 20 years**~~ **pursuant to Policy 4.52.**

8. Policy 4.47 shall be revised as follows:

Policy 4.47: A Seacave/Notch Infill shall be approved only if all the findings set forth below can be made and the stated criteria satisfied. ~~**The permit shall be valid for a period of 20 years commencing with the** date of CDP approval **building permit completion certification date and subject to an encroachment removal agreement approved by the City.**~~

A. Based upon the advice and recommendation of a licensed Geotechnical or Civil Engineer, the City makes the findings set forth below:

1. The Seacave/Notch Infill is more likely than not to delay the need for a larger coastal structure or upper bluff retention structure, that would, in the foreseeable future, be necessary to protect an~~d~~ existing principal structure, City facility, and/or City infrastructure, from danger of erosion. Taking into consideration any applicable conditions of previous permit approvals for development at the site, a determination must be made based on a detailed alternatives analysis that none of the following alternatives to the coastal structure are currently feasible, including:

   - Controls of surface water and site drainage;
   - A smaller coastal structure; or
   - Other non-beach and bluff face stabilizing measures, taking into account impacts on the near and long term integrity and appearance of the natural bluff face, and contiguous bluff properties; and,

2. The bluff property owner did not create the necessity for the Seacave/Notch Infill by unreasonably failing to implement generally accepted erosion and drainage control measures, such as reasonable management of surface drainage, plantings and irrigation, or by otherwise unreasonably acting or failing to act with respect to the bluff property. In determining whether or not the bluff property owner's actions were "reasonable," the City shall take into account whether or not the bluff property owner acted intentionally, with or without knowledge, and shall consider all other relevant credible scientific evidence as well as relevant facts and circumstances.

3. The location, size, design and operational characteristics of the proposed seacave/notch infill will not create a significant adverse effect on adjacent public or private property, natural resources, or public use of, or access to, the beach, beyond the environmental impact typically associated with a similar bluff retention device and the seacave/notch infill is the minimum size necessary to protect the principal structure, and has been designed to minimize all environmental impacts, and provides mitigation for all coastal and environmental impacts as provided for in this LCP.

B. The Seacave/Notch Infill shall be designed and constructed:

1. To avoid migration of the Seacave/Notch Infill onto the beach;

2. To be re-contoured to the face of the bluff, as needed, on a routine basis, through a CDP or exemption, to ensure the seacave/notch infill conforms to the face of the adjoining natural bluff over time, and continues to meet all relevant aesthetic, and structural criteria established by the City;

3. To serve its primary purpose which is to delay the need for a larger coastal structure, and designed to be removable, to the extent feasible, provided all other requirements under the LCP are satisfied; and,

4. To satisfy all other relevant LCP and City Design Standards, set forth for ~~**coastal structures**~~ **Bluff Retention Devices**.

~~C. The Bluff Property Owner shall arrange for and pay the costs of:~~

~~1. The licensed Geotechnical or Civil Engineer; and~~

~~2. The Seacave/Notch Infill~~

~~3. Appropriate mitigation~~

~~4. All necessary repairs, maintenance, and if needed removal.~~

~~C~~D.~~**Only to the extent the City finds that the Seacave/Notch Infill encroaches on the public beach or upon the bluff face such that coastal resources are adversely impacted, then the City shall impose a Sand Mitigation Fee upon the bluff property owner.**~~

9. Policy 4.48 shall be revised as follows:

Policy 4.48~~51~~: Coastal structures shall be approved by the City only if all the following applicable findings can be made and the stated criteria satisfied. The permit shall be valid **until the currently existing structure requiring protection is redeveloped (per definition of Bluff Top Redevelopment in the LUP), is no longer present, or no longer requires a protective device, whichever occurs first** ~~**for a period of 20 years commencing with the building permit completion certification date** date of CDP approval~~ and subject to an encroachment~~-~~/removal agreement approved by the City.

[…]

C. Mitigation for the impacts to shoreline sand supply, public access and recreation and any other relevant coastal resource impacted by the coastal structure is required and shall be assessed in 20-year increments, starting with the building permit completion certification date. Property owners shall apply for a CDP amendment prior to expiration of each 20-year mitigation period, proposing mitigation for coastal resource impacts associated with retention of the coastal structure beyond the preceding 20-year mitigation period and shall include consideration of alternative feasible measures in which the permittee can modify the coastal structure to lessen the coastal structure's impacts on coastal resources. Monitoring reports to the City and the Coastal Commission shall be required every five years from the date of CDP issuance until CDP expiration, which evaluate whether or not the coastal structure is still required to protect the existing structure it was designed to protect. The permittee is required to submit a CDP application to remove the authorized coastal structure within six months of a determination that the coastal structure is no longer required to protect the existing structure it was designed to protect.

10. The first paragraph of Policy 4.51 shall be revised as follows:

Policy 4.51~~4~~: An upper bluff system shall be approved only if all the following applicable findings can be made and the stated criteria will be satisfied. The permit shall be valid **until the currently existing structure requiring protection is redeveloped (per definition of Bluff Top Redevelopment in the LUP), is no longer present, or no longer requires a protective device, whichever occurs first** ~~**for a period of 20 years commencing with the building permit completion certification date** date of CDP approval~~ and subject to an encroachment~~-~~**/removal** agreement approved by the City.

[…]

D. Mitigation for the impacts to shoreline sand supply, public access and recreation and any other relevant coastal resource impacted by the upper bluff system is required and shall be assessed in 20-year increments, starting with the building permit completion certification date. Property owners shall apply for a CDP amendment prior to expiration of each 20-year mitigation period, proposing mitigation for coastal resource impacts associated with retention of the upper bluff system beyond the preceding 20-year mitigation period and shall include consideration of alternative feasible measures in which the permittee can modify the upper bluff system to lessen the upper bluff system's impacts on coastal resources. Monitoring reports to the City and the Coastal Commission shall be required every five years from the date of CDP issuance until CDP expiration, which evaluate whether or not the upper bluff system is still required to protect the existing structure it was designed to protect. The permittee is required to submit a CDP application to remove the authorized upper bluff system within six months of a determination that the upper bluff system is no longer required to protect the existing structure it was designed to protect.

11. Policy 4.52 shall be revised as follows:

Policy 4.52~~5~~: All permits for bluff retention devices shall expire ~~**20 years after** approval of the CDP, **the building permit completion certification date,**~~ **when the currently existing blufftop structure requiring protection is redeveloped (per definition of Bluff Top Redevelopment in the LUP), is no longer present, or no longer requires a protective device, whichever occurs first** and a new CDP must be obtained. Prior to expiration of the permit, the bluff top property owner shall apply for a coastal development permit to remove, modify or retain the protective device. In addition, expansion and/or alteration of a legally permitted existing bluff retention device shall require a new CDP **and be subject to the requirements of this policy.**

The CDP application shall include a re-assessment of need for the device, the need for any repair or maintenance of the device, and the potential for removal based on changed conditions. The CDP application shall ~~evaluate~~ include an evaluation of:

- ~~the~~The age, condition and economic life of the existing principal structure;
- changed geologic site conditions **including but not limited to, changes relative to sea level rise, ~~including~~** implementation of ~~**the City's long-term USACE beach nourishment program or similar**~~ **a** long-term, large scale sand replenishment or shoreline restoration program; and
- any impact to **coastal resources, including but not limited to** public access and recreation.

~~relative to sea level rise and the age, condition, and economic life of principal structure including whether it was an existing structure on January 1, 1977 (prior to implementation of the Coastal Act). Prior to expiration of the permit, the bluff top property owner shall apply for a coastal development permit to either remove or retain the protective device.~~ The CDP shall include a condition **requiring ~~of~~** reassessment **~~and reauthorization~~ of the impacts** of the device in 20-year**~~s~~ mitigation periods pursuant to Policies 4.48 and 4.51**.

No permit shall be issued for retention of a bluff retention device unless the City finds that the bluff retention device is still required to protect an existing principal structure **in danger from erosion**, that it will minimize ~~avoid~~ further alteration of the natural landform of the bluff, and that adequate mitigation for **coastal resource** impacts**, including but not limited to impacts** to the public beach has been provided.

Chapter 8 –Definitions

12. The definition of 'Bluff Top Redevelopment' shall be revised as follows:

Bluff Top Redevelopment: Shall apply to **~~structures~~ proposed development** located between the sea **~~and the inland extent of the sea~~** and the first public road paralleling the sea (or lagoon) that consist**s** of **alterations including** (1) additions **to an existing structure,~~;~~** (2) exterior and/or interior renovations**~~;~~** (3) **and/**or demolition of an existing bluff home or other principal structure**, or portions thereof,** which results in:

~~(1) Alteration of 50% or more of an existing structure, including but not limited to, alteration of 50% or more of exterior walls, interior load-bearing walls, or a combination of both types of walls, or a 50% increase in floor area.; or~~

~~(2) Demolition, renovation or replacement of less than 50% of an existing structure where the proposed remodel would result in cumulative alterations exceeding 50% or more of the existing structure from the date of certification of the LUP.~~

(**~~1~~a**) Alteration of 50% or more of major structural components **including exterior walls, floor and roof structure, and foundation,** ~~;~~ or ~~(2)~~ a 50% increase in floor area. Alterations are not additive **~~or cumulative~~** between individual major structural components; however, changes to individual major structural components are cumulative over time from the date of certification of the LUP.

(b) Demolition, renovation or replacement of less than 50% of a major structural component where the proposed alteration would result in cumulative alterations exceeding 50% or more of a major structural component, taking into consideration previous alterations approved on or after the date of certification of the LUP; or an alteration that constitutes less than 50% increase in floor area where the proposed alteration would result in a cumulative addition of greater than 50% of the floor area, taking into consideration previous additions approved on or after the date of certification of the LUP.

13. The definition of 'Cantilever' shall be revised as follows:

Cantilever: A projecting or overhanging structure of up to 10 feet in depth on the west side of a Bluff Home that is supported at one end and carries a load at the other end or along its length. Cantilever construction allows for structures to project seaward of the GSL or ~~**rear yard**~~ **bluff edge** setback **(minimum 40 feet)** without external bracing. All foundation footings and structural supports for cantilevered square footage shall be located landward of the geologic setback line ~~/**rear yard**~~ **or bluff edge** setback **(minimum 40 feet)**. No newly constructed cantilevered square footage is permitted to project over the bluff edge.

PART IV. FINDINGS FOR DENIAL OF CERTIFICATION OF THE SOLANA BEACH LAND USE PLAN, AS SUBMITTED, AND APPROVAL, AS MODIFIED

The Commission finds and declares as follows:

1. Hazards/Shoreline Protection

a. Plan Summary. The City of Solana Beach has approximately 1.4 miles of shoreline consisting of steep bluffs, and bluff stability is a significant concern along the entire coastal bluff area. The shoreline policies are intended to regulate the construction of shoreline protective devices and to allow appropriate protection for existing bluff top structures, consistent with Coastal Act requirements, as implemented through the LUP.

The City is primarily proposing to amend LUP policies related to shoreline protection and development. The bulk of the policies dealing with shoreline development are contained in Chapter 4 (Hazards & Shoreline/Bluff Development) of the LUP, although some relevant policies are in Chapter 5 (New Development) and in Chapter 8 (Definitions). The current LUP policies address preferred types of bluff retention devices, sand mitigation fees and a public recreation payment, non-conforming structures, bluff top development strategies, standards for new bluff top development, policies on additions to existing structures on bluff tops, repair and maintenance of bluff top structures, and policies for demolition and reconstruction of blufftop homes. The LUP also provides criteria for when and how various types of shoreline protective devices can be approved.

The adopted revised findings staff report for the currently certified Solana Beach LCP Land Use Plan approved by the Commission June 14, 2012 can be found here:

http://documents.coastal.ca.gov/reports/2012/6/Th24a-6-2012.pdf

b. Applicable Coastal Act Policies

Section 30235

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

Section 30253

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.

(4) Minimize energy consumption and vehicle miles traveled.

(5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

c. Conformity with Chapter 3 Policies.

As background, in Chapter 8 (Definitions), the City defines “Bluff Retention Devices” as including all forms of shoreline protection, from seacave/notch infills, to seawalls, to mid and upper bluff protection. “Seacave/Notch Infill” refers to filling of a seacave, notch, joint, fault, rupture or crack in the bluff, “Coastal Structures” refers only to structures located at the base of the bluff (seawall, revetment, or riprap), and “Upper Bluff System” is a device to retain the portion of the bluff located above areas subject to erosion. This staff report uses the City’s terminology as appropriate, although “shoreline protection” and “shoreline armoring” are also used throughout the LUP and this report to generically refer to all forms of shoreline and bluff structures used to protect existing blufftop structures from erosion.

Ownership

Although, site specific anomalies may exist along the coast in Solana Beach, the area seaward of the toe of the bluff is public along the City's entire coastline and the area located between the bluff edge and the toe of the bluff south of Fletcher Cove is private, while the area located between the bluff edge and the toe of the bluff north of Fletcher Cove is for the most part, public[1] (Exhibit 11).

Throughout the majority of Solana Beach, the area between the toe of the bluff and the ocean is most likely Public Trust Lands. Public Trust Lands can include, but are not limited to tide lands[2] and submerged lands. Public Trusts Lands can also include historic tidelands and submerged lands that are presently filled or reclaimed and which were subject to the Public Trust at any time (Public Resources Code 13577). In the City of Solana Beach, the Mean High Tide Line (MHTL) is at the toe of the bluff. The City has received substantial beach nourishment over the past decade which has raised the sand level on the beach and resulted in the high tide not reaching the toe of the bluff as frequently in some locations. In these locations, the beach replenishment projects do not change the MHTL and the MHTL is still likely at the toe of the bluff. Public Resources Code 13577 defines the MHTL "…as the statistical mean of all the high tides over the cyclical period of 18.6 years…" Based on the location of the MHTL, any existing or future seawall or seacave/notch infill is likely on public land.

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[1] In 1988 the City of Solana Beach approved a resolution to allow the transfer of publicly owned coastal bluff face to each blufftop homeowner whenever development on the blufftop lot was proposed (Resolution No. 88-45). The purpose of the resolution was to transfer the liability associated with the eroding bluff and any future shoreline device to the blufftop homeowner. Since 1988, the City has created and quitclaimed approximately 6 or 7 bluff face lots to the blufftop property owners. Land divisions such as the "carving out" of lots from publicly owned land constitutes development under the Coastal Act and requires a coastal development permit. The Commission has approved approximately two coastal development permits for these quitclaimed lots (Ref: CDP Nos. 6-91-129/Steinberg; 6-92-082/Vicker). However, coastal development permits have not been approved for the majority of these quitclaimed lots and, therefore, the majority of these quitclaimed lots are unpermitted. The Commission subsequently stopped approving such transfer and gift of public land by the City due to Coastal Act consistency concerns related to scenic resources, public access, recreation and shoreline sand supply (Ref: CDP #6-06-104/Vams, LLC).

[2] [1] Tidelands include "those lands lying between the lines of mean high tide and mean low tide which are covered and uncovered successively by the ebb and flow thereof." (*Lechuza Villas West v. CA Coastal Commission* (1997) 60 Cal.App.4th 218, 235). The State owns all tidelands and holds such lands in trust for the public. (*Id.; State of Cal. Ex rel. State Lands Com. V. Superior Court* (1995) 11 Cal.4th 50, 63; California Civil Code section 670). "The owners of land bordering on tidelands take to the ordinary high water mark. The high water mark is the mark made by the fixed plan of high tide where it touches the land; as the land along a body of water gradually builds up or erodes, the ordinary high water mark necessarily moves, and thus the mark or line of mean high tide, i.e., the legal boundary, also moves." (*Lechuza*, 60 Cal.App.4th at 235). In other words, the boundary between private property and public tidelands is an ambulatory line. (*Id*. at 242.)

Consistency with the "California Coastal Commission Draft Sea-Level Rise Policy Guidance"

On October 14, 2013, the Commission released a document titled "California Coastal Commission Draft Sea-Level Rise Policy Guidance" out for public review. The information in the guidance document is rooted in certain fundamental guiding principles, many of which derive directly from the requirements of the Coastal Act. In this respect, the principles are not new, but rather generally reflect the policies and practices of the Commission since its inception in addressing coastal hazards and the other resource and development policies of the Act. The draft guidance document acknowledges that climate change is causing the sea level to rise along the coast of California and that the Commission and coastal communities must prepare for the effects of sea-level rise. The guidance document further recognizes the potential risks to the State of California's economy, which includes coastal tourism, commercial fisheries, coastal agriculture, and ports. Furthermore, the guidance document recognizes the risks to coastal property, coastal infrastructure, and public beaches and recreational resources. The document includes pro-active steps that can be taken by the Commission, local governments, permit applicants and other interested parties to prepare for sea level rise in the context of the LCP and the CDP process.

The guidance document is particularly relevant to the subject LCP amendment in terms of shoreline armoring. As discussed in the guidance document, shoreline armoring has the potential to lead to loss of public beaches as the sea level rises and beaches are no longer able to retreat landward. Siting new development in locations that will not require a seawall in the future and limiting the retention of existing seawalls and the construction of new seawalls, when feasible, will help to ensure maximum public access to the coast. Furthermore, the guidance document stresses the importance of ensuring that property owners assume the risk of development in hazardous areas throughout the life of the development, which includes risks to both private property and to adjacent coastal resources that may be adversely impacted.

In order to ensure that coastal resources are protected, adequate mitigation for all impacts to public coastal resources must be provided (i.e. public access, sand supply, biological value, visual aspects, etc.). Section IV of the guidance document, which is intended to aid the Commission and local governments in addressing sea level rise in local coastal programs, identifies adaptation measures to minimize risks of new development. The adaptation measures include, in part, adding conditions to shoreline protective devices that limit authorization for the device to the life of the existing development being protected and requiring mitigation for unavoidable public resource impacts of shoreline structures. Additional adaptation measures are contained in Appendix C of the guidance document and include, in part, conditionally permitting shoreline protection structures to require removal or modification of armoring in the future if the need for protection or site conditions change; discouraging the use of 'hard' protection unless no other feasible alternative is available and requiring designs that address or can be adapted to changing sea level; offering incentives for removal of 'hard' structures and/or incorporating removal of 'hard' structures into Capital Improvement Plans; allowing permits to be re-

opened after a specified time to assess effectiveness in light of sea level rise or in the event that the structure may no longer be useful or appropriate in the future; and requiring that property owners waive rights to future shoreline protection and instead require removal or relocation of structures built in hazardous areas if threatened by erosion/sea level rise in the future. The City's certified LUP and the proposed LUP amendment, as modified, incorporate many of the adaptation measures contained within the "California Coastal Commission Draft Sea-Level Rise Policy Guidance."

Shoreline Hazards

The bluffs and beaches in the City of Solana Beach are public natural resources and a source of public recreational opportunities, public accessways, natural habitat, and an important part of the City's natural beauty. Solana Beach's shoreline has been almost completely built out; there is only one vacant bluff top lot in the entire City. Most of the existing structures located along the City's bluff tops were built in a location that is now considered at risk from shoreline erosion. This is due in part to the distinctive geology of Solana Beach's shoreline.

New Development/Redevelopment of Blufftop Lots - Current Development Patterns:

Due to the fact that many if not all of the existing single family bluff top homes are now located too close to the bluff edge, if they remain in their existing location, they are currently or will likely ultimately be subject to threat from coastal bluff erosion. The LUP, as certified, contains policies which encourage moving the line of residential development further landward to avoid armoring of the coastal bluff from top to toe. Through review of the historic pattern of development, it is clear there are limitations to the extent of improvements that should be permitted to existing structures in their current location. Extensive renovation within the existing footprint would perpetuate the need for bluff retention devices to stabilize the structure in that location. A preferred scenario is to gradually move the line of development inland, through removal of threatened portions, or complete redevelopment of the structures, to avoid impacts to the adjacent coastal resources of the beach and bluffs associated with shoreline armoring.

The City has provided Exhibit 8 to illustrate three examples of existing bluff top homes with the largest, average, and smallest front yard setback from the street and rear setback from the bluff edge.

There are currently 53 bluff top single family residences in the City of Solana Beach all located north of Fletcher Cove Beach Park. Of the 53 homes, approximately 35 homes (~70%) have a lower seawall at the base of the bluff. Of the 35 homes with a lower seawall, approximately 15 have some form of mid or upper bluff armoring consisting of a geogrid structure and/or a below-grade upper bluff retention device. In addition, 2 homes have a below-grade upper bluff retention device and no seawall. Approximately 16 homes (~30%) have only seacave or notch infills or a natural bluff with no seawall or mid or upper bluff protection. In addition, there is one vacant undeveloped bluff top lot with only a seacave/notch infill at the base of the bluff (Exhibit 9).

There are 9 bluff top Condominium complexes in the City of Solana Beach all south of Fletcher Cove Beach Park. Of the 9 complexes, 6 complexes (~67%) have a full or partial lower seawall at the base of the bluff. Of the 6 complexes with a lower seawall, 3 have some form of mid or upper bluff armoring consisting of a geogrid structure, retaining wall and/or below-grade upper bluff retention device. Three complexes (~33%) have only seacave or notch infills or a natural bluff with no seawall or mid or upper bluff protection (Exhibit 9).

Based on a general analysis of permits issued by the Commission for shoreline armoring and the use of current aerial photos of the bluff, staff found that approximately 50% of the shoreline of Solana Beach is actually armored. This figure is lower than what might be expected from the information presented in the preceding two paragraphs due to the fact that the entire beach frontage of Fletcher Cove Beach Park is not armored and 5 out of the 6 condominium complexes only have partial seawalls that do not cover their entire frontage.

The City has provided aerial map exhibits of the entire shoreline showing the coastal bluff edge, a 25 ft. setback, a 40 ft. setback, and the approximate Geologic Setback (GSL) Line (http://solana-beach.hdso.net/LCPLUP/LCPLUP-Chapter4.pdf). The GSL line is the cumulative setback distance of 75 years-worth of projected erosion of 0.4 feet per year and a location where development can be safely sited with an industry standard Factor of Safety of 1.5. These aerial maps have been provided as exhibits to the staff report (Exhibit 2). On the aerial map exhibits, the GSL is only an approximation and is shown as an approximate 70 ft. setback from the bluff edge.

The City has also previously provided a survey showing the approximate size of existing bluff top homes and garages to determine an average home size. The City found that the average bluff top home in Solana Beach is approximately 2,000 sq. ft. plus a 400 sq. ft. garage. In order to obtain this size home, a footprint of approximately 1,200 sq. ft. would be needed for a two-story structure. The City has indicated that given the size of the existing lots and geologic constraints, strict compliance with the LUP policies on geologic setbacks and other development standards would preclude construction of a new primary residence on many lots, even with reductions in the front yard setback and parking standards, as described in Policy 4.24. The Commission acknowledges an analysis must be done on a case-by-case basis, taking into account the size and configuration of the particular lot, geologic conditions, past permit special conditions on the site and the proposed new structure in question before redevelopment potential and reasonable use for any lot can be determined. Using these scaled exhibits, Coastal Commission staff was able to approximate the following information:

- Approximately 1/3 or 17 of the 53 existing single family homes are currently located 25 ft. or greater from the bluff edge and 2 of the homes are currently located 40 ft. or greater from the bluff edge.
- Approximately half or 26 of the 54 single family properties have an average distance of at least 15 ft. between the GSL line and the western edge of the side walk that is adjacent to the front property line.

- Approximately 1/6 or 9 of the 54 single family residential properties would be able to achieve a building footprint of at least 1,200 sq. ft. if the entire footprint was located landward of the GSL. The building footprint is based on the assumption that 5 ft. front and side yard setbacks would be used. If an additional 400 sq. ft. footprint due to cantilever is used, then approximately 15 of the 54 single family properties could achieve a reasonable sized structure with all foundational support landward of the GSL.
- Approximately 2/3 or 35 of the 54 single family residential properties would be able to achieve a building footprint of at least 1,200 sq. ft. if the entire footprint was located landward of a 40 ft. setback line. The building footprint is based on the assumption that 5 ft. front and side yard setbacks would be required. A first and second floor cantilever would provide an additional footprint of 400 sq. ft. and an additional 800 sq. ft. of living area with a 50 ft. wide lot. Thus, if the maximum cantilever area is constructed, even greater than 2/3 (approximately 47) of the 53 homes could achieve a reasonable sized structure with all foundational support landward of a 40 ft. setback line.

The City has stated that local requirements for private view protection may prevent some bluff top property owners from constructing a two story home; however, the City has provided data stating that 33 of the 53 existing homes are two stories. Private view protection is not required pursuant to the Coastal Act and any such impacts must be weighed against the need to reduce risk for structures in hazardous areas and to avoid encroachment on the coastal resources including the beach and bluff while still providing the property owners a reasonable use of their bluff top property. Therefore, redevelopment including a second story and possibly a cantilevered area with structural foundation at the established blufftop setback line appear to be possible to increase the size of a redeveloped home.

The City has also provided data showing the age of bluff top homes and whether or not a home has been remodeled and or added sq. ft. in the past. The data is summarized as follows (**this data has not been verified by Commission staff):

- The average year built is 1970
- The oldest home was built in 1949 and the newest home was built in 1998
- 3 of the homes have been re-constructed in the past 20 years
- 29 of the homes have either remodeled or constructed an addition to the original home
- 24 of the homes have not remodeled or constructed any additions

Based on the information above, it is clear that the City's inventory of bluff top homes is reaching the point when substantial improvements or complete redevelopment may be considered by the property owner. LUP Policy 4.17 and 4.24, as certified, require new development and additions to existing development on bluff top lots to be setback landward of the Geologic Stability Line (GSL) such that it does not rely on new or existing bluff retention devices. In addition, the LUP policies, as certified, encourage a

revised building footprint at least 40 ft. inland from the bluff edge, on caissons, as a preferred alternative to additional mid and upper bluff protective devices.

The Commission's adopted Revised Findings for certification of the Solana Beach LCP Land Use Plan, as approved on June 14, 2012, state:

> *"Thus, as modified, LUP policies make it clear that once a lower seawall has been constructed, mid and upper bluff protection devices cannot be approved unless a detailed alternatives analysis determines that there are no feasible alternatives. Specifically, Policy 4.56 requires consideration of a revised building footprint and foundation system (e.g., caissons) with a setback that avoids future exposure and alteration of the natural landform as an alternative to mid and upper bluff protective devices, and a determination that such an alternative is not feasible.*
>
> *Caissons are foundation systems created by drilling holes and filling them with concrete. The caissons can be drilled to bedrock or deep into the underlying strata, as necessary, depending on the soil type and the required factor of safety for the site. The piers provide stability and support for the above structures, such that even on the small lots that exist along the Solana Beach shoreline, the structures they support could be sited in a location that would be safe from the threat of erosion for the life of the structure. The drawbacks of caissons are that even though initially placed below ground, when they are constructed close to the edge of a bluff, should the bluff continue to erode, the piers can become exposed, revealing a concrete structure representing exactly the type of visual blight and substantial alteration of the natural landforms of the bluff that section 30253 of the Coastal Act prohibits.*
>
> *Therefore, as modified, the LUP permits the use of caisson foundations as an alternative to mid and upper bluff protection when the caissons are used to re-site/re-build new development set back in a location safe from erosion for 75 years, and far enough inland from the bluff edge such that it can reasonably be expected that the caissons will never be exposed. In other words, once a site is protected by a seawall and thus, no longer threatened by marine erosion, should the existing principal structure be further threatened by the instability of the upper bluff, rather than approve mid or upper bluff protection, the City must determine that moving and/or rebuilding the existing structure on a safer inland location on the lot, is not a feasible alternative.*
>
> *Policy 4.27, as modified, requires that all new bluff property development be set back from the bluff edge a sufficient distance to ensure it will not be in danger for erosion and that it will ensure stability for its projected 75-year economic life. Typically, as described in Policy 4.27, determining this location involves a quantitative slope analysis demonstrating a minimum factor of safety. In no case can the setback be less than 40 feet from the bluff*

edge, and only if it can be demonstrated that the structure will remain stable, as defined above, at such a location for its 75-year economic life and has been sited safely without reliance on existing or future bluff retention devices. Because the shoreline lots in Solana Beach are narrow, there are many lots for which it would be difficult, if not impossible, to build on and meet this criteria.

However, Policy 4.25, as modified, allows the City to consider as an option for new structures, the use of a caisson foundation with a minimum 40 foot bluff top setback, if caissons would allow the structure to meet the stability requirement and avoid alteration of the natural landform along the bluffs, i.e., exposure of the caissons in the future. The Commission's engineer has reviewed the LUP and the geologic conditions of many lots on the Solana Beach shoreline. He has concluded that in many cases, once the lower bluff and clean sands lens is encapsulated by a seawall, it is likely that the upper bluff will be able to reach a stable angle of repose at approximately 35 degrees (as measured from the top of the seawall). At this point, the bluff may remain relatively stable for years. Therefore, under this scenario, it can reasonably be assumed that a caisson foundation located inland of the 35 degree line, will not become exposed.

To be clear—Policy 4.27, as modified, requires new development to be sited without reliance on existing bluff retention devices; the siting of a new structure cannot depend on the presence of an existing seawall to determine a safe location. But for a blufftop lot that already has a seawall, this policy may allow construction of a new home, albeit most likely a smaller home, because the caissons would allow the new home to be sited safely, while the presence of the seawall would ensure that the caissons will not be exposed in the future. Currently, the only option for some bluff top property owners is to maintain their existing residence in place, because there is no safe location to relocate on the site if caissons are not used. In any case, as modified, the LUP requires that before any application for mid or upper bluff protection can be approved, the City must determine that relocating/rebuilding the structure a minimum of 40 feet back, with caissons, is not a feasible alternative. Again, the intent of this policy is to encourage, incentivize, and require blufftop property owners to evaluate rebuilding a new safe structure, rather than maintaining an existing structure in a hazardous location that requires alteration of the public bluffs."

Therefore, the LUP, as certified, provides opportunities for redevelopment of the blufftop parcels taking into consideration existing geologic constraints and hazardous conditions. Modifications to the building footprint and its foundation further inland on private property must be analyzed as a potentially feasible alternative once a seawall is permitted to protect an existing structure. If erosion continues, other options must be considered by the property owner as feasible alternatives to additional armoring and additional impacts to coastal resources.

Provisions of Certified LUP - Protection of Existing Structures - Shoreline Armoring

Coastal Act Sections 30235 and 30253 acknowledge that seawalls, revetments, cliff retaining walls, groins and other such structural or "hard" methods designed to forestall erosion also alter natural landforms and natural shoreline processes. Accordingly, with the exception of coastal dependent uses, Section 30235 limits the construction of shoreline protective works to those required to protect existing structures or public beaches in danger from erosion. The Coastal Act provides these limitations because shoreline structures can have a variety of negative impacts on coastal resources including, but not limited to, adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, including ultimately resulting in the loss of beach.

Section 30235 mandates that shoreline armoring must be "required" to protect the existing threatened structures. In other words, shoreline armoring shall only be permitted if it is the only feasible alternative capable of protecting the existing endangered structures.[3]

The LUP policies, as certified, are designed to guide development such that impacts from shoreline protection are avoided whenever possible, and that when shoreline protection is unavoidable, it is limited to the greatest extent feasible to lower bluff protection only. Also, the impacts from shoreline protection must always be fully mitigated. Furthermore, LUP policies, as certified, require that new development be sited in a location that will not require reliance on shoreline armoring.

On a bluff top property that does not have any form of shoreline armoring, Policy 4.47 would allow seacave/notch fill projects to be approved, even when an existing principal structure is *not* in imminent danger or meeting the standard for construction of a seawall. Such projects would function as preventative measures that, on the whole, will serve to minimize impacts to coastal resources.

In addition, as certified, LUP policies make it clear that once a lower seawall has been constructed, mid and upper bluff protection devices cannot be approved unless a detailed alternatives analysis determines that there are no feasible alternatives. Specifically, Policy 4.51 requires consideration of various alternatives, which include the planting of vegetation, control of surface water and site drainage, other non-beach and bluff face stabilization measures, and a smaller coastal structure. Another alternative is removal and relocation of all, or portions, of the affected structure. Under this alternative, if only the seaward most portion of the structure is threatened by upper bluff erosion, removal of the threatened portion would be considered a feasible alternative to additional armoring. An additional alternative includes relocating/rebuilding the structure further inland from the bluff edge, with caissons so the entire structure is stable. The intent of this policy is to encourage and require blufftop property owners to evaluate the potential for a safer

[3] Coastal Act Section 30108 defines feasibility as follows: "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

structure in a more landward location, rather than maintaining an existing structure in a hazardous location that requires alteration of the public bluffs to provide protection in that location.

As certified, LUP Policies 4.47, 4.48, and 4.51 require that as a condition of approval for a bluff retention device (i.e. seacave/notch infill, lower seawall, upper bluff system), the applicant shall be subject to an encroachment removal agreement approved by the City along with the CDP authorization for the shoreline armoring device. In addition, Policy 4.52 requires that the device only be authorized for 20 years, at which time the property owner must assess the possibility of removal and a new CDP for retention of the device shall only be issued if it is still required to protect an existing structure, will avoid further alternation of the natural landform of the bluff, and adequate mitigation for impacts to public beach has been provided.

Duration of Shoreline Armoring Authorization

The City is proposing changes to the LUP policy that establishes the 20 year authorization period and reassessment requirement for bluff retention devices (Policy 4.52). The existing LUP policy, as certified, requires that an analysis be done at the end of the 20 year authorization period to determine the continued need for the device and the potential for removal, based on factors that include changed geologic site conditions relative to sea level rise, the age, condition, and economic life of the principal structure on the bluff top and whether the principal structure was existing prior to the implementation of the Coastal Act. The City's proposed changes require an applicant to also analyze the need for repair and maintenance of the bluff retention device in addition to the possibility for removal. Further, the proposed policy would require that the analysis of the device after the 20 year authorization period be based on changed geologic site conditions relative to beach replenishment activities (specifically referencing an Army Corps project that has been approved by the Commission, but has not yet been implemented), while reference to sea level rise and whether the existing structure existed prior to the implementation of the Coastal Act has been removed. The City also proposes that the applicant only show that the device will "*minimize further alteration of the natural landform of the bluff*" in place of the current language that requires an applicant to show that the device will "*avoid further alteration of the natural landform of the bluff*." In addition, the City has amended multiple policies related to the 20 year authorization period for shoreline armoring devices to require that the timeline for mitigation and authorization begin on the building permit completion certification date instead of the date of CDP approval. The proposed change to the start date would delay the start of authorization lime limits and would also delay mitigation payments.

The Commission is suggesting modifications to the LUP policies that would tie authorization of the bluff retention device to the life of the structure requiring protection. The majority of the shoreline armoring in the City has been approved and constructed pursuant to a permit from the Coastal Commission. A typical condition of approval for a seawall permit addresses future response to erosion and requires the applicant to acknowledge that the Commission will consider removal of the structures, including portions of the home or the entire home, as preferred and practical alternatives to bluff

and shoreline protective devices. Specifically, the special condition indicates that should additional protection be contemplated in the future, the applicant is required to submit an analysis of alternatives to bluff protective works that may be considered by the Commission, including relocation of the principal structure, relocation of portions of the structure that are threatened, structural underpinning, or other remedial measures identified to stabilize the residence that do not include additional bluff or shoreline protective devices. A sample of the Special Condition is included below and was excerpted from the 6-08-073/Cumming, Burgh & DiNoto Commission staff report for the construction of a seawall and geogrid structure below three homes at 365-371 Pacific Avenue in Solana Beach.

> *8. Future Response to Erosion. If in the future the permittees seek a coastal development permit to construct additional bluff or shoreline protective devices, the permittee will be required to include in the permit application information concerning alternatives to the proposed bluff or shoreline protection that will eliminate impacts to scenic visual resources, recreation and shoreline processes. Alternatives shall include, but not be limited to: relocation of all or portions of the principal structure that are threatened, structural underpinning, and other remedial measures capable of protecting the principal structure and providing reasonable use of the property, without constructing bluff or shoreline stabilization devices. The information concerning these alternatives must be sufficiently detailed to enable the Coastal Commission or the applicable certified local government to evaluate the feasibility of each alternative, and whether each alternative is capable of protecting existing structures that are in danger from erosion. No additional bluff or shoreline protective devices shall be constructed on the adjacent public bluff face above the approved seawall or on the beach in front of the proposed seawall unless the alternatives required above are demonstrated to be infeasible. No shoreline protective devices shall be constructed in order to protect ancillary improvements (patios, decks, fences, landscaping, etc.) located between the principal residential structures and the ocean.*

In certain more recent CDP approvals, the Commission has required a fixed armoring authorization term, such as twenty years. The concept is based on addressing certain inherent uncertainties associated with the length of time shoreline protection might exist in any particular case without major repairs or replacement in a dynamic coastal environment, and to address the changing and somewhat uncertain nature of decisions related to shoreline armoring, such as the state of the art for design of such devices, sea level rise and other physical changes, legislative change, or new judicial determinations. For example, with respect to sea level rise and other physical changes, there is a growing body of evidence that there has been an increase in global temperature and that acceleration in the rate of sea level rise can be expected to accompany this increase in temperature (some shoreline experts have indicated that sea level could rise by as much

as 5.5 feet by the year 2100)[4]. On the California coast the effect of a rise in sea level will be the landward migration of the intersection of the ocean with the shore, leading to a faster loss of the beach, as the beach is squeezed between the landward migrating ocean and the fixed backshore. This will expose the back bluff or seawall to more frequent wave attack, increasing the rate of erosion of unarmored bluffs and potentially reducing available usable beach area.

A sample of a previously applied Special Condition requiring that an applicant obtain an amendment within 20 years of approval of a seawall is included below and was excerpted from the staff report for CDP 6-09-033/Garber et. al. for the construction of a seawall below five homes at 211-231 Pacific Avenue in Solana Beach.

> *3. Extension of Seawall Authorization or Seawall Removal. Prior to the expiration of the twenty year authorization period for the permitted seawall, the property owners shall submit to the Commission an application for a coastal development permit amendment to either remove the seawall in its entirety, change or reduce its size or configuration, or extend the length of time the seawall is authorized. Provided a complete application is received before the 20-year permit expiration, the expiration date shall be automatically extended until the time the Commission acts on the application. Sufficient information shall accompany any amendment application to conform with the permit filing guidelines at the time and to allow the Commission to consider the following in review of the proposed permit amendment:*
>
> *1) An analysis, based on the best available science and updated standards, of beach erosion, wave run-up, sea level rise, inundation and flood hazards prepared by a licensed civil engineer with expertise in coastal engineering and a slope stability analysis, prepared by a licensed Certified Engineering Geologist and/or Geotechnical Engineer or Registered Civil Engineer with expertise in soils, in accordance with the procedures detailed in the Local Coastal Program (LCP), if certified or the City Zoning Code;*
> *2) An evaluation of alternatives that will increase stability of the existing principal structure for its remaining life, or re-site new development to an inland location, such that further alteration of natural landforms and/or impact to adjacent tidelands or public trust lands is avoided;*
> *3) An analysis of the condition of the existing seawall and any impacts it may be having on public access and recreation, scenic views, sand supplies, and other coastal resources;*
> *4) An evaluation of the opportunities to remove or modify the existing seawall in a manner that would eliminate or reduce the identified*

[4] The 2012 National Research Council's Report, *Sea Level Rise for the Coasts of California, Oregon and Washington: Past Present and Future*, is currently considered the best available science on sea-level rise for California. The NRC report predicts that for areas south of Cape Mendocino, sea level may increase between 16.56 and 65.76 inches between 2000 and 2100 (NRC, 2012).

impacts, taking into consideration the requirements of the LCP, if certified, and the protection required for remaining properties subject to this coastal development permit;

5) *For amendment applications to extend the authorization period, a proposed mitigation program to address unavoidable impacts identified in subsection (3) above;*
6) *The surveyed location of all property lines and the mean high tide line by a licensed surveyor along with written evidence of full consent of any underlying land owner, including, but not limited to the City, State Parks, or State Lands Commission, of the proposed amendment application. If application materials indicate that development may impact or encroach on tidelands or public trust lands, written authorization from the underlying property owner and the State Lands Commission of the proposed amendment shall be required prior to issuance of the permit amendment to extend the authorization period.*

In August of 2013, the Commission approved a CDP for extensive shoreline armoring fronting an existing condominium complex in Pacifica (2-10-039/Land's End Associates), which required that the armoring only be authorized until the time that existing structures requiring armoring are redeveloped, no longer present, or no longer require armoring. The Commission also found that it was appropriate to require mitigation for the impacts of the armoring on public access and sand supply for a 20-year period and at the end of the 20-year period to require the applicant to obtain a CDP amendment to either remove the armoring or propose additional mitigation. The aforementioned condition is as follows:

1. ***Duration of Armoring Approval.***

a. ***Authorization Expiration.*** *This CDP authorizes the armoring (consisting of the seawall, riprap toe protection, riprap wedges (at the upcoast and downcoast edges of the seawall), and the grade beam and caisson buried wall until the time when the currently existing structures requiring armoring are: (i) redeveloped as that term is defined in Special Condition 11; (ii) no longer present; or no longer require armoring, the Permittee shall submit a complete CDP amendment application to the Coastal Commission to remove the armoring.*

b. ***Modifications.*** *If, the Permittee applies for a CDP or an amendment to this permit to enlarge the armoring or to perform repair work affecting more than 50 percent of the armoring the Permittee shall provide additional mitigation for the impacts of the enlarged or reconstructed armoring on public views, public recreational access, shoreline processes, and all other affected coastal resources that have not already been mitigated through this permit.*

c. Amendment Required Proposing Mitigation for Retention of Armoring Beyond 20 Years. *If the Permittee intends to keep the armoring in place after August 15, 2033, the Permittee must submit a complete CDP amendment application prior to August 15, 2033 proposing mitigation for the coastal resource impacts associated with the retention of the armoring beyond 20 years (including, in relation to any potential modifications to the approved project desired by the Permittee at that time that may be part of such CDP application).*

The Commission is suggesting modifications to the proposed LUPA policies that require, in place of a fixed 20 year authorization period, that the timeframe for authorization of permits for new bluff retention devices, or alterations or expansion of existing devices, be as long as the structure requiring protection still exists or the structure no longer needs the protection for some reason[5]. This more fully conforms to section 30235 of the Coastal Act as the 20 year authorization period does not take into account situations where a property owner may receive approval of a new seawall to protect an existing structure in danger of erosion, and then demolishes and rebuilds that structure before the 20 year authorization period has ended. In such a situation, the seawall would have authorization to remain even though the existing structure it was designed to protect is no longer on-site, which would not be consistent with section 30235 of the Coastal Act, and would effectively make the seawall a legal non-conforming structure. Furthermore, the 20 year authorization period in the currently certified LUP doesn't specifically require removal of a seawall upon expiration of the 20 year period. In addition, while not necessarily a Chapter 3 issue, processing such applications would take significant staff time and resources away from other pending matters. Thus, the most supportable criteria for determining the authorization period of a seawall that is consistent with section 30235 is to tie the authorization period to the existing structure that requires protection by the seawall. Upon redevelopment of the property, the seawall would either be removed or, if removal is not appropriate for any reason, the terms of authorization of retention of the protective device would be reassessed through a new CDP which would address any rights to retention, and removal of the device in the future would remain a viable option. Therefore, the following findings support the suggested modifications to the shoreline armoring authorization period.

Section 30235 only authorizes shoreline protection devices when necessary to protect an existing structure in danger of erosion, and shoreline protective devices are no longer authorized by Section 30235 after the existing structures they protect are redeveloped, no longer present, or no longer require armoring. Although shoreline armoring in this case cannot be found consistent with all other applicable provisions of the Coastal Act, Coastal Act provision 30235 mandates that shoreline armoring shall be approved when required to protect existing structures if specified criteria are met.

[5] This authorization and the 20-year mitigation periods are in addition to the standard CDP permit condition which mandates that a CDP will expire if development has not commenced within 2 years of approval and that development shall be pursued in a diligent manner and completed in a reasonable period of time.

The only applicable basis for the Commission to approve shoreline armoring that is otherwise inconsistent with the Coastal Act is when it is required to protect an existing structure in danger from erosion. If there was no existing structure in danger from erosion and the armoring was not required to protect it, the seawall would be denied. That a project satisfies the tests of Section 30235, and thereby must be authorized despite its other impacts that cannot be fully mitigated, therefore presumes the existence of a legally authorized existing structure that the armoring is required to protect.

Accordingly, one reason to limit the length of a shoreline protective device's development authorization is to ensure that the armoring being authorized by Section 30235 is only being authorized as long as it is required to protect a legally authorized existing structure. If an applicant must seek reauthorization of the armoring before the structure that it was constructed to protect is demolished or redeveloped, then Section 30235 instructs the Commission to approve the shoreline protective device if it is still required to protect an existing structure in danger of erosion. However, once the existing structure that the armoring is required to protect is demolished or redeveloped, the armoring is no longer authorized by the provisions contained in Section 30235 of the Coastal Act. Accordingly, if there is no existing structure in danger from erosion, then the Commission cannot approve an otherwise inconsistent shoreline protective device relying on the provisions of Section 30235 of the Coastal Act.

Another reason to limit the authorization of shoreline protective devices is to ensure that the Commission can properly implement Coastal Act Section 30253 together with Section 30235. If a landowner is seeking new development on a blufftop lot, Section 30253 requires that such development be sited and designed such that it will not require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. Sections 30235 and 30253 prohibit such armoring devices for new development and require new development to be sited and designed so that it does not require the construction of such armoring devices. These sections do not permit landowners to rely on such armoring devices when siting new structures on bluff tops and/or along shorelines. If a shoreline protective device exists in front of a lot, but is no longer required to protect the existing structure it was authorized to protect, it cannot accommodate future redevelopment of the site in the same location relying on the provisions of 30235. Otherwise, if a new structure is able to rely on shoreline armoring which is no longer required to protect an existing structure, then the new structure can be sited without a sufficient setback, perpetuating an unending construction/redevelopment loop that prevents proper siting and design of new development, as required by Section 30253. By limiting the length of development authorization of a new shoreline protective device to the existing structure it is required to protect, the Commission can more effectively apply Section 30253 when new development is proposed.

Suggested modifications by the Commission would require the property owner to provide mitigation for impacts, including, but not limited to, public access and sand supply, for 20-year periods. Mitigation reassessment for shoreline armoring devices would occur at the end of each 20-year mitigation period. Mitigation for impacts resulting from shoreline armoring devices, in part, calculates passive erosion and sand retention impacts,

both of which are tied to the future rates of erosion and are time dependent. These impacts will continue to occur, though, for the full time that the approved armoring system is in place, including beyond twenty years if it continues to exist or be necessary to protect the existing endangered structure.

In siting new development, proposed setbacks attempt to anticipate future acceleration of erosion through using the highest historic erosion rate or by developing relationships between erosion and sea level. And, on an eroding coastline, if the actual erosion rate is lower than the predicted erosion rate, the result is only that the development will be safe from erosion for a longer time period than initially predicted. However, for shoreline armoring mitigation, the Commission has often based the fee calculations upon average or moderate historic erosion rates due to the typically shorter mitigation time period used. While the erosion rates currently used for mitigation calculations can be expected to provide a reasonable estimate of future erosion for the coming one or two decades, projections much farther into the future are far more uncertain; and the uncertainty concerning future erosion only increases with time. Using a time period of twenty years for the mitigation calculations ensures that the mitigation will cover the likely initial impacts from shoreline armoring devices, and then allows a recalculation of the impacts based on better knowledge of future erosion rates and associated impacts accruing to the armoring when the twenty years is up. Efforts to mitigate for longer time periods would require the use of much higher erosion rates and would bring a higher amount of uncertainty into a situation.

Suggested modifications require the property owner to submit a complete permit amendment application to propose mitigation for impacts attributable to shoreline armoring devices beyond the 20-year period upon which initial impact mitigation is based. And as such, additional mitigation will be required after the initial 20-year period. As modified, the policies would provide a way to address inherent uncertainties, including those related to the lifetime of development being protected by the armoring, changed circumstances and updated mitigation requirements (Suggested Modifications 9-11).

As indicated above, the Commission is suggesting modifications that would tie the length of authorization of the protective device to the bluff top structure the armoring is approved to protect, consistent with the requirements of Section 30235. In addition, suggested modifications add back sea level rise as an important parameter that must be analyzed. As discussed previously, a possible future scenario for Solana Beach if the entire shoreline is armored is that, as sea level rises, there may no longer be a public beach. In the future, it may no longer be possible to provide adequate mitigation for the impacts that shoreline armoring causes to public beaches. Thus, while future beach replenishment projects may allow the continued provision of public beach even to the point that additional shoreline protection is not needed, it may also be possible that future beach replenishment projects are not successful and the beach is no longer accessible to the public due to rising water levels. Thus, an evaluation of sea level rise is important for determining future mitigation for adverse impacts and as a factor in the retention analysis of shoreline armoring devices.

As amended by the City and through suggested modifications by the Commission, Policy 4.52 would read as follows:

> ***Policy 4.52****: All permits for bluff retention devices shall expire when the currently existing blufftop structure requiring protection is redeveloped (per definition of Bluff Top Redevelopment in the LUP), is no longer present, or no longer requires a protective device, whichever occurs first and a new CDP must be obtained. Prior to expiration of the permit, the bluff top property owner shall apply for a coastal development permit to remove, modify or retain the protective device. In addition, expansion and/or alteration of a legally permitted existing bluff retention device shall require a new CDP and be subject to the requirements of this policy.*
>
> *The CDP application shall include a re-assessment of need for the device, the need for any repair or maintenance of the device, and the potential for removal based on changed conditions. The CDP application shall include an evaluation of:*
>
> - *The age, condition and economic life of the existing principal structure;*
> - *changed geologic site conditions including but not limited to, changes relative to sea level rise, implementation of a long-term, large scale sand replenishment or shoreline restoration program; and*
> - *any impact to coastal resources, including but not limited to public access and recreation.*
>
> *The CDP shall include a condition requiring reassessment of the impacts of the device in 20-year mitigation periods pursuant to policies 4.48 and 4.51.*
>
> *No permit shall be issued for retention of a bluff retention device unless the City finds that the bluff retention device is still required to protect an existing principal structure in danger from erosion, that it will minimize further alteration of the natural landform of the bluff, and that adequate mitigation for coastal resource impacts, including but not limited to impacts to the public beach has been provided.*

Suggested Modifications would also require that Policy 4.18 not be deleted, as proposed by the City, this policy, along with Policy 4.52, would affirm that if an existing shoreline armoring device is expanded or altered, a CDP is required and an assessment must be done to determine if the device is still required to protect the structure the device was permitted to protect, and/or if it should be removed, modified or retained. There may be circumstances where existing shoreline armoring cannot be immediately removed when no longer needed to protect the threatened structure that it was constructed to protect. For

instance, legal rights to retention may still exist or existing shoreline armoring may still be needed to stabilize an adjacent property, in which case, authorization of the device would be tied to the life of the structure requiring protection. It is also possible that removal of existing shoreline armoring may only feasibly be undertaken in a comprehensive manner as a multi-property project. As modified, it is clear that removal of existing seawalls remains a viable option in the future to assure the use of the entire public beach is not lost as a result of continued sea level rise and the shoreline armoring that protects private bluff top structures

A suggested modification has been made by the Commission to add text stating "encroachment/removal agreement" to the LUP in all places where "encroachment/removal agreement" or "encroachment agreement" is used. This change addresses a concern by the City that encroachment agreements are only required where private shoreline armoring devices are constructed on public property or in the public right-of-way, while a removal agreement can be required for where private shoreline armoring devices are constructed on private property (Suggested Modification 5).

Seacave/Notch Infills

Subsequent to the certification of the City's LUP, it became apparent that some uncertainty remained regarding the intent of the LUP policies related to seacave and notch infills. Seacave and notch infills can reduce the potential for a significant bluff failure and allow the City, and the region as a whole, more time to pursue other non-structural methods, such as beach replenishment, to protect the bluffs and delay the need for more substantial shoreline protection.

The intent for the seacave/notch infill approach is to allow the bluff to continue to erode landward and the clean sands lens may still become exposed. Once the clean sands lens is exposed, it is typical that a higher seawall will be needed to encapsulate the clean sands lens. The Commission recognizes that this may be the case for some areas. However, there are areas along the shoreline of Solana Beach where a seacave/notch infill has delayed the need for a seawall for many years. Delaying the construction of a seawall allows the bluff to erode and creates additional beach area that is available for public use.

The certified LUP allows seacave/notch infills to be approved when the primary structure on a bluff top lot is not in danger from erosion. Figure No. 1 in Appendix B of the City's LUP depicts a seawall and is only applicable in situations where the blufftop primary structure is imminently threatened (i.e. where the "Factor of Safety [is] near 1.0") (Exhibit 7). A suggested modification to this LUP amendment requires that Figure 1A be added to the LUP to depict the seacave/notch infill option that can be constructed pre-emptively, when the Factor of Safety is not near 1.0 and the bluff top structure is not imminently threatened. Figure 1A, which was provided by the City, depicts a seacave/notch infill with erodible concrete and a higher strength concrete face on the seaward portion of the infill (Exhibit 6). The City contends that the high strength concrete face will allow the infill to be colored and textured to better blend in with the natural bluff and that the high strength concrete face can be physically removed as the adjacent bluff erodes landward. Due to the fact that the high strength concrete face will

not naturally erode as a result of wave action, it performs the same as a seawall and will fix the back of the beach. The installation of a high strength concrete face would result in a very challenging enforcement situation and would most likely result in the infill material encroaching onto and adversely impacting public beach area. Furthermore, it is likely that property owners would be resistant to physically remove the high strength concrete face once it was installed for fear of destabilizing the bluff adjacent to and above the infill.

Suggested modifications require that Figure 1A be modified to consist solely of erodible concrete and not include a high strength concrete face on the seaward portion of the infill. A seacave/notch infill that uses only erodible concrete may be more difficult to treat aesthetically than an infill with a higher strength concrete face, but it will permit the bluff to continue to erode landward resulting in the creation of additional beach area. While an erodible concrete seacave/notch infill may require the need for increased monitoring and maintenance by the property owner to ensure it is functioning as designed, than would be otherwise required with a structural armoring device, the benefits of not fixing the back of the beach, while at the same time forestalling a catastrophic bluff collapse and the possible exposure of the clean sand lens make erodible concrete seacave/notch infills worthwhile.

The Surfrider Foundation has raised concerns that past seacave/notch infill projects approved by the Commission have not eroded landward as per the design intent and now create adverse impacts to coastal resources. The failure of past seacave/notch infill projects to erode landward likely resulted from the use of full strength concrete or using a concrete mix that, while not as strong as full strength concrete, did not have a comparable erosion rate to the surrounding bluffs. The most recent large stand-alone seacave infill project in Solana Beach was approved by Commission in 2002 (CDP #6-00-066/Pierce & Monroe). Since that time, more is known about erodible concrete and it can be better designed, such that it erodes at a more consistent rate as the adjacent natural bluff.

Additional suggested modifications clarify that erodible concrete seacave/notch infills are not subject to the sand supply mitigation, public access and recreation mitigation, encroachment removal agreement, or authorization timeline policies of the LUP. The construction of a seacave/notch infill will help to prevent catastrophic bluff failure, but will still allow the bluff to erode landward. Seacave/notch infills are designed to erode at the same rate as the adjacent natural bluff, thus there will be no impacts to sand supply or to public access and recreation. Furthermore, since seacave/notch infills are designed to erode at the same rate as the natural bluff, if they function as designed, there will not be a need to physically remove the entire fill, and thus encroachment removal agreements and time limits for authorization are not needed.

The modifications suggested to the description of Seacave/Notch Infill and the related policy do not change the intent of the certified LUP. The changes are proposed to provide additional clarity regarding the options available to address coastal bluff stability (Suggested Modifications 2-4).

<u>Use of Recreation Mitigation fees for Beach Replenishment</u>

The City's certified Land Use Plan currently provides that Sand Mitigation Fees must be expended for sand replenishment and potentially retention, and that the Public Recreation Fee must be expended for public access and public recreation improvements. As proposed by the City in this LUP amendment, the Sand Mitigation fees will be allowed to be used for public access and public recreation improvements, where an analysis does not identify any 'near-term' sand replenishment projects. In addition, the City proposes that the Public Recreation Fee will be available for sand replenishment projects, where an analysis does not identify any 'near-term' public recreation or public access projects.

In its previous approval of the City's LUP, the Commission found that the sand mitigation fee is specifically designed to offset the impacts to sand supply that result from the presence of shoreline protective devices and that the public recreation fee is designed to capture impacts to recreation that are not captured by the sand mitigation fee, such as the degradation of the visual experience that can repel visitors. The Commission further found that if the public recreational fee were used to promote projects that did not enhance the recreational experience of the public and if the sand supply fee was used for something other than sand replenishment, the impacts to sand supply and public access and recreation as a result of shoreline armoring would not be adequately mitigated consistent with Chapter 3.

However, the Commission also recognizes that beach sand replenishment projects can provide an improved public access and recreational experience for beach goers and that public access and recreation improvements also have the potential to at least partially mitigate for a loss of sand on public beaches. Therefore, Commission staff recommends that the Commission support the use of sand supply and public access and recreation fees for secondary priority uses, when a 'near-term' first priority project is not available. Although no definition for 'near-term' is provided by the City, the funds can only be released for secondary priority projects upon written approval of the Executive Director of the Commission. Per the City's proposal, a thorough analysis will be required to ensure no 'near-term' projects are available. Examples of 'near-term' public access and recreation projects could include public stairway replacement and repairs, parkland acquisition in the vicinity of the coastal bluffs and beaches, restrooms, and even the potential acquisition of bluff top homes. The City also proposes to amend the LUP to allow project applicants to fund a specific public access/recreation project in lieu of paying mitigation fees. The proposed amendments will likely allow the City and the Commission greater leeway to capitalize on future opportunities to improve the public beach experience. The application of these policies will be further detailed when the City submits its LCP implementation plan for Commission review.

Definitions

The definitions section of the LUP mainly covers topics and policies relating to shoreline development. 'Bluff Top Redevelopment', as currently defined in the City's certified LCP, is intended to identify and prohibit redevelopment projects that essentially consist of rebuilding existing structures in hazardous, non-conforming locations, unless the entire structure is brought into conformance. The definition allows a reasonable amount of

changes to an existing structure, including up to a 50% increase in the size of the structure, but would not allow the familiar practice of stripping a house to the studs, or gutting the entire interior, or demolishing everything but one wall, and still characterizing the structure as "existing," thereby allowing the unlimited perpetuation of a non-conforming structure.

As a part of this LUP amendment, the City is proposing to modify the definition of 'Bluff Top Redevelopment' to remove reference to interior load-bearing walls and instead to focus on major structural elements of the home. These major structural elements would include exterior walls, the structural components of the floor and roof, and the foundation of an existing home. The City has also proposed language to clarify that changes to major structural elements are not additive between individual elements, while alterations to individual major structural element are cumulative. The intent of this clarification is that if for example, an applicant proposed to modify 40% of the exterior walls and 30% of the roof structure; this would not be considered redevelopment because it relates to two different major structural components. However, if the applicant were to come back for a subsequent CDP to modify an additional 10% of the exterior walls or an additional 20% of the roof structure, the project would be considered redevelopment because it would result in a cumulative alteration to more than 50% of a major structural component.

The Commission supports the City's proposed changes to the definition of 'Bluff Top Redevelopment', however some changes are required for clarification. Suggested modifications clarify that alterations are cumulative for individual major structural components and that additions are also cumulative over time. Such that, an initial 25% addition would not be considered redevelopment, however, if in the future a subsequent 25% addition was proposed, then that would result in a cumulative 50% increase in floor area and would thus constitute redevelopment (Suggested Modification 12).

The City is proposing to add a definition for 'Cantilever' to the LUP. As proposed, a projecting or overhanging structure of up to 10 feet in depth would be allowed to the seaward side of a bluff top home, provided that all foundation footings and structural supports for the cantilevered structure are located landward of the geologic setback line/rear yard setback. The Commission supports the City's proposed 'Cantilever' addition; however, a suggested modification replaces the term "rear yard setback" with "bluff edge setback (minimum 40 feet)" in order to clarify the definition and be consistent with the certified LUP (Suggested Modification 13).

2. Public Access/Public Recreation

a. Plan Summary. Chapter two of the certified LUP addresses the many forms of public access to the shoreline, including vertical and lateral access.

b. Applicable Coastal Act Policies. The following Coastal Act provisions and are particularly relevant to promoting coastal access by requiring adequate public access to the beach and by requiring that oceanfront land suitable for recreational use be protected for recreational use and development:

Section 30210

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

Section 30211

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.

Section 30212

(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, (3) Agriculture would be adversely affected. Dedicated accessways shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway. […]

Section 30212.5

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

Section 30221

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

c. Conformity with Chapter 3 Policies.

Shoreline Armoring/Public Access and Recreation

As cited above, the Coastal Act has numerous policies related to the provision and protection of public access and recreation opportunities. As such, many categories of development are affected by and must ensure that public access and recreation are not adversely impacted. Although the above discussion of the City's beach and bluff policies concentrated on the inconsistencies with Sections 30235 and 30253, there are a number of adverse impacts to public access and recreation associated with the construction and retention of shoreline protection. The natural shoreline processes referenced in Section 30235, such as the formation and retention of sandy beaches, can be significantly altered by construction of a seawall, since bluff retreat is one of several ways that beach area and beach quality sand is added to the shoreline. This retreat is a natural process resulting from many different factors such as erosion by wave action causing cave formation, enlargement and eventual collapse, saturation of the bluff soil from ground water causing the bluff to slough off and natural bluff deterioration. When a seawall is constructed on the beach at the toe of the bluff, it directly impedes these natural processes, reducing the amount of sand available for access and recreation, inconsistent with the above-cited policies. The physical encroachment of a protective structure on the beach also reduces the beach area available for public use and is therefore a significant adverse impact. Furthermore, when the back beach is fixed with a shoreline armoring device, passive erosion is halted and additional public beach area can no longer be created. This is particularly true given the existing beach profiles and relatively narrow beach in Solana Beach.

Previous sections of this report have thoroughly discussed the impacts of seawalls on public access. Therefore, this section will address another concern about the LUP public access and recreation policies, private stairways on the bluff face and beach. Policies relating to private bluff stairways are contained within in Chapter 2 (Public Access and Recreation) of the certified LUP.

Private Stairways

There are three existing private stairways that all serve bluff top condominium complexes (Exhibit 10). The private stairways are located on the bluff fronting the Seascape Shores, Seascape 1, and Del Mar Beach Club condominium complexes. In the City of Solana Beach, the coastal bluffs are in private ownership south of Fletcher Cove and under public ownership north of Fletcher Cove. All the private bluff stairways in the City are located south of Fletcher Cove and are thus located on privately owned bluffs. However, portions of the three existing stairways are also located on the beach, which as described below is a public resource. As stated previously, the mean high tide line is most likely at the toe of the bluff for the entirety of the City of Solana Beach. In addition, previous findings by the Coastal Commission (CDP 6-04-092) and draft surveys by the California State Lands Commission show that the mean high tide line is at the toe of the bluff fronting Seascape Shores. In 1983, the Coastal Commission required that Seascape 1 record an offer to dedicate (OTD) for a lateral access easement for public access and

passive recreational use along the shoreline seaward of the toe and face of the seawall. This lateral access OTD was never recorded by Seascape 1 and is currently in violation of this condition. However, Seascape 1 is actively working with the Commission to record the required lateral access OTD. The Del Mar Beach Club recorded a lateral access deed restriction in 1980 at the toe of the bluff, which was required by the San Diego Coast Regional Commission pursuant to CDP F4051. Thus, at least a portion of all three of the existing private stairways on the beach and bluff in the City of Solana Beach are located on public property (Seascape Shores) or on private property subject to a public access easement or public access deed restriction (Seascape 1 and Del Mar Beach Club).

The LUP, as certified, prohibits construction of new private beach accessways on the bluff face. As proposed, the City is acknowledging the potential for conversion of private access to public access in the event redevelopment of the stairways is proposed in the future. In order to ensure that the public access policies in the LUP are consistent with Coastal Act provisions 30210, 30211, 30212, 30212.5, and 30221 and that adequate public access to the beach and that oceanfront land suitable for recreational use is protected for recreational use and development, the Commission is suggesting modifications to Policy 2.60.5 to ensure that all of the private stairways which encroach on public beach area are subject to the requirements of the LUP to convert to public stairways if the stairways are replaced or redeveloped in the future (Suggested Modifications 1).

3. Visual Resources

a. Plan Summary. The suggested modifications described in the above discussion on the Chapter 4 Hazards and Shoreline/Bluff Development policies have been designed to limit the construction of shoreline protective devices and to ensure that the devices are removed, as feasible, if they are no longer needed to protect the existing principal structure that they were built to protect, which will help to protect the scenic and visual qualities of the natural bluffs.

b. Applicable Coastal Act Policies

Section 30251

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 subordinate to the character of its setting.

Section 30253 (5) (cited above)

Section 30251 of the Coastal Act provides for the protection of scenic coastal areas and the enhancement of visual resources. Section 30253(5) requires that popular visitor destination points for recreational uses be protected. Because shoreline armoring and exposed residential caisson systems have the potential to visually degrade the bluffs and alter natural landforms, the previously identified suggested modifications are required in order to find this LUP amendment consistent with the Coastal Act. Limiting the authorization period for shoreline armoring to the life of the structure the armoring is approved to protect provides for the opportunity to remove shoreline armoring when it no longer serves its intended purpose and can reduce adverse visual impacts to the natural bluffs.

In addition, the LUP only requires hydroseeding of the bluff following construction of a mid and upper bluff geogrid structure. It has been the experience of the Commission that when the mid and upper coastal bluff is reconstructed with a geogrid structure, hydroseeding alone is not an effective method to vegetate the bluff. Geogrid structures approved in the past that were hydroseeded have resulted in what appears to be flat, barren unnatural surfaces on the bluff face. Staff is recommending that, consistent with standard Commission practice on CDPs, container planting be used in addition to hydroseeding of coastal bluffs following construction of mid and upper bluff geogrid structures (Suggested Modification 6). Therefore, as modified, the LUP can be found consistent with the visual protection policies of the Coastal Act.

4. Conclusion

In summary, the LUP amendment, as proposed, is inconsistent with Chapter 3 of the Coastal Act because it does not provide clear direction in regards to various aspects of shoreline armoring structures and development on the coastal bluff and bluff top properties. The proposed LUP amendment is deficient in several critical policy areas that affect priority public access, visual resources, and alteration of the natural landform of the coastal bluffs. The proposed modifications are necessary to address and resolve the identified policy conflicts. Therefore, as modified, the Commission finds the LUP amendment does conform to the Chapter 3 policies of the Coastal Act and the land use plan may be approved.

PART V. CONSISTENCY WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 21080.9 of the California Environmental Quality Act (CEQA) exempts local government from the requirement of preparing an environmental impact report (EIR) in connection with its local coastal program. The Commission's LCP review and approval program has been found by the Resources Agency to be functionally equivalent to the

EIR process. Thus, under CEQA Section 21080.5, the Commission is relieved of the responsibility to prepare an EIR for each LCP.

Nevertheless, the Commission is required in an LCP submittal to find that the LCP does conform with CEQA provisions. The proposed City of Solana Beach LUPA is not consistent with the hazard, visual protection, natural resource protection, and new development policies of the Coastal Act. Suggested modifications have been added as described and listed above. If modified as suggested, no impacts to coastal resources are expected to result from the amendment.

Any specific impacts associated with individual development projects would be assessed through the environmental review process, and, an individual project's compliance with CEQA would be assured. Therefore, the Commission finds that no significant immitigable environmental impacts under the meaning of CEQA will result from the approval of the proposed LCP amendment as modified.

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Introduction to the Proposed Amendment to the Solana Beach Local Coastal Program (LCP) Land Use Plan (LUP)

At a public hearing of the Solana Beach City Council on February 27, 2013 the City Council adopted the California Coastal Commission (CCC) modified/approved Local Coastal Program (LCP) Land Use Plan (LUP) under Solana Beach City Council Resolution 2013-018. The City's LUP incorporates all of the CCC-staff Suggested Modifications approved by the CCC.

At the February 27th, 2013 public hearing, the City Council also directed City Staff to begin preparing a Land Use Plan Amendment (LUPA) to modify some of the key provisions in the LUP relating primarily to bluff top development and shoreline protection. This LUPA was developed in conjunction with CCC staff and interested stakeholders and is expected to be issued for a six-week public review and comment period beginning on March 28, 2013 and ending on May 10, 2013. Following the conclusion of the LUPA public review period and a public hearing before the Solana Beach City Council, the LUPA was submitted to the CCC for processing and formal consideration at a Commission meeting originally scheduled for October 2013.

Solana Beach City Council Resolution 2013-108 was adopted on September 12, 2013, formally expressing the intent of the City Council in providing the City Manager with the explicit authority to amend, change, delete or otherwise modify the LUP text and policies targeted for modification in the Council approved LUPA. This updated LUPA reflects the current proposed amendments to the Certified LUP as revised on October 23, 2013.

The following revised text, policies and definitions constitute the Proposed Solana Beach Draft LUPA and contain substantive and non-substantive changes, additions and deletions. This Proposed LUP Amendment should be regarded as a draft document for consideration by the City Council and the public. There may be further revisions to this LUPA based on: (1) ongoing coordination and input from the stakeholders; (2) anticipated ongoing input from staff from the California Coastal Commission (CCC); and (3) direction provided by the City Council at a future public hearing.

Chapter 1 – Proposed Revisions
Chapter 2, Page 10: However, conditions do change over time, and future projects must be evaluated individually to determine the appropriate and feasible mitigation for shoreline protection projects based on any changed physical or regulatory conditions.
Chapter 2 – Proposed Revisions
Policy 2.4: ~~New development shall minimize impacts to public access along the shoreline and inland trails.~~ The City shall assure that the recreational needs resulting from any proposed development will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition at three acres per 1000 population, and/or development plans with the provision of onsite recreational facilities to serve new development.
Policy 2.7: New development shall be sited and designed to avoid impacts to public access and recreation along the shoreline and trails. If there is no feasible alternative that can eliminate or avoid all access impacts, then the feasible alternative that would result in the least significant adverse impact shall be required. Some impacts may be mitigated through the dedication of an access or trail easement where the project site encompasses an LCP mapped access or trail alignment, where the City, County, State, or other public agency has identified a trail used by the public, or where prescriptive rights exist. Mitigation measures required for impacts to public access and recreational opportunities shall be implemented prior to, or concurrent with construction of the approved development.
Policy 2.60: No new private beach stairways shall be constructed, and private beach stairways shall be phased out at the end of the economic life of the stairways. Existing permitted or private beach stairways constructed prior to the Coastal Act may be maintained in good condition, with a CDP where required, but shall not be expanded in size or function. Routine repair and maintenance shall not include the replacement of the stairway or any significant portion of greater than 50% of the stairway cumulatively over time from the date of the LUP certification. ~~As feasible, private beach accessways shall be phased out or converted to public accessways.~~
Policy 2.60.5: Upon application for a permit for the replacement of a private beach stairway or replacement of greater than 50% thereof, private beach accessways may be converted to public accessways where feasible and where public access can be reasonably provided. The condition to convert the stairway to a public stairway may only be applied where all or a portion of the stairway utilizes public land or a public access easement.
Chapter 4 – Proposed Revisions
Chapter 4, Page 11: It is essential that the implementation of the programs recommended herein, and achievement of the goals set forth herein, be balanced between public and private interests. The City is committed to implementing the above stated goals and strategies of the LCP ~~including, without limitation, replenishment and retention of beach sand. Sand Mitigation Fees may be expended for sand replenishment and retention projects, and Public/Recreation Fees may be expended for public access and public recreation improvements.~~

Chapter 4, Page 12:

In compliance with the Coastal Act, the goal of the LCP is to limit bluff retention devices on the public bluffs and beach area while protecting public and private property rights to the extent required by law and the health, safety, and welfare of residents and the public. The City's shoreline has largely been built out, and many of the existing structures located along the City's blufftops were built in a location that is now considered at risk from shoreline erosion. Thus, some amount of lower bluff protection has been and will continue to be unavoidable to protect existing structures in danger from erosion pursuant to Section 30235 of the Coastal Act. However, the LCP policies acknowledge that modifications to the building footprint and its foundation further inland on private property ~~will be considered feasible~~ must be analyzed as ~~a~~an potentially feasible alternatives to avoid additional mid and upper bluff stabilization and alteration of the natural landform on public property to protect private development. Such stabilization measures can have particularly extensive adverse impacts on the natural bluff landform and the scenic quality of the shoreline even beyond those associated with lower bluff protection. In all cases, impacts from these devices on public access, recreation, scenic resources and sand supply must be mitigated.

For all new development, the LCP requires that the development be designed so that it will neither be subject to nor contribute to bluff instability, and is sited to not require construction of protective devices that would alter the natural landforms of the bluffs.

Chapter 4, Page 134:

• **Upper Bluff Repair** (See Appendix B Figure 4) – This repair is used where there is a pre-existing lower bluff seawall and/or infill/bluff repair and shall only be used when there is a need to stabilize the upper bluff terrace deposits to provide structural protection due to upper bluff failures or extreme erosion. When feasible, the building footprint and foundation should be moved inland and the bluffs left in a natural state. The repair is much like the upper bluff stabilization described in ~~(~~Preferred Solution #3.~~)~~ It should ~~and~~ take~~in~~ into account lateral migration of erosion from adjacent properties, which would involve benching and placing erodible concrete between the clean sand lens and the bluff face to assure that the clean sand erosion does not undermine the stability of the upper bluff and bluff top principal structure. The slope is then rebuilt and reinforced to create an adequate safety factor to protect the upper bluff structure.

Chapter 4, Page 143:

The City's preference for protecting existing principal structures in danger from erosion is relocating/rebuilding the principal structure on the site to a location that is stable per ~~LUP~~ Policy 4.24. If all feasible alternatives to mid and upper bluff protection have been excluded, then the following types of upper bluff retention systems may be utilized with a lower seawall when collapse of the mid and upper bluff threatens an existing principal structure:~~.~~

~~The following describes types of the City's preferred upper bluff retention systems that may be utilized with a lower seawall when collapse of the mid and upper bluff threatens an existing principal structure:~~

Policy 4.14: Existing, lawfully established structures that are located between the sea and the

first public road paralleling the sea (or lagoon) built prior to the adopted date of the LUP that do not conform to the provisions of the LCP shall be considered legal non-conforming structures. Such structures may be maintained and repaired, as long as the improvements do not increase the size or degree of non-conformity. ~~Minor a~~Additions and improvements to such structures that are not considered Bluff Top Redevelopment, as defined herein, may be permitted provided that such additions or improvements themselves comply with the current policies and standards of the LCP. Complete ~~D~~demolition and reconstruction or Bluff Top Redevelopment is not permitted unless the entire structure is brought into conformance with the policies and standards of the LCP. See also Policy 5.45 which addresses non-Bluff Properties.

~~**Policy 4.18:** A legally permitted bluff retention device shall not be factored into setback calculations. Expansion and/or alteration of a legally permitted bluff retention device shall include a reassessment of the need for the shoreline protective device and any modifications warranted to the protective device to eliminate or reduce any adverse impacts it has on coastal resources or public access, including but not limited to, a condition for a reassessment and reauthorization of the modified device in 20 years.~~

Policy 4.234: Where adherence to the LCP policies on geologic setbacks and other development standards would preclude construction of a new primary residence on a Bluff Top Property, even with reductions in the front yard setback and parking standards, the Bluff Top ~~d~~Development project shall be reviewed as a site-specific LCP Amendment to allow the minimum development necessary to avoid a taking of private property for public use without just compensation.

~~**Policy 4.38:** As part of the LCP Local Implementation Plan (LIP), the City of Solana Beach will establish a two-tiered permit application process to distinguish between projects that may be processed administratively by the City and those requiring discretionary actions(s) by the City. Projects that cannot be considered minor and projects located within the "appealable zone" will require a public hearing and will be treated as discretionary actions.~~

Policy 4.369: Establish a Shoreline ~~District~~ Account which will serve as the primary account where all funds generated pursuant to the Hazards & Shoreline/Bluff Development Chapter of the LUP will be held. The City should invest the Shoreline ~~District~~ Account funds prudently and expend them for purposes outlined in the LCP including, without limitation:

- Sand replenishment and retention studies and projects;
- Updating the October 2010 MHTL Survey;
- Preparation of other shoreline surveys and monitoring programs;
- Opportunistic beach nourishment programs and development of stockpile locations;
- Repair and maintenance of bluff retention devices subject to reimbursement by the affected non-compliant bluff property owners;
- Public recreation improvements;
- Repair and replacement of beach access infrastructure;
- Insurance premiums; and
- Shoreline related litigation.

~~Sand Mitigation Fees must be expended for sand replenishment and potentially retention.~~

~~Recreation Fees must be expended for public access and public recreation improvements.~~
The City may use the funds in the Shoreline Account, subject to the restrictions of any terms of the funding sources, to pay for projects such as beach sand replenishment and retention structures, public recreation and public beach access improvement projects, feasibility and impact studies, operating expenses, insurance, and litigation; and to pay to conduct surveys and monitoring programs.

~~**Policy 438:** As part of the LCP Local Implementation Plan (LIP), the City of Solana Beach will establish a two-tiered permit application process to distinguish between projects that may be processed administratively by the City and those requiring discretionary actions(s) by the City. Projects that cannot be considered minor and projects located within the "appealable zone" will require a public hearing and will be treated as discretionary actions.~~

~~**Policy 4.42:** Ensure the private and public interest in protecting and preserving private property rights under the state and federal Constitutions, the Coastal Act, and local ordinances, such that regulations are not overreaching and no private owner is denied reasonable use of his, her or its bluff property. In accordance with Public Resources Code Section 30010, this Policy is not intended to increase or decrease the rights of any owner of property under the Constitution of the State of California or the United States.~~

Policy 4.47~~9~~: The City has adopted preferred bluff retention solutions (see Appendix B) to streamline and expedite the City permit process for bluff retention devices. The preferred bluff retention solutions are designed to meet the following goals and objectives:

1. Locate bluff retention devices as far landward as feasible;
2. Minimize alteration of the bluff face;
3. Minimize visual impacts from public viewing areas;
4. Minimize impacts to adjacent properties including public bluffs and beach areas; and
5. Conduct annual visual inspection and maintenance as needed.

The bluff property owner's licensed Civil or Geotechnical Engineer must examine the device for use in the specific location and take responsibility for the design as the Engineer of Record.

The Bluff Property Owner shall arrange for and pay the costs of:

1. The licensed Geotechnical or Civil Engineer;
2. The bluff retention device;
3. A bond to ensure completion of the bluff retention device;
4. Appropriate mitigation; and
5. All necessary repairs, maintenance, and if needed removal.

Applicants who seek permits to install a preferred bluff retention solution can do so on a streamlined basis, relying on previously approved standards and designs, and shall receive expedited processing from the City. As technology develops, the City will consider other preferred bluff retention solutions that meet the goals and policies of the LCP, as an amendment to the LUP or within the LIP.

Applications for coastal development permits for all bluff retention devices where any portion of which will be sited seaward of the MHTL, shall be submitted first to the City for approval of a major use permit and then to the CCC for a coastal development permit. The CCC has original jurisdiction for the portion of the bluff retention device that will be sited seaward of the MHTL. Such developments shall be subject to this LCP for the portions within the City's jurisdiction. Chapter 3 of the Coastal Act will be the standard of review for the portion within the CCC's jurisdiction. For beachfront development that will be subject to wave action periodically, unless the State Lands Commission determines that there is no evidence that the proposed development will encroach on tidelands or other public trust interests, the City shall reject the application on the grounds that it is within the original permit jurisdiction of the CCC and shall direct the applicant to file his or her application with the CCC.

Policy 4.4752: A Seacave/Notch Infill shall be approved only if all the findings set forth below can be made and the stated criteria satisfied. The permit shall be valid for a period of 20 years commencing with the ~~date of CDP approval~~ building permit completion certification date and subject to an encroachment removal agreement approved by the City.

A. Based upon the advice and recommendation of a licensed Geotechnical or Civil Engineer, the City makes the findings set forth below:

1. The Seacave/Notch Infill is more likely than not to delay the need for a larger coastal structure or upper bluff retention structure, that would, in the foreseeable future, be necessary to protect and existing principal structure, City facility, and/or City infrastructure, from danger of erosion. Taking into consideration any applicable conditions of previous permit approvals for development at the subject site, a determination must be made based on a detailed alternatives analysis that none of the following alternatives to the coastal structure are currently feasible, including:
   - Controls of surface water and site drainage;
   - A smaller coastal structure; or
   - Other non-beach and bluff face stabilizing measures, taking into account impacts on the near and long term integrity and appearance of the natural bluff face, and contiguous bluff properties.

2. The bluff property owner did not create the necessity for the Seacave/Notch Infill by unreasonably failing to implement generally accepted erosion and drainage control measures, such as reasonable management of surface drainage, plantings and irrigation, or by otherwise unreasonably acting or failing to act with respect to the bluff property. In determining whether or not the bluff property owner's actions were "reasonable," the City shall take into account whether or not the bluff property owner acted intentionally, with or without knowledge, and shall consider all other relevant credible scientific evidence as well as relevant facts and circumstances.

3. The location, size, design and operational characteristics of the proposed seacave/notch infill

will not create a significant adverse effect on adjacent public or private property, natural resources, or public use of, or access to, the beach, beyond the environmental impact typically associated with a similar bluff retention device and the seacave/notch infill is the minimum size necessary to protect the principal structure, has been designed to minimize all environmental impacts, and provides mitigation for all coastal and environmental impacts as provided for in this LCP.

B. The Seacave/Notch Infill shall be designed and constructed:

1. To avoid migration of the Seacave/Notch Infill onto the beach;
2. To be re-contoured to the face of the bluff, as needed, on a routine basis, through a CDP or exemption, to ensure the seacave/notch infill conforms to the face of the adjoining natural bluff over time, and continues to meet all relevant aesthetic, and structural criteria established by the City;
3. To serve its primary purpose which is to delay the need for a larger coastal structure, and designed to be removable, to the extent feasible, provided all other requirements under the LCP are satisfied; and~~,~~
4. To satisfy all other relevant LCP and City Design Standards, set forth for coastal structures.

~~C. The Bluff Property Owner shall arrange for and pay the costs of:~~

~~1. The licensed Geotechnical or Civil Engineer; and~~
~~2. The Seacave/Notch Infill;~~
~~3. Appropriate mitigation; and~~
~~4. All necessary repairs, maintenance, and if needed removal.~~

C~~D~~. Only to the extent the City finds that the Seacave/Notch Infill encroaches on the public beach or upon the bluff face such that coastal resources are adversely impacted, then the City shall impose a Sand Mitigation Fee upon the bluff property owner.

Policy 4.49~~52~~: The bluff property owner shall pay for the cost of the coastal structure or Infill and pay a Sand Mitigation Fee and a Public Recreation Fee per LUP Policy ~~4.38~~4.40. These mitigation fees are not intended to be duplicative with fees assessed by other agencies. It is anticipated the fees assessed as required by this LCP will be in conjunction with, and not duplicative ~~with~~ of, the mitigation fees typically assessed by the CCC and the CSLC for impacts to coastal resources from shoreline protective devices.

Sand Mitigation Fee - to mitigate for actual loss of beach quality sand which would otherwise have been deposited on the beach. For all development involving the construction of a bluff retention device, a Sand Mitigation Fee shall be collected by the City which shall be used for beach sand replenishment and/or retention purposes. The mitigation fee shall be deposited in an interest-bearing account designated by the City Manager of Solana Beach in lieu of providing sand to replace the sand that would be lost due to the impacts of any proposed

protective structure. The methodology used to determine the appropriate mitigation fee has been approved by the CCC and is contained in LUP Appendix A. The funds shall solely be used to implement projects which provide sand to the City's beaches, not to fund other public operations, maintenance, or planning studies.

Sand Mitigation Fees must be expended for sand replenishment and potentially for retention projects as a first priority and may be expended for public access and public recreation improvements as secondary priorities where an analysis done by the City determines that there are no near-term, priority sand replenishment Capital Improvement Projects (CIP) identified by the City where the money could be allocated. The Sand Mitigation funds shall be released for secondary priorities only upon written approval of an appropriate project by the City Council and the Executive Director of the Coastal Commission.

Public Recreation Fee – Similar to the methodology established by the CCC for the sand mitigation fee, the City and the CCC are jointly developing a methodology for calculating a statewide public recreation fee. To assist in the efforts, the City has shared the results of their draft study with the CCC to support the development of a uniform statewide Public Recreation / Land Lease Fee. Until such time as an approved methodology for determining this fee has been established, and the methodology and payment program has been incorporated into the LCP through an LCP amendment, the City will collect a $1,000 per linear foot interim fee deposit. In the interim period, CCC will evaluate each project on a site-specific basis to determine impacts to public access and recreation, and additional mitigation may be required. The City shall complete its Public Recreation/Land Lease fee study within 18 months of effective certification of the LUP.

Project applicants have the option of proposing a public recreation/access project in lieu of payment of Public Recreation Fees (or interim deposits) to the City. At the City's discretion, these projects may be accepted if it can be demonstrated that they would provide a directly-related recreation and/or access benefit to the general public.

Public Recreation Fees must be expended for public access and public recreation improvements as a first priority and for sand replenishment and retention as secondary priorities where an analysis done by the City determines that there are no near-term, priority public recreation or public access CIP identified by the City where the money could be allocated. The Public Recreation funds shall be released for secondary priorities only upon written approval of an appropriate project by the City Council and the Executive Director of the Coastal Commission.

Policy 4.4853: Coastal structures shall be approved by the City only if all the following applicable findings can be made and the stated criteria satisfied. The permit shall be valid for a period of 20 years commencing with the building permit completion certification date ~~date of CDP approval~~ and subject to an encroachment removal agreement approved by the City.

A. Based upon the advice and recommendation of a licensed Geotechnical or Civil Engineer, the City makes the findings set forth below:

1. A bluff failure is imminent that would threaten a bluff home, city facility, city infrastructure, and/or other principal structure.
2. The coastal structure is more likely than not to preclude the need for a larger coastal structure or upper bluff retention structure. Taking into consideration any applicable conditions of previous permit approvals for development at the subject site, a determination must be made based on a detailed alternatives analysis that none of the following alternatives to the coastal structure are then currently feasible, including:
   - A Seacave/Notch Infill;
   - A smaller coastal structure; or
   - Other remedial measures capable of protecting the bluff home, city facility, non-city-owned utilities, and/or city infrastructure, which might include other non-beach and bluff face stabilizing measures, taking into account impacts on the near and long term integrity and appearance of the natural bluff face, and contiguous bluff properties.

Policy 4.514: An upper bluff system shall be approved only if all the following applicable findings can be made and the stated criteria will be satisfied. The permit shall be valid for a period of 20 years commencing with the building permit completion certification date and subject to an encroachment removal agreement approved by the City.

A. Based on the advice and recommendation of a licensed Geotechnical or Civil Engineer, the City makes the findings set forth below:
   1. A bluff failure is imminent that would threaten a bluff home, city facility, city infrastructure, and/or other principal structure in danger from erosion. ~~and, that.~~
   2. The bluff home, city facility, city infrastructure, and/or principal structure is more likely than not to be in danger within one year after the date an application is made to the City.

Taking into consideration any applicable conditions of previous permit approval for development at the subject site, a determination must be made based on a detailed alternatives analysis that none of the following alternatives to the upper bluff system are then currently feasible, including:

- No upper bluff system;
- Vegetation;
- Controls of surface water and site drainage;
- A revised building footprint and foundation system (e.g., caissons) with a setback that avoids future exposure and alteration of the natural landform;
- A smaller upper bluff system;
- Other remedial measures capable of protecting the bluff home, city facility, non-city-owned utilities, and/or city infrastructure which might include tie-backs or other feasible non-beach and bluff face stabilizing measures, taking into account impacts on the near and long term integrity and appearance of the natural bluff face, the public beach, and, contiguous bluff properties; ~~and~~ or
- Removal and relocation of all, or portions, of the affected bluff home, city facilities or city infrastructure.

Policy 4.52~~5~~: All permits for ~~new~~ bluff retention devices shall expire 20 years after ~~approval of the~~

~~CDP,~~ the building permit completion certification date, ~~-~~and a new CDP must be obtained. Prior to expiration of the permit, the bluff top property owner shall apply for a coastal development permit to remove, modify or retain the protective device. ~~—~~In addition, expansion and/or alteration of a legally permitted existing bluff retention device shall require a new CDP. The CDP application shall include a re-assessment of need for the device, the need for any repair or maintenance of the device, and the potential for removal based on changed conditions. ~~-~~The CDP application shall ~~evaluate~~ include an include an evaluation of:

- ~~the~~The age, condition and economic life of the existing principal structure;
- changed geologic site conditions including implementation of the City's long-term USACE beach nourishment program or similar long-term, large scale sand replenishment or shoreline restoration program; and~~,~~
- any impact to public access and recreation.

~~relative to sea level rise and the age, condition, and economic life of principal structure including whether it was an existing structure on January 1, 1977 (prior to implementation of the Coastal Act). Prior to expiration of the permit, the bluff top property owner shall apply for a coastal development permit to either remove or retain the protective device.~~ The CDP shall include a condition of reassessment and reauthorization of the device in 20 years~~——~~.No permit shall be issued for retention of a bluff retention device unless the City finds that the bluff retention device is still required to protect an existing principal structure, that it will minimize ~~avoid~~ further alteration of the natural landform of the bluff, and that adequate mitigation for impacts to the public beach has been provided.

~~**Policy 4.72:** Use the funds in the Shoreline District Account to pay for projects such as beach sand replenishment and retention structures, including feasibility and impact studies, operating expenses, insurance, litigation; and to pay to conduct surveys and monitoring programs. Sand Mitigation Fees may only be expended for sand replenishment and potentially retention projects, and Land Lease/Recreation Fees may be expended for public access and public recreation improvements.~~

Chapter 5 – Proposed Revisions

Policy 5.9.5: Ensure the private and public interest in protecting and preserving private property rights under the state and federal Constitutions, the Coastal Act, and local ordinances, such that regulations are not overreaching and no private owner is denied reasonable use of his, her or its property. In accordance with Public Resources Code Section 30010, this Policy is not intended to increase or decrease the rights of any property owner under the Constitution of the State of California or of the United States.

Policy 5.45: Existing, lawfully established structures that are not located on property located between the sea and its inland extent and the first public road paralleling the sea (or lagoon) that were built prior to the adopted date of the LUP that do not conform to the provisions of the LCP shall be considered non-conforming structures. Non-conforming uses or structures may not be increased or expanded into additional locations or structures. Such structures may be maintained~~,~~ and repaired as long as the improvements do not increase the size or degree of non-conformity. This section shall not be interpreted to allow the reconstruction of a nonconforming structure unless destroyed by a disaster~~,~~ as defined in Public Resources Code § 30610(g)(2)(A).

~~Demolition and reconstruction that results in the demolition of more than 50 percent of the exterior walls of a non-conforming structure is not permitted unless the entire structure is brought into conformance with the policies and standards of the LCP. Non-conforming uses or structures may not be increased or expanded into additional locations or structures. (See Policy 4.14 for structures that are located between the sea and its inland extent and the first public road paralleling the sea (or lagoon).)~~

Chapter 7 – Proposed Revisions

Policy 7.1:

b) All public transportation facilities, including streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads, and mass transit facilities and stations, bridges, trolley wires, and other related facilities. ~~For purposes of this division, neither the Ports of Hueneme, Long Beach, Los Angeles nor San Diego Unified Port District nor any of the developments within these ports shall be considered public works.~~

Chapter 8 – Proposed Revisions and Additions

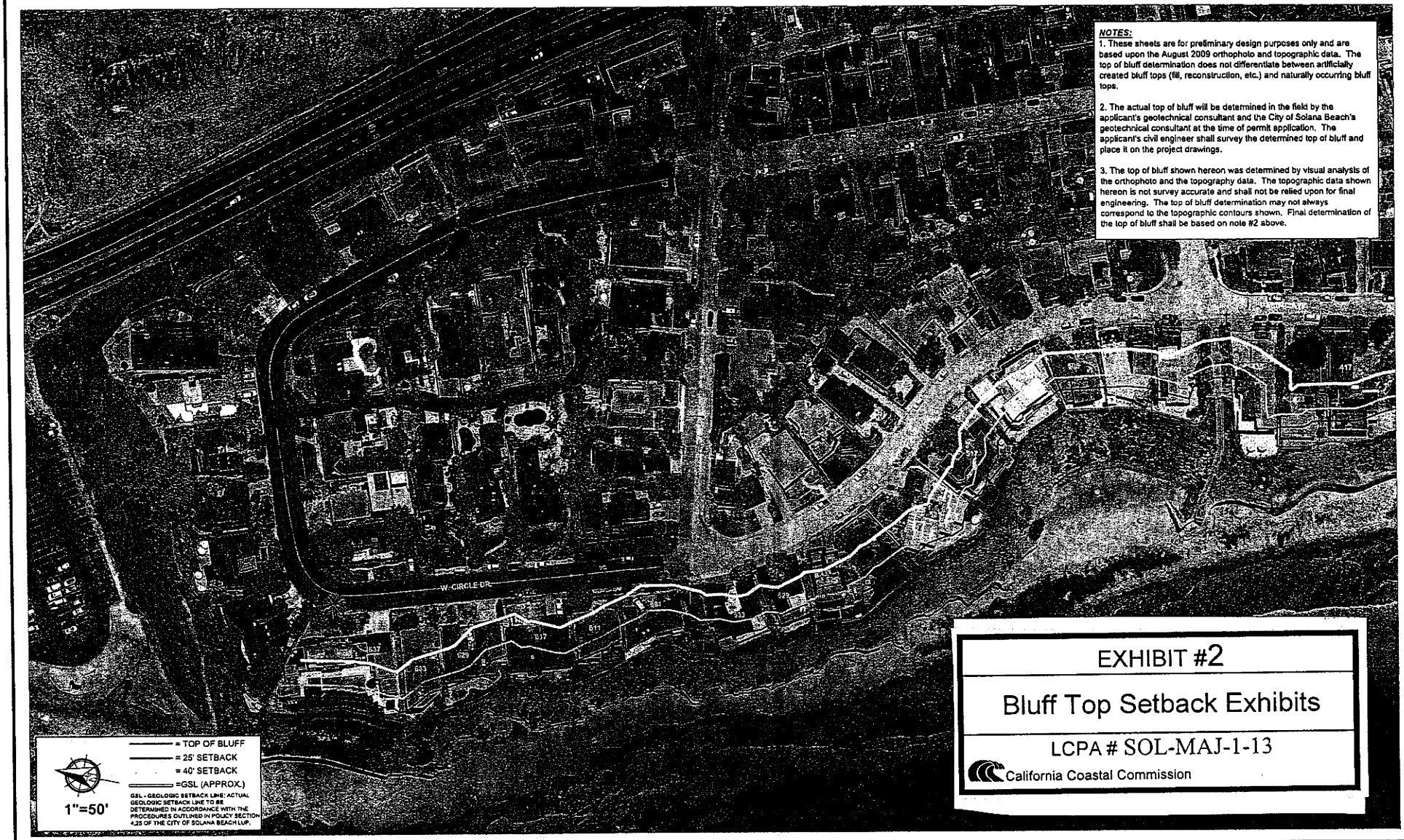
Bluff Top Redevelopment: Shall apply to structures located between the sea and the inland extent of the sea and the first public road paralleling the sea (or lagoon) that consist of (1) additions; (2) exterior and/or interior renovations; (3) or demolition of an existing bluff home or other principal structure which results in: (1) alteration of 50% or more of major structural components; or (2) a 50% increase in floor area. Alterations are not additive or cumulative between individual major structural components; however, changes to individual major structural components are cumulative over time from the date of certification of the LUP.

~~(1) Alteration of 50% or more of an existing structure, including but not limited to, alteration of 50% or more of exterior walls, interior load-bearing walls, or a combination of both types of walls, or a 50% increase in floor area.; or~~

~~(2) Demolition, renovation or replacement of less than 50% of an existing structure where the proposed remodel would result in cumulative alterations exceeding 50% or more of the existing structure from the date of certification of the LUP.~~

Caisson Foundation: Means a subsurface support structure. A Caisson is a shaft or shafts of steel reinforced concrete placed under a building column, foundation or wall and extending down to hardpan, bedrock or competent material as defined or approved by a soils engineer or geologist. Caissons, for this definition, are drilled into position and are used to carry surface building loads and/or to carry surface building loads from anticipated future loss of support (i.e. "slope failure"). Also known as pier foundation.

Cantilever: A projecting or overhanging structure of up to 10 feet in depth on the west side of a Bluff Home that is supported at one end and carries a load at the other end or along its length. Cantilever construction allows for structures to project seaward of the GSL or rear yard setback without external bracing. All foundation footings and structural supports for cantilevered square footage shall be located landward of the geologic setback line/rear yard setback. No newly constructed cantilevered square footage is permitted to project over the bluff edge.



NOTES:

1. These sheets are for preliminary design purposes only and are based upon the August 2009 orthophoto and topographic data. The top of bluff determination does not differentiate between artificially created bluff tops (fill, reconstruction, etc.) and naturally occurring bluff tops.

2. The actual top of bluff will be determined in the field by the applicant's geotechnical consultant and the City of Solana Beach's geotechnical consultant at the time of permit application. The applicant's civil engineer shall survey the determined top of bluff and place it on the project drawings.

3. The top of bluff shown hereon was determined by visual analysis of the orthophoto and the topography data. The topographic data shown hereon is not survey accurate and shall not be relied upon for final engineering. The top of bluff determination may not always correspond to the topographic contours shown. Final determination of the top of bluff shall be based on note #2 above.

= TOP OF BLUFF
= 25' SETBACK
= 40' SETBACK
=GSL (APPROX.)

1"=50'

GSL - GEOLOGIC SETBACK LINE: ACTUAL GEOLOGIC SETBACK LINE TO BE DETERMINED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN POLICY SECTION 4.25 OF THE CITY OF SOLANA BEACH LUP.

EXHIBIT #2

Bluff Top Setback Exhibits

LCPA # SOL-MAJ-1-13

California Coastal Commission

CHANGE NO.	DESCRIPTION	APPROVED	DATE

BENCHMARK
DESCRIPTION:
LOCATION:
RECORD FROM:
ELEVATION:
DATUM: NAVD88

SCALE
HORIZONTAL: 1" = 50'
VERTICAL: N/A

DESIGNED BY: SN | DRAWN BY: SN | CHECKED BY: JK

PLANS PREPARED UNDER SUPERVISION OF
JAMES KNOWLTON
DATE:
R.C.E. NO.:
EXP.:

ENGINEERING DEPARTMENT APPROVALS
RECOMMENDED: _____ DATE _____
APPROVED: _____ DATE _____

CITY OF SOLANA BEACH
ESTIMATED TOP OF COASTAL BLUFF, 25' SETBACK, 40' SETBACK, AND APPROXIMATE GEOLOGIC SETBACK LINE

DRAWING NO.
SHEET 1 OF 5

NOTES:

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3. The top of bluff shown hereon was determined by visual analysis of the orthophoto and the topography data. The topographic data shown hereon is not survey accurate and shall not be relied upon for final engineering. The top of bluff determination may not always correspond to the topographic contours shown. Final determination of the top of bluff shall be based on note #2 above.

CHANGE NO.	DESCRIPTION	APPROVED	DATE

BENCHMARK
DESCRIPTION:
LOCATION:
RECORD FROM:
ELEVATION:
DATUM: NAVD88

SCALE
HORIZONTAL: 1" = 50'
VERTICAL: N/A

DESIGNED BY: SH | DRAWN BY: SH | CHECKED BY: JK

PLANS PREPARED UNDER SUPERVISION OF
DATE:
R.C.E. NO.:
JAMES KNOWLTON EXP.:

ENGINEERING DEPARTMENT APPROVALS
RECOMMENDED: _____ DATE
APPROVED: _____ DATE

CITY OF SOLANA BEACH

ESTIMATED TOP OF COASTAL BLUFF, 25' SETBACK, 40' SETBACK, AND APPROXIMATE GEOLOGIC SETBACK LINE

DRAWING NO.

SHEET 2 OF 5

NOTES:

1. These sheets are for preliminary design purposes only and are based upon the August 2009 orthophoto and topographic data. The top of bluff determination does not differentiate between artificially created bluff tops (fill, reconstruction, etc.) and naturally occurring bluff tops.

2. The actual top of bluff will be determined in the field by the applicant's geotechnical consultant and the City of Solana Beach's geotechnical consultant at the time of permit application. The applicant's civil engineer shall survey the determined top of bluff and place it on the project drawings.

3. The top of bluff shown hereon was determined by visual analysis of the orthophoto and the topography data. The topographic data shown hereon is not survey accurate and shall not be relied upon for final engineering. The top of bluff determination may not always correspond to the topographic contours shown. Final determination of the top of bluff shall be based on note #2 above.

CHANGE NO.	DESCRIPTION	APPROVED	DATE

BENCHMARK

DESCRIPTION:
LOCATION:
RECORD FROM:
ELEVATION:
DATUM: NAVD88

SCALE

HORIZONTAL: 1" = 50'
VERTICAL: N/A

DESIGNED BY:	DRAWN BY:	CHECKED BY:
SN	SN	JK

PLANS PREPARED UNDER SUPERVISION OF

JAMES KNOWLTON

DATE:
R.C.E. NO.:
EXP.:

ENGINEERING DEPARTMENT APPROVALS

RECOMMENDED: _____ DATE

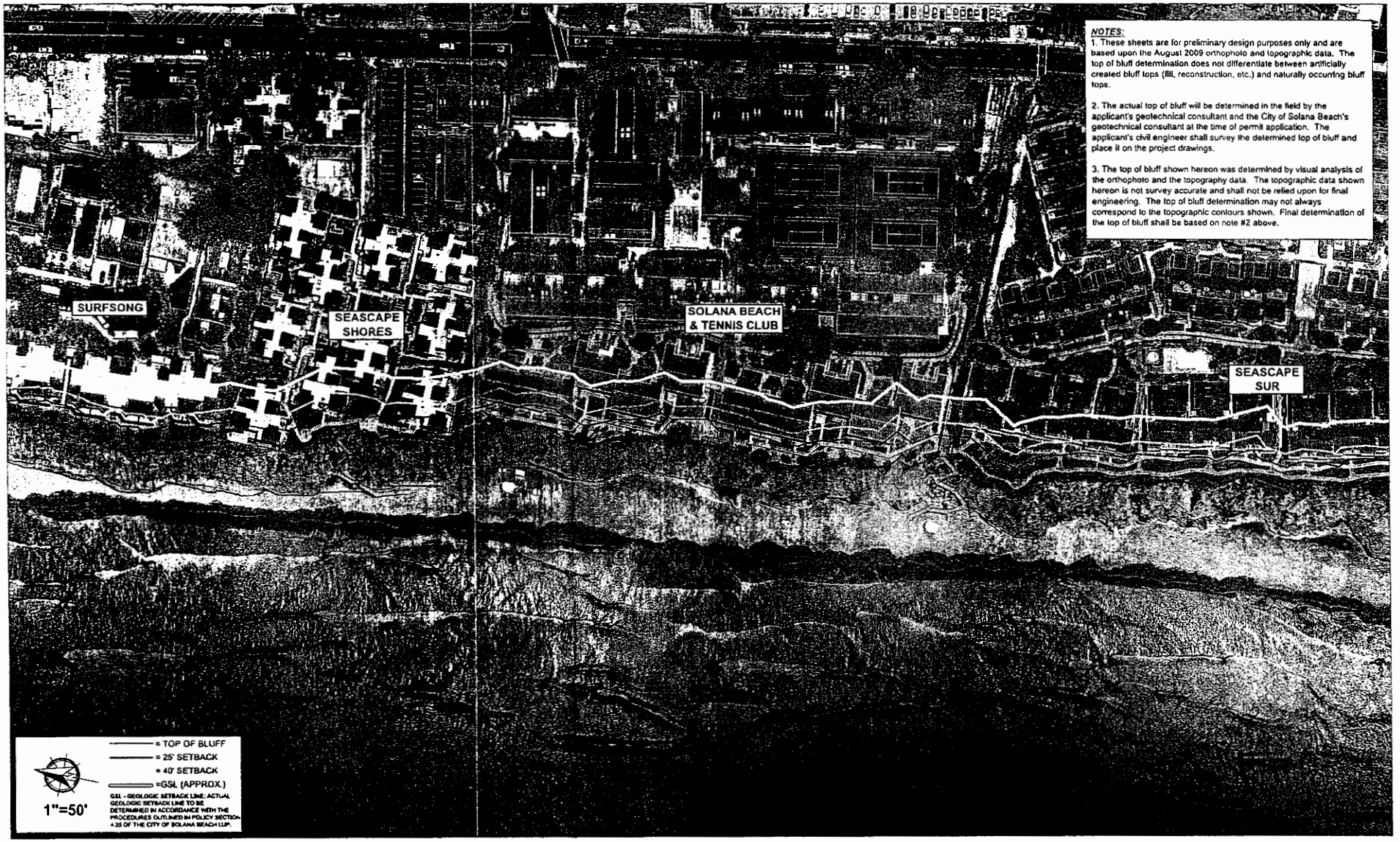
APPROVED: _____ DATE

CITY OF SOLANA BEACH

ESTIMATED TOP OF COASTAL BLUFF, 25' SETBACK, 40' SETBACK, AND APPROXIMATE GEOLOGIC SETBACK LINE

DRAWING NO.

SHEET 3 OF 5



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LOCATION: _____
RECORD FROM: _____
ELEVATION: _____
DATUM: NAVD88

SCALE

HORIZONTAL: 1" = 50'
VERTICAL: N/A

DESIGNED BY:	DRAWN BY:	CHECKED BY:
SH	SH	JK

PLANS PREPARED UNDER SUPERVISION OF

_____
JAMES KNOWLTON

DATE: _____
R.C.E. NO.: _____
EXP.: _____

ENGINEERING DEPARTMENT APPROVALS

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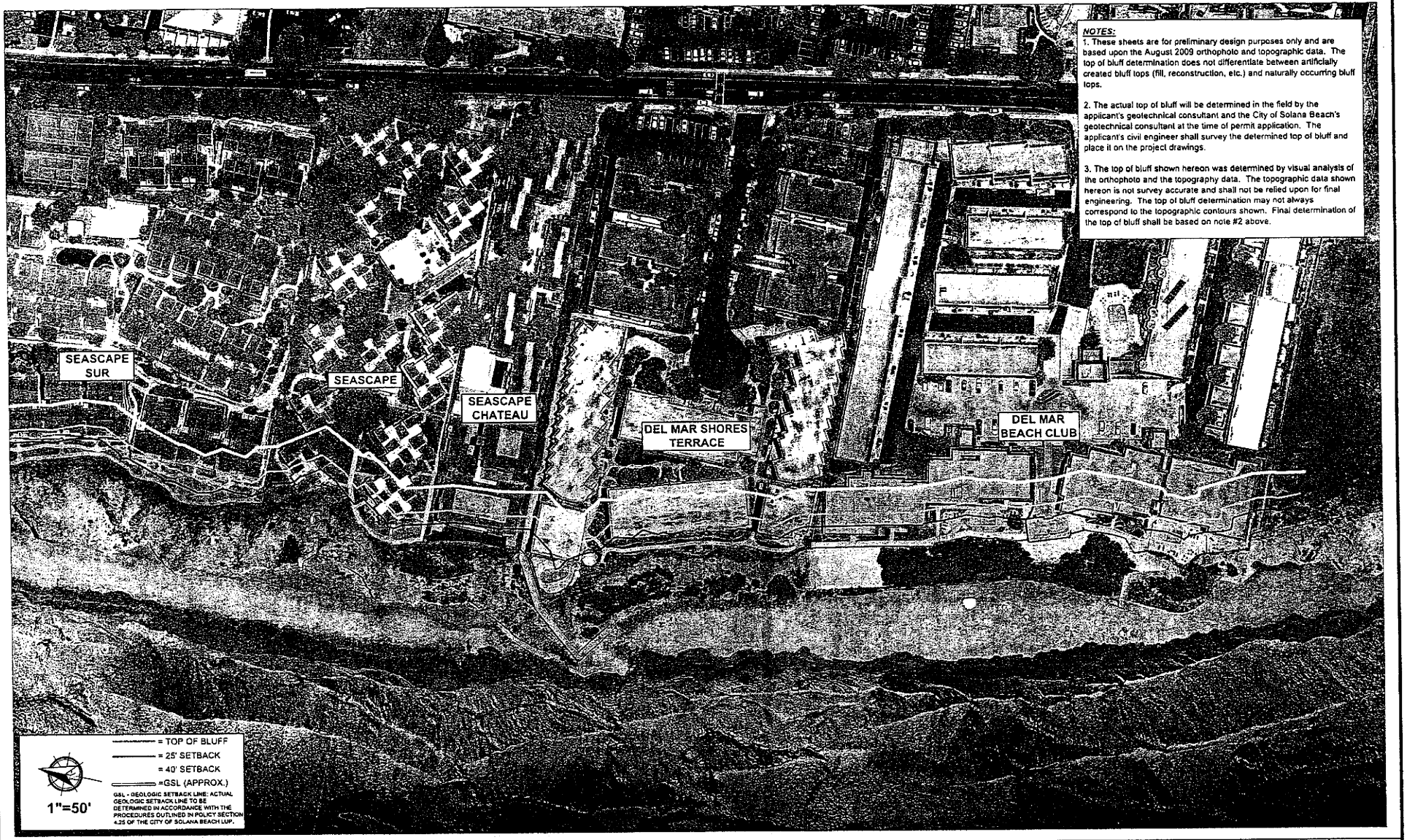
CITY OF SOLANA BEACH

ESTIMATED TOP OF COASTAL BLUFF, 25' SETBACK, 40' SETBACK, AND APPROXIMATE GEOLOGIC SETBACK LINE

DRAWING NO.

SHEET 4 OF 5



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RECORD FROM: _____
ELEVATION: _____
DATUM: NAVD88

SCALE
HORIZONTAL: 1" = 50'
VERTICAL: N/A

DESIGNED BY: SN | DRAWN BY: SN | CHECKED BY: JK

PLANS PREPARED UNDER SUPERVISION OF
_____
JAMES KNOWLTON
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CITY OF SOLANA BEACH
ESTIMATED TOP OF COASTAL BLUFF, 25' SETBACK, 40' SETBACK, AND APPROXIMATE GEOLOGIC SETBACK LINE

DRAWING NO.
SHEET 5 OF 5

CHAPTER 4—HAZARDS & SHORELINE / BLUFF DEVELOPMENT

A. Introduction

Within the City of Solana Beach there are three primary types of natural hazards including hillside-related geologic hazards, flooding hazards, and fire hazards. Hillside-related geologic hazards occur in the City due to the presence of steep slopes and coastal bluffs and are shown in Exhibits 4-1 – 4-5. Flood hazard areas in the City are related to the existence of the 100-year flood plain and are shown in Exhibit 4-6. Fire hazards in the City are related to the presence of a WUI which exists in much of the northern part of the City as shown in Exhibit 4-7. Policies related to each of these natural hazard areas are included in the LUP.

Over the past half-century, human actions have been the major influence affecting the City and the shoreline. Through urban development activities, including water reservoir and dam building, road building, residential and commercial development on coastal hillsides, flood control systems, and sand mining, natural sediment transport to the beach has been hindered or eliminated. All major coastal rivers in the region have at least one dam and reservoir and are bisected by at least one major roadway. Much of the sediment-laden fresh water that would naturally flow to coastal wetlands is diverted to farms and city water distribution systems. Dams and roads reduce the size of flood flows and thus reduce the flushing of sediment from estuaries, trapping the sand that would otherwise nourish coastal beaches.

Beach sand is a product of the weathering of the land. The primary natural source for the region's beaches is sediment carried from inland areas by rivers and streams. Coastal bluff erosion is another source of beach sand. Offshore sand supplies (relic or ancient beaches) may be a natural source of beach sand, but these resources are an under-examined component of the littoral sand budget. Beach sand is the primary buffer protecting sea cliffs and coastal development from erosion and storm damage. To offset the loss of natural sand sources no longer reaching the shoreline, previous projects have built man-made beaches by conducting beach nourishment projects. Most of the sand for this purpose has come from offshore borrow sites, as well as, harbor dredging projects in San Diego Bay and in Oceanside Harbor.

The natural sand cycle of sand movement is a seasonal process. For the San Diego region, beach sand loss typically occurs in the winter due to large storms and waves, followed by a period of sand gain during the summer's gentler storms and surf. During the winter, sand shifts from the beach above the mean sea level to offshore covered by seawater. These combined seasonal processes, including both winter and summer sand shifts, comprise a complete sedimentation cycle. A coastal segment that contains a complete sedimentation cycle is defined as a littoral cell. Along the San Diego region's coast there are three littoral cells that cycle sand on and off the beaches and along shore in a zig-zag pattern. Bounded on one side by the landward limit of the beach and extending seaward beyond the area of breaking waves (beyond the depth of closure), a littoral cell is the region where wave energy dissipates.

Littoral cells are physically interconnected; occurrences in one part of a littoral cell will ultimately have an impact on other parts. There are three littoral zones off of the San Diego region including the Oceanside Littoral Cell, the Mission Bay Littoral Cell, and the Silver Strand Littoral Cell.

Solana Beach is located within the southern half of the Oceanside Littoral Cell. Other than the San Elijo Lagoon this portion of the littoral cell it does not have any major river, stream, or other resources that continually or directly provide a sand supply to the beach. Sediment flowing through the lagoon is blocked by at least three transportation corridors, including I-5, the NCTD berm, and Highway 101. Thus, the City's beaches are experiencing a net loss of sand. The reach from southern Oceanside to northern Del Mar is dependent on longshore transport of sand from the north and south. Longshore sand transport is driven by waves breaking at an angle to the shoreline. Transport is generally southward in winter and northward in summer. Sand also moves onshore and offshore seasonally. Under the present conditions of sand starvation, the small contribution from cliff erosion in Solana Beach gets immediately swept away. Seacliff erosion is a natural process occurring throughout San Diego County generally and in Solana Beach specifically, which in the last several decades has been greatly accelerated by a variety of factors including the El Nino storms of 1997-1998. Armoring of the shoreline, sea level rise, the lack of sand replenishment due to the damming of and mining in coastal rivers that formerly carried to the ocean much greater amounts of sediment than are currently being delivered.

Throughout much of Solana Beach, horizontally-bedded clean sand beach deposits exist within the lower part of the coastal bluffs. The clean sand layer exposed within the coastal bluffs in Solana Beach, typically between elevation 25 feet and 35 feet (MSL), cannot stand vertical. Once exposed, tends to continually erode and slough undermining the overlying lightly cemented dune sands triggering additional failures higher up on the bluff face. Wherever these clean sands are exposed by a cliff failure, the bluff becomes unstable, and susceptible to additional accelerated failure. Ongoing and progressive upper-bluff failures continue to this day along the Solana Beach coastline. Overlying the beach sands are thick sand dune deposits, which comprise much of the middle Bay Point Formation in this area and likely part of a dune field that overran the beach deposits after the sea retreated. These clean relic beach sands have not been encountered in other Bay Point Formation exposures extending from the Point Loma Peninsula in central San Diego, up to the northerly limits of San Diego County.

It is this relatively unstable geologic environment that has necessitated shoreline stabilization along much of the City's coastline north of Fletcher Cove. The clean sand lens instability has prompted the City of Solana Beach to adopt "Preferred Bluff Stabilization Measures (LUP Appendix B)." Seacliff erosion is the primary reason why shoreline protection management remains a critical issue in Solana Beach.

Exhibit 4-1

Exhibit 4-2

Exhibit 4-3

Exhibit 4-4

Exhibit 4-5

Exhibit 4-6
Flood Map

Exhibit 7
WUI Map

1. Coastal Act Provisions

Under the Coastal Act, development is required to be sited and designed to minimize risks, assure stability and structural integrity, and neither create nor contribute significantly to erosion or require the construction of protective devices that would substantially alter the natural landforms along bluffs and cliffs (Section 30253). Section 30235 of the Coastal Act allows the construction of bluff retention devices where existing structures are threatened from erosion and when designed to eliminate or mitigate impacts on shoreline sand supply. The Coastal Act also provides that development damaged or destroyed by disasters can be rebuilt in the same location, exempt from a CDP, under certain conditions. Certain emergency actions are also exempt from permit requirements.

2. Land Use Plan Provisions

To ensure consistency with the Coastal Act, the policies contained below in the LUP are intended to facilitate development and redevelopment in a manner which minimizes impacts from hazards as well as impacts to coastal resources, including public access and recreation. The primary objectives of the City in reducing flood, fire and geologic hazards in the City include the establishment of policies that manage, reduce, minimize and/or avoid risks associated with known hazards in the City.

Reducing the potential adverse effects of shoreline hazards include implementing comprehensive and long-term shoreline management strategies, policies and programs that promote beach sand replenishment and retention to reduce the need for shoreline protection devices.

Where the clean sand lens is not exposed along the coastal bluff, seacave and infills may be considered as appropriate solutions that can avoid or postpone the need for larger shoreline protection device.

The LUP policies, goals, and requirements regarding natural hazards and shoreline and bluff development can be summarized as follows:

- Maintaining public ownership of the bluffs and beaches; Prohibiting new development that could require shoreline protection, and new land divisions which create new lots within high hazard areas;
- Requiring that new development on oceanfront bluffs be set back in accordance with all provisions of the LCP;
- Providing that applicants assume the risk of building in hazardous areas without the expectation that future bluff protection devices will be allowed;
- Acknowledging that the shoreline is inherently a changing, unstable area, and development along the shoreline should never be considered permanent.
- Regulating development to avoid the need for mid and upper bluff shoreline protection;

- Developing emergency permit procedures, follow-up actions and monitoring to ensure that the emergency response, whether temporary or permanent, is the least environmentally damaging alternative to the extent feasible;
- Providing for the development of long-term shoreline management policies; Including measures to establish periodic nourishment of the City's beaches which are vulnerable to direct wave attack and erosion to assure long-term maintenance of beach area for public recreational use;
- Monitoring the issue of potential future sea level rise, both in the short term via permitting actions and a long-term response to address future development impacts along the shoreline;
- Siting and designing development to avoid or minimize risk from geologic, flood and fire hazards;
- Implementing a HOZ program for siting and designing development and to minimize grading and vegetation clearance on steep slopes;
- Providing that development utilize adequate drainage and erosion control measures both during construction and as a long-term feature; and,
- Requiring that new development be sited and designed to avoid the impacts of fuel modification and brush clearance on native habitat and neighboring property, particularly parkland.

This LCP includes an LUP and Local Implementation Plan (LIP) which will contain LIP implementing ordinances, and other code amendments, as needed, to implement the LCP. The following policies and plans are intended to implement the LCP.

It is essential that the implementation of the programs recommended herein, and achievement of the goals set forth herein, be balanced between public and private interests. The City is committed to implementing the above stated goals and strategies of the LCP. ~~including, without limitation, replenishment and retention of beach sand. Sand Mitigation Fees may be expended for sand replenishment and retention projects, and Public/Recreation Fees may be expended for public access and public recreation improvements.~~

This section addresses shoreline structures that alter natural shoreline processes. This section is intended to set the general policy framework for implementing the LCP.

The shoreline of Solana Beach is characterized by a narrow strip of sandy beach at the foot of coastal bluffs. This shoreline consists of public beach access points, public infrastructure improvements, private residences, the Fletcher Cove Community Center, Fletcher Cove Park, the City of Solana Beach Marine Safety Center, and other structures on the tops of the bluffs. Many improvements are situated within twenty-five feet of the bluff edge due to erosion or the siting of the original construction or both. The City's coastal bluff edge and 25' and 40' setback lines are shown in Exhibit 4-1, 4-2, 4-3, 4-4, and 4-5. Because of the narrowness of the beach and lack of a sand buffer, the bluffs are subjected to wave action, particularly during the winter months. Surficial

or subaerial erosion has also resulted from wind, rain, irrigation, storm water drainage, construction, elimination or reduction in upland sand sources to the coast, sand retention devices to the north of the City and climbing activity on the face of the bluff.

A variety of bluff retention devices including seacave or notch infills, have been constructed in the Solana Beach in an attempt to protect bluff homes. However, based on the need to encapsulate the clean sand lens once it becomes exposed, these small protective efforts are often expanded over time into larger 35-foot high seawalls, with mid-bluff reconstruction and upper bluff retaining walls that together cover a larger portion of the bluff face.

In compliance with the Coastal Act, the goal of the LCP is to limit bluff retention devices on the public bluffs and beach area while protecting public and private property rights to the extent required by law and the health, safety, and welfare of residents and the public. The City's shoreline has largely been built out, and many of the existing structures located along the City's bluff tops were built in a location that is now considered at risk from shoreline erosion. Thus, some amount of lower bluff protection has been and will continue to be unavoidable to protect existing structures in danger from erosion pursuant to Section 30235 of the Coastal Act. However, the LCP policies acknowledge that modifications to the building footprint and its foundation further inland on private property ~~will be considered feasible~~ must be analyzed as a potentially feasible alternatives to avoid additional mid and upper bluff stabilization and alteration of the natural landform on public property to protect private development. Such stabilization measures can have particularly extensive adverse impacts on the natural bluff landform and the scenic quality of the shoreline even beyond those associated with lower bluff protection. In all cases, impacts from these devices on public access, recreation, scenic resources and sand supply must be mitigated.

For all new development, the LCP requires that the development be designed so that it will neither be subject to nor contribute to bluff instability, and is sited safely without reliance on existing or future shoreline protection.

The City is currently engaged in local, regional, state, and federal efforts to implement a comprehensive and long-term beach sand replenishment program. The LCP includes an approval process that emphasizes preferred bluff retention solutions and conditions of approval requiring the bluff property owner to agree to certain requirements, including the payment of mitigation fees.

The City's preferred bluff retention systems are derived from the most recent designs approved by both the City and the CCC and are contained in LUP Appendix B. Although generalized these designs represent the retention systems preferred by the City and have been accepted by the CCC as reflected in recently approved permits.

The following describes the types of preferred bluff retention systems to protect the lower bluff only:

- **Infill/Bluff Stabilization – Seacave/notch Infill (See Appendix B Figure 1A) – This first solution is designed to address sea caves and undercut portions of the lower dense sandstone bluff where the clean sand lens is not yet exposed. If left uncorrected the sea cave/undercut will eventually lead to block failures of the lower sandstone, exposure of the clean sand lens and landward bluff retreat. This failure exposes the clean sand lens of the upper bluff terrace deposits triggering rapid erosion and landward retreat of the upper bluff, which eventually endangers the structures at the top of the bluff. If treated at this stage, the Bluff Retention Device will minimize the need for a future higher seawall and future upper bluff repair. This alternative is not designed as a structural wall, is not reinforced, does not include tiebacks, and uses only erodible concrete which shall erode at the same erosion rate as the surrounding natural bluff material. The infill is required to maintain a textured and colored face mimicking the existing bluff material. Erodible concrete seacave/notch infills are not subject to the sand supply mitigation, public access and recreation mitigation, encroachment/removal agreement, or authorization timeline policies of the LUP.**

- **Infill/Bluff Stabilization – Lower Seawall (See Appendix B Figure 1)** – This ~~first~~ solution is designed to address sea caves and undercut portions of the lower dense sandstone bluff where the clean sand lens is not yet exposed. If left uncorrected the sea cave/undercut will eventually lead to block failures of the lower sandstone, exposure of the clean sand lens and landward bluff retreat. This failure exposes the clean sand lens of the upper bluff terrace deposits triggering rapid erosion and landward retreat of the upper bluff, which eventually endangers the structures at the top of the bluff. If treated at this stage, the bluff retention system will minimize the need for a future higher seawall and future upper bluff repair. This stabilization method is designed as a structural wall and will be reinforced, have structural tiebacks into the sandstone bedrock and will be required to have a textured face mimicking the existing material.

- **Higher Seawall/Clean Sand Lens Encapsulation (See Appendix B Figure 2)** – If the clean sand lens has been exposed, it may be necessary to build a seawall high enough cover this segment of the bluff face. This method consists of a structurally engineered seawall (with tiebacks into the sandstone) approximately 35' high to protect and encapsulate the clean sand lens at the base of the terrace deposits. The wall is required to have a textured face mimicking the existing material. If treated at this stage, the bluff retention system will minimize or prevent the need for future mid or upper stabilization.

The City's preference for protecting existing principal structures in danger from erosion is relocating/rebuilding the principal structure on the site to a location that is stable per

~~LUP~~ Policy 4.24. If all feasible alternatives to mid and upper bluff protection have been excluded, then the following types of upper bluff retention systems may be utilized with a lower seawall when collapse of the mid and upper bluff threatens an existing principal structure:~~.~~

~~The following describes types of the City's preferred upper bluff retention systems that may be utilized with a lower seawall when collapse of the mid and upper bluff threatens an existing principal structure:~~

- **Seawall and Upper Bluff Repair (See Appendix B Figure 3)** – This retention system is an all-encompassing bluff stabilization measure and shall only be used when bluff failures have caused exposure of the clean sand lens and significant erosion of the mid and upper bluff. Encapsulation of the clean sand lens is needed to protect the bluff top principal structure from potential damage. This repair consists of a structurally engineered seawall (with tiebacks into the sandstone) approximately 35' high to protect and encapsulate the clean sand lens at the base of the terrace deposits. The upper bluff is reconstructed at a stable angle by bringing in additional soil which is then reinforced with a geogrid fabric. The lower seawall is textured to simulate the existing bluff material and the upper soil is similar to the existing soil and is hydro-seeded **and planted with container plantings consisting of** ~~**with**~~ native, drought tolerant, non-invasive, and salt tolerant vegetation.

- **Upper Bluff Repair (See Appendix B Figure 4)** – This repair is used where there is a pre-existing lower bluff seawall, and/or infill/bluff repair and shall only be used when there is a need to stabilize the upper bluff terrace deposits to provide structural protection due to upper bluff failures or extreme erosion. When feasible, the building footprint and foundation should be moved inland and the bluffs left in a natural state. The repair is much like the upper bluff stabilization described in Preferred Solution #3~~)~~. It should ~~and take~~ing into account lateral migration of erosion from adjacent properties, which would involve benching and placing erodible concrete between the clean sand lens and the bluff face to assure that the clean sand erosion does not undermine the stability of the upper bluff and bluff top principal structure. The slope is then rebuilt and reinforced to create an adequate safety factor to protect the upper bluff structure.

  Caisson and Tieback Alternative (See Appendix B Figure 5) – This bluff retention system, consists of drilled reinforced concrete caissons (24 inches or greater in diameter). These structurally designed caissons are drilled down to or into the lower sandstone bedrock, shall be below grade, and as far landward as possible to avoid exposure of the drilled caisson in the future. In many cases, to avoid future exposure, the structure requiring stabilization can also be moved further inland to a location that, in connection with the lower seawall, will assure stability of the structure and avoid alteration of the natural landform of the bluffs. In any event, it is required, as a condition of approval that the homeowner post a

bond for a future reinforced concrete face to be constructed if the caissons are exposed. Additional tiebacks may be required at that time.

Prior to approval of any upper bluff retention system, a detailed alternative analysis must be performed, consistent with Policy 4.514. In addition, per Policy 4.514, on sites where there is existing lower bluff protection, no upper bluff retention system shall be approved unless it has been determined that removing and relocating/rebuilding the principal bluff top structure with a caisson foundation system in a location that will avoid future exposure and alteration of the natural landform is infeasible, resulting in a taking of private property for public use without just compensation.

Once the LCP is certified, the City will have jurisdiction to issue CDPs for projects landward of the MHTL, with the CCC retaining appeal jurisdiction only in those areas described in Section 30603 of the Coastal Act. Both before and after the certification of the LCP, the CCC retains original jurisdiction over development located on tidelands, submerged lands, filled and unfilled public trust lands). Accordingly, applications for all bluff retention devices to be sited seaward of the MHTL, within the Commission's original jurisdiction shall be submitted to the City for a major use permit and then to the Coastal Commission for a CDP.

All permits issued for developments within an area appealable to the CCC must be approved through a public hearing process. Appeal jurisdiction for the CCC is defined in Section 30603 of the Coastal Act and includes such geographic areas as those between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or the MHTL where this is no beach, whichever is the greater distance; and any areas located within 300 feet of the top of the seaward face of any coastal bluff, or within 100 feet of any wetland, estuary, or stream; and any major public works project or major energy facility.

In cases where proposed development is bisected by the CDP jurisdiction boundary line, an applicant may, if all parties are in agreement (i.e., the City, the CCC, and the property owner), apply for a consolidated CDP from the CCC without needing to obtain a CDP from the City. Chapter 3 policies of the Coastal Act are the standard of review for such permits, with the City's certified LCP used for additional guidance.

To the extent an applicant proposes a bluff retention device which is designed in accordance with the preferred bluff retention solutions, the City will expedite processing and there will be a presumption of compliance of the design of the bluff retention device with the LCP. Nevertheless, the applicant will be required to establish the need for the bluff retention device in accordance with the findings stated below in Policies 4.475~~0~~, 4.485~~1~~ and 4.503.

The LCP contains provisions for imposing Sand Mitigation Fees and compliance with the City's Public Recreation Fees. Bluff property owners who construct bluff retention

devices shall pay the City a Sand Mitigation Fee. The Sand Mitigation Fee formula is based on the CCC formula and is detailed in Appendix A.

In April 2010, the City completed a draft fee study and conducted a public hearing on the fee study to determine the amount of fees that maybe appropriately assessed as mitigation for the potential adverse effects on public recreation and public lands resulting from placing a bluff retention device on a public beach. The City received a substantial number of comments on the fee study from local stakeholders including property owners, surfers and CCC staff and the fee study remains a draft. Because this is a statewide issue, the City will provide this draft study and the data developed by the City to the CCC. The City will coordinate with the CCC and other state regulatory entities in developing a uniform statewide Public Recreation / Land Lease Fee.

Based on the October 2010 MHTL survey, the land on which bluff retention devices are proposed to be located may include public lands owned by the State of California, the City of Solana Beach or both. In addition, the location of the MHTL is constantly changing. The City is collecting a $1,000 per linear foot fee deposit to be applied towards a future Public Recreation/Land Lease Fee. Therefore, until such time as a final Public Recreation / Land Lease Fee is adopted by the City following Coastal Commission approval of such a payment and certification of an LUP amendment adding to the City's LCP, the City will continue to impose an interim fee deposit in the amount of $1,000 per linear foot to be applied as a credit toward the Public Recreation / Land Lease Fee. The City shall complete its Public Recreation/Land Lease fee study within 18 months of effective certification of the LUP. In association with approval of any bluff retention device on public land, the City will also require an encroachment/removal agreement to be renewed at least every 20 years. Additional mitigation for impacts to public access and recreation may also be required through site-specific review and approval of the coastal development permit.

The City will continue to aggressively pursue implementation of a comprehensive beach sand replenishment and retention program as the best approach to buffer bluffs from wave attack and reduce the need for bluff retention devices. Environmentally sound local, regional, state and federal beach sand replenishment and retention programs that the City is actively advancing include:

- Sand Compatibility and Opportunistic Use Program (SCOUP)
- Regional Beach Sand Project #2
- Regional Coastal Sediment Management Master Plan
- U.S. Army Corps Shoreline Protection Project for Solana Beach and Encinitas
- Southern California Reef Technology Project at Fletcher Cove

The City will continue to actively seek state and federal funding for expedited implementation of these programs and has prioritized the creation of a wider beach and a beach profile that can feasibly be established and maintained on City beaches for shoreline protection and recreation benefits. In implementing sand replenishment and retention programs, care will be taken such that any such program shall not result in net

material degradation of existing surfing or other recreational or wildlife resources including near shore habitat.

The sand replenishment and retention programs are funded from a combination of sources including CCC Sand Mitigation and Recreation Impact Fees held by SANDAG, City imposed mitigation fees, taxes, assessments, grants and federal appropriations. Goals, implementing plans and budgets for each program have been established, and are periodically reviewed by the City and are modified as needed.

A variety of sand retention systems will be carefully analyzed by the City, and may be evaluated by SANDAG before being deployed. The effectiveness of any such system, its potential environmental effects, the impact on recreational activities, aesthetics and safety, and other relevant issues will be addressed in compliance with CEQA and NEPA.

Beach replenishment and sand retention projects can be done concurrently or separately depending on funding resources and permitting constraints. Replenishment and retention are addressed separately below, but are being considered by the City in a coordinated fashion for maximum shoreline protection and recreational benefit.

The LCP includes standards that will be used to determine the need for bluff retention devices. Bluff retention devices shall provide for reasonable and feasible mitigation for their net impacts, such as the payment of mitigation fees.

Slope stability is a significant concern in Solana Beach along the entire coastal bluff area. These steep coastal bluffs have experienced loss of soil and rock resulting from a combination of natural forces and human activities. Ocean wave action weakens the base of the bluffs, particularly when high tides combine with high waves associated with Pacific Ocean storms.

Urban development on the bluff tops has placed increased loads on the geologic substructure. A combination of the lack from protective beach, saturation of bluff sands and increased subsurface flow resulting rain or from urban irrigation, contributes to weakening of the bluffs and surficial erosion. This erosion is generally experienced as sudden slippage rather than gradual movement. Loss of beach sand in recent years has further aggravated problems of slope instability. In response, shore protection devices have been used to abate further erosion, and to protect public recreational uses and private property.

Like much of southern California, Solana Beach lies within a region of high seismic activity. An offshore extension of the Rose Canyon fault lies approximately two miles west of Solana Beach. This fault is considered active by the State of California and a strong earthquake along this fault would create moderate to severe ground shaking in the City. Seismically-induced ground shaking in hillside areas could result in slumping or landslides in areas of slope instability.

Certain parts of Solana Beach may be subject to liquefaction which occurs when poorly consolidated and saturated soils lose their strength due to seismic shaking. The potential for liquefaction in the City is greatest in the area between Stevens Avenue and Valley Avenue, and in the area north of Via del la Valle between Del Mar Downs and Stevens Avenue. These two areas are underlain by poorly consolidated alluvium and slope wash that could liquefy during an earthquake depending on groundwater elevations.

Flooding problems in Solana Beach have historically occurred in the area near Stevens Avenue and Valley Avenue. Although City drainage system facilities are adequately sized to handle flood flows, capacity problems with downstream flood control facilities south of Via de la Valle have occasionally caused floodwaters to back up into the Stevens Avenue/Valley Avenue area.

Flood hazard areas in Solana Beach have been mapped through the National Flood Insurance Program administered by the U.S. Department of Housing and Urban Development (HUD) and the Federal Emergency Management Agency (FEMA) and are shown in Exhibit 4-6. The Flood Insurance Rate Map (FIRM) for the area identifies areas exposed to potential 100-year and 500-year flooding, including coastal flood hazard areas. Given the extent of existing urban development in Solana Beach, additional flooding effects resulting from new development on downstream areas are likely to be minor.

Fire hazards in Solana Beach may be classified as either structural fires or vegetation fires. The Solana Beach Fire Department is responsible for responding to both types of fire. For structural fires, the department designates certain locations, such as schools and higher density residential development as potential high life safety hazard areas.

Many properties in the northern part of the City are located within the WUI and have been designated by the State as being in a high or very high fire hazard severity area and are shown in Exhibit 4-7. The CalFire maps are posted on the City's website at http://www.cityofsolanabeach.org/csite/cms/app_engine/assets/images/cd_wui.pdf.

Many of the northern-most line of homes in the City (closest to the San Elijo Lagoon) are contiguous to sensitive native habitat areas identified by the City as ESHA. One of the key goals of this Chapter of the LUP is to establish policies for the WUI that reduce fire hazard risk in the City to lives and property and also reduce the need for a 100-foot buffer between vegetation and homes thereby avoiding or reducing vegetation

management practices. By establishing equivalent methods of fire risk reduction for homes in the WUI, and incorporating them into project design, the Fire Marshal is able to reduce the need for fire-risk reduction related vegetation management for existing homes, remodels, and new development.

Thinning of plant materials and other vegetation management practices reduce the fire risk for existing and new structures. Creating a defensible space around a structure acts as a barrier between a structure and an advancing fire. Maintaining a defensible fire space around structures is essential, and in some cases required, for protection against fire.

Uncontrolled widlfires pose a serious threat to human lives and property, but are generally part of the natural disturbance cycle of adjacent wildlands. The propensity of wildlands to carry fire to surrounding developments usually necessitates the provision of fuel breaks in order to reduce or eliminate the likelihood of damage to property. Properly maintained fuel modification zones and fire breaks will reduce the incidence of fires spreading from developed areas to natural land and lower the potential impacts of unseasonable and frequent wildfires to listed species and their habitats.

The LUP contains policies which require that any new development is sited and designed to avoid the need for fuel modification within ESHA. One potential method of reducing fire risk to properties adjacent to the WUI is to install a non-combustible wall thereby reducing the vegetation management zone. ESHA protection policies are contained in Chapter 3. Additionally, the LUP contains policies that require mitigation for impacts resulting from the removal, conversion, or modification of natural vegetation that cannot be avoided through the implementation of project alternatives. The mitigation to be provided includes one of three measures: habitat restoration, habitat conservation, or in-lieu fee for habitat conservation.

The City has worked with CalFire, the San Elijo Lagoon Conservancy, CDFW, the County of San Diego and other relevant state and federal agencies to develop the *San Elijo Lagoon Ecological Reserve Vegetation Management Plan*. This Plan was adopted by the City and the County in January 2009 and is aimed at reducing wildfire risk in the City. Policies aimed at reducing wildfire risk in the City are included below.

B. Coastal Act Policies

Section 30235:

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

stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Section 30236:
Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (l) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Section 30253:
New development shall do all of the following:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(b) 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.

(c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.

(d) Minimize energy consumption and vehicle miles traveled.

(e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.

C. Land Use Plan Policies

1. General Development

Policy 4.1: The City of Solana Beach contains areas subject to natural hazards that present risks to life and property. These areas require additional development controls to minimize risks. Potential hazards in the City include, but are not be limited to, the following:

- Coastal Bluffs
- Slopes with low stability & and high landslide potential: Hillside areas that have the potential to slide, fail, or collapse.
- Seismic ground shaking: Shaking induced by seismic waves traveling through an area as a result of an earthquake on a regional geologic fault.
- Liquefaction: Areas where water-saturated artificial fill or sediment can potentially lose strength and fail during strong ground shaking.

- Flood prone areas most likely to flood during major storms.
- Wave action: The entire shoreline is subject to direct wave attack and damage from wave activity due to a lack of protective beach.
- Tsunami: Low lying shoreline areas subject to inundation by a sea wave generated by local or distant earthquake, submarine landslide, subsidence, or volcanic eruption.
- Fire hazard: Areas subject to major wildfires located in the City's WUI.

Policy 4.2: Minimize the exposure of new development to geologic, flood and fire hazards. The Hillside/Coastal Bluff Overlay (HOZ) policies) shall apply to all areas designated as within the HOZ on the City of Solana Beach LUP map (Exhibit 5-2) or where site-specific analysis indicates that the parcel contains slopes exceeding 25 percent grade.

Policy 4.3: Regulate development in hillside areas to preserve the natural topography and enhance scenic qualities of the City, protect native coastal vegetation, preserve existing watersheds, and reduce the potential for environmental hazards including soil erosion, siltation of coastal wetlands, landslides, adverse impacts due to runoff, and other impacts which may affect general safety and welfare.

Policy 4.4: Any projects that propose building within the HOZ, on bluff properties, or inland bluff projects must include a geologic reconnaissance report to determine the geologic stability of the area. When additional information is needed to assess stability, a preliminary engineering geology report must also be prepared identifying the results of subsurface investigation regarding the nature and magnitude of unstable conditions, as well as mitigation measures needed to reduce or avoid such conditions. (HOZ applies to areas with steep slopes greater than 25% as shown in Exhibit 5-2).

Policy 4.5: Development within flood prone areas subject to inundation or erosion shall be prohibited unless no alternative building site exists on the legal lot and proper mitigation measures are provided to minimize or eliminate risks to life and property from flood hazard. The City shall ensure that permitted development and fill in the 100-year floodplain will not result in an obstruction to flood control and that such development will not adversely affect coastal wetlands, riparian areas, or other sensitive habitat areas within the floodplain. (The Floodplain Overlay applies to areas within the 100-year floodplain as shown in Exhibit 4-6)

Policy 4.6: Permitted infill development in the 100-year floodplain shall be limited to structures capable of withstanding periodic flooding without requiring the construction of on or off-site flood protective works or channelization. Proposed development shall be required to incorporate the best mitigation measures feasible pursuant to Public Resources Code Section 30236.

Policy 4.7: New development shall provide adequate drainage and erosion control facilities that convey site drainage in a non-erosive manner in order to minimize hazards resulting from increased runoff, erosion, and other hydrologic impacts to streams.

Policy 4.8: Land divisions, including lot line adjustments, shall be prohibited unless all proposed parcels can be demonstrated to be safe from flooding, erosion, fire and geologic hazards and will provide a safe, legal, all-weather access road(s), which can be constructed consistent with all policies of the LCP.

Policy 4.9: Information should be provided to the public concerning hazards and appropriate means of minimizing the harmful effects of natural disasters upon persons and property relative to siting, design and construction.

Policy 4.10: On ancient landslides, unstable slopes, and other geologic hazard areas new development shall only be permitted where an adequate factor of safety can be provided.

Policy 4.11: Applications for new development for projects located within the HOZ, shall include a geologic/soils/geotechnical study that identifies any geologic hazards affecting the proposed project site, any necessary mitigation measures, and contains a statement that the project site is suitable for the proposed development and that the development will be safe from geologic hazard for the economic life of the structure. Such reports shall be signed by both a licensed Geotechnical Engineer and a certified engineering geologist, and be subject to review and approval by the City Public Works Director.

Policy 4.12: In the event that remediation or stabilization of landslides that affect existing structures or that threaten public health or safety is required multiple alternative remediation or stabilization techniques shall be analyzed to determine the least environmentally damaging alternative. Maximum feasible mitigation shall be incorporated into the project in order to minimize adverse impacts to resources and to preclude the need for future mitigation.

Policy 4.13: New development which does not conform to the provisions of the LCP shall be prohibited on property or in areas where such development would present an extraordinary risk to life and property due to an existing or demonstrated potential public health and safety hazard.

Non-Conforming Structures

Policy 4.14: Existing, lawfully established structures that are located between the sea and the first public road paralleling the sea (or lagoon) built prior to the adopted date of the LUP that do not conform to the provisions of the LCP shall be considered legal non-conforming structures. Such structures may be maintained and repaired, as long as the improvements do not increase the size or degree of non-conformity. ~~Minor~~ Additions and improvements to such structures that are not considered Bluff Top Redevelopment,

as defined herein, may be permitted provided that such additions or improvements themselves comply with the current policies and standards of the LCP. Complete dDemolition and reconstruction or bluff top redevelopment is not permitted unless the entire structure is brought into conformance with the policies and standards of the LCP. See also Policy 5.45 which addresses non-Bluff Properties.

2. Shoreline Development

Policy 4.15: Implement a City-wide, long-term comprehensive shoreline management strategy which includes, but is not limited to, the following:

- An examination of local and regional long-term erosion rates and trends in order to reflect and plan for shoreline changes.
- An examination of mean sea level elevation trends and future sea level rise projections in order to include these conditions in future erosion rates and to plan for potential shoreline changes.
- Standard plans defining the preferred bluff retention solutions that would be acceptable or preferable, and where appropriate, identification of the types of armoring that should be avoided for certain areas or beaches in order to minimize risks and impacts from armoring to public access and scenic resources along the shoreline and beach recreation areas.
- Standard feasibility analysis of alternatives as a required element of bluff retention device projects to ensure that mid and upper bluff retention devices are avoided to the extent feasible. The analysis should require, but not be limited to, the use of technical evaluations of the site (geotechnical reports, engineering geology reports, and wave run up reports etc.), an examination of all other options (partial relocation, removal of seaward portions of the structure, revised building footprint and foundation, sand replenishment, sand retention devices, or no action, etc.), and a conclusion that a bluff retention device would be the only feasible means for protecting the existing principal structure in danger from erosion. The analysis will take into consideration the age and size of the structure, the size of the lot, whether the existing principal structure was constructed prior to the Coastal Act, and previous permit actions on the site that require consideration of alternatives to shoreline and bluff protective devices.
- Standard conditions and monitoring requirements which include mechanisms to ensure shoreline protection effectiveness with provisions for the modification or removal of ineffective, obsolete or hazardous bluff retention devices.
- Conditions requiring removal of shoreline and bluff protective devices if no longer required to protect a principal residential structure.
- Procedures to address emergency conditions, such as: coordination with property owners; field inspections before and after storm seasons; guidance for types of preferred temporary emergency devices and a provision for their removal if a permit for a bluff retention device is not obtained.

Policy 4.16: Encourage SANDAG to maintain an inventory of available studies on local

and regional coastal processes and beach resources for the purpose of advancing the SANDAG shoreline preservation strategies for the San Diego region. The City will consider participating in studies to fill information gaps on the regional effects of bluff retention devices, on beach and bluff erosion, and methods to protect the shoreline, and counteract erosion.

Policy 4.17: New development shall be set back a safe distance from the bluff edge, with a reasonable margin of safety, to eliminate the need for bluff retention devices to protect the new improvements. All new development, including additions to existing structures, on bluff property shall be landward of the Geologic Setback Line (GSL) as set forth in Policy 4.25. This requirement shall apply to the principal structure and accessory or ancillary structures such as guesthouses, pools, tennis courts, cabanas, and septic systems, etc. Accessory structures such as decks, patios, and walkways, which are at-grade and do not require structural foundations may extend into the setback area no closer than five feet from the bluff edge. On lots with a legally established bluff retention device, the required geologic analysis shall describe the condition of the existing seawall; identify any impacts it may be having on public access and recreation, scenic views, sand supply and other coastal resources; and evaluate opportunities to modify or replace the existing protective device in a manner that would eliminate or reduce those impacts.

~~**Policy 4.18:** A legally permitted bluff retention device shall not be factored into setback calculations. Expansion and/or alteration of a legally permitted bluff retention device shall include a reassessment of the need for the shoreline protective device and any modifications warranted to the protective device to eliminate or reduce any adverse impacts it has on coastal resources or public access, including but not limited to, a condition for a reassessment and reauthorization of the modified device in 20 years.~~

Policy 4.18: A legally permitted bluff retention device shall not be factored into setback calculations. Expansion and/or alteration of a legally permitted bluff retention device shall include a reassessment of the need for the shoreline protective device and any modifications warranted to the protective device to eliminate or reduce any adverse impacts it has on coastal resources or public access, including but not limited to, a condition for a reassessment and reauthorization of the modified device pursuant to Policy 4.52.

Policy 4.189: New shoreline or bluff protective devices that alter natural landforms along the bluffs or shoreline processes shall not be permitted to protect new development. A condition of the permit for all new development and blufftop redevelopment on bluff property shall require the property owner record a deed restriction against the property that expressly waives any future right that may exist pursuant to Section 30235 of the Coastal Act to new or additional bluff retention devices.

Policy 4.1920: Existing, legal non-conforming publicly-owned facilities that are coastal-dependent uses such as public access improvements and lifeguard facilities located within 40 feet of the edge of the bluff edge, may be maintained, repaired and/or replaced as determined necessary by the City. Any such repair or replacement of existing public facilities shall be designed and sited to avoid the need for shoreline protection to the extent feasible.

Policy 4.201: New accessory structures on bluff properties shall be constructed in a manner that allows easy relocation landward or removal should they become threatened by coastal erosion or bluff failure. The City shall also condition CDPs authorizing accessory structures with a requirement that the permittee (and all successors in interest) shall apply for a CDP to remove the accessory structure(s) if it is determined by a licensed Geotechnical Engineer that the accessory structure is in danger from erosion landslide or other form of bluff collapse.

Policy 4.212: No bluff retention device shall be allowed for the sole purpose of protecting an accessory structure.

Policy 4.223: Where setbacks and other development standards could preclude the construction of a home the City may consider options including but not limited to reduction of the two car onsite parking space requirement to a one car onsite parking requirement or construction within five feet of the public right of way front yard setback for all stories as long as adequate architectural relief (e.g., recessed windows or doorways or building articulation) is maintained as determined by the City. The City may also consider options including a caisson foundation with a minimum 40 foot bluff top setback to meet the stability requirement and avoid alteration of the natural landform along the bluffs. A condition of the permit for any such home shall expressly require waiver of any rights to new or additional buff retention devices which may exist and recording of said waiver on the title of the bluff property.

Policy 4.234: Where adherence to the LCP policies on geologic setbacks and other development standards would preclude construction of a new primary residence on a Bluff Top Property, even with reductions in the front yard setback and parking standards, the Bluff Top Ddevelopment project shall be reviewed as a site-specific LCP Amendment to allow the minimum development necessary to avoid a taking of private property for public use without just compensation.

Policy 4.25: All new bluff property development shall be set back from the bluff edge a sufficient distance to ensure that it will not be in danger from erosion and that it will ensure stability for its projected 75-economic life. To determine the GSL, applications for bluff property development must include a geotechnical report, from a licensed Geotechnical Engineer or a certified Engineering Geologist, that establishes the Geologic Setback Line (GSL) for the proposed development. This setback line shall establish the location on the bluff top stability where can be reasonably assured for the economic life of the development. Such assurance will take the form of a quantitative

slope analysis demonstrating a minimum factor of safety against sliding of 1.5 (static) or 1.2 (pseudostatic, k-0.15 or determined through analysis by the geotechnical engineer), using shear strength parameters derived from relatively undeformed samples collected at the site. In no case shall the setback be less than 40 feet from the bluff edge, and only if it can be demonstrated that the structure will remain stable, as defined above, at such a location for its 75-year economic life and has been sited safely without reliance on existing or future bluff retention devices, other than a caisson foundation.

Furthermore, all new development including, but not limited to principal structures, additions, and ancillary structures, shall be specifically designed and constructed such that it could be removed in the event of endangerment.

The predicted bluff retreat shall be evaluated considering not only historical bluff retreat data, but also acceleration of bluff retreat made possible by continued and accelerated sea level rise, future increase in storm or El Niño events, the presence of clean sands and their potential effect on the pattern of erosion at the site, an analysis of the ongoing process of retreat of the subject segment of the shoreline, and any known site-specific conditions. To the extent the MEIR or geology reports previously accepted by the City address the issues referenced above and remain current, technical information in the MEIR and previously accepted geology reports may be utilized by an applicant. Any such report must also consider the long-term effects of any sand replenishment and/or retention projects to the extent not addressed in the MEIR or the EIR for the specific application.

Policy 4.256: With respect to bluff properties only, the City will require the removal or capping of any permanent irrigation system within 100 feet of the bluff edge in connection with issuance of discretionary permits for new development, redevelopment, or shoreline protection, or bluff erosion, unless the bluff property owner demonstrates to the satisfaction of the Public Works Director, or the CCC if the project is appealed, that such irrigation has no material impact on bluff erosion (e.g., watering hanging plants over hardscape which drains to the street).

Policy 4.267: Require all bluff property landscaping for new development to consist of native, non-invasive, drought-tolerant, fire-resistant, and salt-tolerant species.

Policy 4.278: All storm water drain systems that currently drain or previously drained towards the west over the bluff shall be capped. These systems should be redesigned to drain directly, or through a sump system, and then pumped to the street in compliance with SWP 2007-0001 and consistent with SUSMP requirements. This policy shall be implemented as a condition of approval for all discretionary permits issued for bluff properties or within 5 years of adoption of the LCP, whichever is sooner.

Policy 4.289: A bluff home may continue its legal non-conforming status; however, a bluff top redevelopment shall constitute new development and cause the pre-existing non-conforming bluff home to be brought into conformity with the LCP. Entirely new bluff

homes shall also conform to the LCP.

Policy 4.2930: Limit buildings and structures on the sloped face and toe of the bluff to lifeguard towers, subsurface public utility drainage pipes or lines, bluff retention devices, public stairs and related public infrastructure which satisfy the criteria established in the LCP. No other permanent structures shall be permitted on a bluff face. Such structures shall be maintained so that they do not contribute to further erosion of the bluff face and are to be visually compatible with the surrounding area to the maximum extent feasible.

3. Shoreline Erosion and Protective Structures

Policy 4.301: Assess potential environmental effects associated with beach sand replenishment and sand retention projects as required under CEQA and NEPA.

Policy 4.312: When bluff retention devices are unavoidable, encourage applicants to pursue preferred bluff retention designs as depicted in Appendix 2 of the LUP when required to protect an existing principal structure in danger from erosion. All future bluff retention device applications should utilize these designs as the basis of site-specific engineering drawings to ensure consistency with the LUP.

Policy 4.323: The City Manager, through City Staff, shall be responsible for: (a) contracting for the construction, routine maintenance, and repair of approved publicly owned bluff retention devices, if any; (b) approving permits for maintenance and repair activities of all private bluff retention devices with the bluff property owners responsible for and paying for all costs thereof; (c) monitoring and enforcing permit conditions, LUP and implementing ordinances requirements, and mitigation requirements which include aesthetic treatments, and payment of mitigation fees or fee deposits; (d) overseeing annual inspections of all bluff retention devices and notifying bluff property owners (and/or any assessing entity) of work which must be completed by the bluff property owner to ensure compliance with the aesthetic, structural and safety criteria set forth in the implementing ordinances; (e) preparing and submitting an annual status report on LCP related matters to the City Council; and (f) contracting for and removing bluff publicly owned retention devices where such removal is warranted and is in conformance with the LCP.

Policy 4.334: Identify, evaluate and pursue all feasible potential sources of revenue for funding the City's shoreline management policies and programs as contained in the LUP. Fundamental fairness dictates that the costs of the LCP's programs be allocated and shared in proportion to the benefits realized by the affected parties, including the public, the City, and the bluff property owners, respectively. Potential sources of funding may include, without limitation:

- Regional Sediment Management and opportunistic sand funding sources.
- Use of monies held by SANDAG from previous CCC sand and recreation mitigation fees collected for bluff retention devices in the City.

- City assessed Sand Mitigation Fees, which may be expended for sand replenishment and retention projects.
- City fees directly related to actual costs incurred by the City shall be established for the processing and issuance of permits, the use of City facilities and staff, and reasonable third party costs.
- Government grants (e.g., Federal Land and Water Conservation Fund, Army Corps of Engineers, Coastal Conservancy, State Tidelands Oil Revenue Fund, Oceanside Harbor mitigation fund, State Parks Bond, Open Space Bond Act, Park Land Bond Act, etc.).
- Bond financing.
- Parking revenues, beach fees, etc.
- Two percent of the existing, and any dedicated increases in, the transient occupancy tax; sales tax; or other dedicated taxes.
- Environmental mitigation fees (paid by third parties such as Caltrans, port districts, utility companies, developers, etc.).
- Funds from other parties responsible for loss of sand on the beach (e.g., water districts, sand mining companies, Caltrans, Amtrak, NCTD and any/all other property owners in the watershed, etc.) utilizing assessment districts or other equitable funding mechanisms.

Policy 4.345: Establishment of an assessing entity, as subject to the approval of the majority of affected property owners, with such funds utilized solely to benefit those properties.

Policy 4.356: Ensure that rules governing any assessing entities, are established and bound based on applicable State laws, regulations and requirements associated with the specific assessing entity.

Policy 4.367: Establish a Shoreline ~~District~~ Account which will serve as the primary account where all funds generated pursuant to the Hazards & Shoreline/Bluff Development Chapter of the LUP will be held. The City should invest the Shoreline ~~District~~ Account funds prudently and expend them for purposes outlined in the LCP including, without limitation:

- Sand replenishment and retention studies and projects;
- Updating the October 2010 MHTL Survey;
- Preparation of other shoreline surveys and monitoring programs;
- Opportunistic beach nourishment programs and development of stockpile locations;
- Repair and maintenance of bluff retention devices subject to reimbursement by the affected non-compliant bluff property owners;
- Public recreation improvements;
- Repair and replacement of beach access infrastructure;
- Insurance premiums; and
- Shoreline related litigation.

~~Sand Mitigation Fees must be expended for sand replenishment and potentially retention. Recreation Fees must be expended for public access, and public recreation improvements.~~

The City may use the funds in the Shoreline Account, subject to the restrictions of any terms of the funding sources, to pay for projects such as beach sand replenishment and retention structures, public recreation and public beach access improvement projects, feasibility and impact studies, operating expenses, insurance, and litigation; and to pay to conduct surveys and monitoring programs.

~~**Policy 4.38:** As part of the LCP Local Implementation Plan (LIP), the City of Solana Beach will establish a two-tiered permit application process to distinguish between projects that may be processed administratively by the City and those requiring discretionary actions(s) by the City. Projects that cannot be considered minor and projects located within the "appealable zone" will require a public hearing and will be treated as discretionary actions.~~

Policy 4.3~~7~~9: Maximize the natural, aesthetic appeal and scenic beauty of the beaches and bluffs by avoiding and minimizing the size of bluff retention devices, preserving the maximum amount of unaltered or natural bluff face, and minimizing encroachment of the bluff retention device on the beach, to the extent feasible, while ensuring that any such bluff retention device accomplishes its intended purpose of protecting existing principal structures in danger from erosion.

Policy 4.3840: Provide for reasonable and feasible mitigation for the impacts of all bluff retention devices which consists of the payment of Sand Mitigation Fees and Public Recreation Fees to the City or other assessing agency.

Policy 4.3941: Maintain adequate signage to warn the public of the dangers associated with bluff collapse to minimize public and private safety risks inherent in the ongoing existence of unprotected, and unstable natural bluffs.

~~**Policy 4.42:** Ensure the private and public interest in protecting and preserving private property rights under the state and federal Constitutions, the Coastal Act, and local ordinances, such that regulations are not overreaching and no private owner is denied reasonable use of his, her or its bluff property. In accordance with Public Resources Code Section 30010, this Policy is not intended to increase or decrease the rights of any owner of property under the Constitution of the State of California or the United States.~~

Policy 4.403: Ensure that each bluff property owner is able to enjoy reasonable use of his/her or its property as required by law, and where setbacks cause reasonable use to be difficult to achieve, acquisition of the bluff property by the City should be encouraged, if feasible.

Policy 4.414: The City, and in cases of original jurisdiction the CCC, shall regulate every bluff retention device including initial approval, construction, maintenance and repair activities for the life of the device.

Policy 4.425: Allow reasonable use of City property by a bluff property owner during the construction of a bluff retention device. For example, the City could allow use of City parking lots (with the exception of the Fletcher Cove parking lot) or other appropriate properties for staging areas and reasonable access to City ramps and the beach if reasonable impacts to public access and recreation can be avoided or minimized so as to have little material impact. However, except in emergency situations, no work on the beach shall occur on weekends, holidays or between Memorial Day weekend and Labor Day. In no case shall equipment be stored on the sandy beach overnight. The Fletcher Cove Park access ramp and all public parking spaces within Fletcher Cove shall remain open and available to public use during construction. Access corridors shall be located in a manner that has the least impact on public access to and along the shoreline.

Policy 4.436: Acknowledge the importance of balancing the rights of private property owners with minimizing, and potentially eliminating, the need for future bluff retention devices by the provision of alternate forms of protection such as a wide sandy beach, thereby reducing the impacts of such devices and achieving a more natural and attractive beach and bluff compared to what exists now.

Policy 4.447: The City has adopted preferred bluff retention solutions (see Appendix B) to streamline and expedite the City permit process for bluff retention devices. The preferred bluff retention solutions are designed to meet the following goals and objectives:

1. Locate bluff retention devices as far landward as feasible;
2. Minimize alteration of the bluff face;
3. Minimize visual impacts from public viewing areas; ,
4. Minimize impacts to adjacent properties including public bluffs and beach area; and,
5. Conduct annual visual inspection and maintenance as needed.

The bluff property owner's licensed Civil or Geotechnical Engineer must examine the device for use in the specific location and take responsibility for the design as the Engineer of Record.

The Bluff Property Owner shall arrange for and pay the costs of:

1. The licensed Geotechnical or Civil Engineer;
2. The bluff retention device;
3. A bond to ensure completion of the bluff retention device;
4. Appropriate mitigation; and
5. All necessary repairs, maintenance, and if needed removal.

Applicants who seek permits to install a preferred bluff retention solution can do so on a streamlined basis, relying on previously approved standards and designs, and shall receive expedited processing from the City. As technology develops, the City will consider other preferred bluff retention solutions that meet the goals and policies of the LCP, as an amendment to the LUP or within the LIP.

Applications for coastal development permits for all bluff retention devices where any portion of which will be sited seaward of the MHTL, shall be submitted first to the City for approval of a major use permit and then to the CCC for a coastal development permit. The CCC has original jurisdiction for the portion of the bluff retention device that will be sited seaward of the MHTL. Such developments shall be subject to this LCP for the portions within the City's jurisdiction. Chapter 3 of the Coastal Act will be the standard of review for the portion within the CCC's jurisdiction. For beachfront development that will be subject to wave action periodically, unless the State Lands Commission determines that there is no evidence that the proposed development will encroach on tidelands or other public trust interests, the City shall reject the application on the grounds that it is within the original permit jurisdiction of the CCC and shall direct the applicant to file his or her application with the CCC.

Policy 4.458: The City shall allow applicants proposing to install something other than a preferred bluff retention solution to apply for such an alternate design, but said applicants will not be eligible for the expedited processing and other benefits associated with preferred bluff retention solutions. Such non-standard designs shall, in most instances, undergo a more complete CEQA review as applicable, and would not enjoy the imprimatur of pre-approval associated with a preferred bluff retention solution.

Policy 4.469: All proposed development on a beach or along the shoreline, including a shoreline protection structure located within the jurisdiction of the State Lands Commission: (1) must be reviewed and evaluated in writing by the State Lands Commission and (2) may not be permitted if the State Lands Commission determines that the proposed development is located on public tidelands or would adversely impact tidelands unless State Lands Commission approval is given in writing.

Policy 4.4750: A Seacave/Notch Infill shall be approved only if all the findings set forth below can be made and the stated criteria satisfied. ~~**The permit shall be valid for a period of 20 years commencing with the** date of CDP approval~~ **building permit completion certification date and subject to an encroachment removal agreement approved by the City.**

A. Based upon the advice and recommendation of a licensed Geotechnical or Civil Engineer, the City makes the findings set forth below:

1. The Seacave/Notch Infill is more likely than not to delay the need for a larger coastal structure or upper bluff retention structure, that would, in the foreseeable future, be necessary to protect and existing principal structure,

City facility, and/or City infrastructure, from danger of erosion. Taking into consideration any applicable conditions of previous permit approvals for development at the site, a determination must be made based on a detailed alternatives analysis that none of the following alternatives to the coastal structure are currently feasible, including:

- Controls of surface water and site drainage;
- A smaller coastal structure; or
- Other non-beach and bluff face stabilizing measures, taking into account impacts on the near and long term integrity and appearance of the natural bluff face, and contiguous bluff properties; and,

2. The bluff property owner did not create the necessity for the Seacave/Notch Infill by unreasonably failing to implement generally accepted erosion and drainage control measures, such as reasonable management of surface drainage, plantings and irrigation, or by otherwise unreasonably acting or failing to act with respect to the bluff property. In determining whether or not the bluff property owner's actions were "reasonable," the City shall take into account whether or not the bluff property owner acted intentionally, with or without knowledge, and shall consider all other relevant credible scientific evidence as well as relevant facts and circumstances.

3. The location, size, design and operational characteristics of the proposed seacave/notch infill will not create a significant adverse effect on adjacent public or private property, natural resources, or public use of, or access to, the beach, beyond the environmental impact typically associated with a similar bluff retention device and the seacave/notch infill is the minimum size necessary to protect the principal structure, has been designed to minimize all environmental impacts, and provides mitigation for all coastal and environmental impacts as provided for in this LCP.

B. The Seacave/Notch Infill shall be designed and constructed:

1. To avoid migration of the Seacave/Notch Infill onto the beach;

2. To be re-contoured to the face of the bluff, as needed, on a routine basis, through a CDP or exemption, to ensure the seacave/notch infill conforms to the face of the adjoining natural bluff over time, and continues to meet all relevant aesthetic, and structural criteria established by the City;

3. To serve its primary purpose which is to delay the need for a larger coastal structure, and designed to be removable, to the extent feasible, provided all other requirements under the LCP are satisfied; and,

4. To satisfy all other relevant LCP and City Design Standards, set forth for coastal structures.

~~C. The Bluff Property Owner shall arrange for and pay the costs of:~~

~~1. The licensed Geotechnical or Civil Engineer; and~~

~~2. The Seacave/Notch Infill~~

~~3. Appropriate mitigation~~

~~4.~~1. ~~All necessary repairs, maintenance, and if needed removal.~~

C. ~~D. **Only to the extent the City finds that the Seacave/Notch Infill encroaches on the public beach or upon the bluff face such that coastal resources are adversely impacted, then the City shall impose a Sand Mitigation Fee upon the bluff property owner.**~~

Policy 4.~~4851:~~ Coastal structures shall be approved by the City only if all the following applicable findings can be made and the stated criteria satisfied. The permit shall be valid **until the currently existing structure requiring protection is redeveloped (per definition of Bluff Top Redevelopment in the LUP), is no longer present, or no longer requires a protective device, whichever occurs first ~~for a period of 20 years commencing with the building permit completion certification date~~** ~~date of CDP approval~~ and subject to an encroachment ~~/~~removal agreement approved by the City.

A. Based upon the advice and recommendation of a licensed Geotechnical or Civil Engineer, the City makes the findings set forth below.

1. A bluff failure is imminent that would threaten a bluff home, city facility, city infrastructure, and/or other principal structure.

2. The coastal structure is more likely than not to preclude the need for a larger coastal structure or upper bluff retention structure. Taking into consideration any applicable conditions of previous permit approvals for development at the subject site, a determination must be made based on a detailed alternatives analysis that none of the following alternatives to the coastal structure are currently feasible, including:

   - A Seacave/Notch Infill;
   - A smaller coastal structure; or
   - Other remedial measures capable of protecting the bluff home, city facility, non-city-owned utilities, and/or city infrastructure, which might include or other non-beach and bluff face stabilizing measures, taking into account impacts on the near and long term integrity and appearance of the natural bluff face, and contiguous bluff properties;

3. The bluff property owner did not create the necessity for the coastal structure by unreasonably failing to implement generally accepted erosion and drainage control measures, such as reasonable management of surface drainage, plantings and irrigation, or by otherwise unreasonably acting or

failing to act with respect to the bluff property. In determining whether or not the bluff property owner's actions were reasonable, the City shall take into account whether or not the bluff property owner acted intentionally, with or without knowledge, and shall consider all other relevant credible scientific evidence, as well as, relevant facts and circumstances.

4. The location, size, design and operational characteristics of the proposed coastal structure will not create a significant adverse effect on adjacent public or private property, natural resources, or public use of, or access to, the beach, beyond the environmental impact typically associated with a similar coastal structure and the coastal structure is the minimum size necessary to protect the principal structure, has been designed to minimize all environmental impacts, and provides mitigation for all coastal and environmental impacts, as provided for in this LCP.

B. The coastal structure shall meet City Design Standards, which shall include the following criteria to ensure the coastal structure will be:

1. Constructed to resemble as closely as possible the natural color, texture and form of the adjacent bluffs;

2. Landscaped, contoured, maintained and repaired to blend in with the existing environment;

3. Designed so that it will serve its primary purpose of protecting the bluff home or other principal structure, provided all other requirements under the implementing ordinances are satisfied, with minimal adverse impacts to the bluff face;

4. Reduced in size and scope, to the extent feasible, without adversely impacting the applicant's bluff property and other properties; and

5. Placed at the most feasible landward location considering the importance of preserving the maximum amount of natural bluff and ensuring adequate bluff stability to protect the bluff home, City facility, or City infrastructure.

C. Mitigation for the impacts to shoreline sand supply, public access and recreation and any other relevant coastal resource impacted by the coastal structure is required and shall be assessed in 20-year increments, starting with the building permit completion certification date. Property owners shall apply for a CDP amendment prior to expiration of each 20-year mitigation period, proposing mitigation for coastal resource impacts associated with retention of the coastal structure beyond the preceding 20-year mitigation period and shall include consideration of alternative feasible measures in which the permittee can modify the coastal structure to lessen the coastal

structure's impacts on coastal resources. Monitoring reports to the City and the Coastal Commission shall be required every five years from the date of CDP issuance until CDP expiration, which evaluate whether or not the coastal structure is still required to protect the existing structure it was designed to protect. The permittee is required to submit a CDP application to remove the authorized coastal structure within six months of a determination that the coastal structure is no longer required to protect the existing structure it was designed to protect.

Policy 4.4952: The bluff property owner shall pay for the cost of the coastal structure or Infill and pay a Sand Mitigation Fee and a Public Recreation Fee per LUP Policy 4.3840. These mitigation fees are not intended to be duplicative with fees assessed by other agencies. It is anticipated the fees assessed as required by this LCP will be in conjunction with, and not duplicative with of, the mitigation fees typically assessed by the CCC and the CSLC for impacts to coastal resources from shoreline protective devices.

Sand Mitigation Fee - to mitigate for actual loss of beach quality sand which would otherwise have been deposited on the beach. For all development involving the construction of a bluff retention device, a Sand Mitigation Fee shall be collected by the City which shall be used for beach sand replenishment and/or retention purposes. The mitigation fee shall be deposited in an interest-bearing account designated by the City Manager of Solana Beach in lieu of providing sand to replace the sand that would be lost due to the impacts of any proposed protective structure. The methodology used to determine the appropriate mitigation fee has been approved by the CCC and is contained in LUP Appendix A. The funds shall solely be used to implement projects which provide sand to the City's beaches, not to fund other public operations, maintenance, or planning studies.

Sand Mitigation Fees must be expended for sand replenishment and potentially for retention projects as a first priority and may be expended for public access and public recreation improvements as secondary priorities where an analysis done by the City determines that there are no near-term, priority sand replenishment Capital Improvement Projects (CIP) identified by the City where the money could be allocated. The Sand Mitigation funds shall be released for secondary priorities only upon written approval of an appropriate project by the City Council and the Executive Director of the Coastal Commission.

Public Recreation Fee – Similar to the methodology established by the CCC for the sand mitigation fee, the City and the CCC are jointly developing a methodology for calculating a statewide public recreation fee. To assist in the effort, the City has shared the results of their draft study with the CCC to support their development of a uniform statewide Public Recreation / Land Lease Fee. Until such time as an approved

methodology for determining this fee has been established, and the methodology and payment program has been incorporated into the LCP through an LCP amendment, the City will collect a $1,000 per linear foot interim fee deposit. In the interim period, CCC will evaluate each project on a site-specific basis to determine impacts to public access and recreation, and additional mitigation may be required. The City shall complete its public recreation/land lease fee study within 18 months of effective certification of the LUP.

Project applicants have the option of proposing a public recreation/access project in lieu of payment of Public Recreation Fees (or interim deposits) to the City. At the City's discretion, these projects may be accepted if it can be demonstrated that they would provide a directly-related recreation and/or access benefit to the general public.

Public Recreation Fees must be expended for public access and public recreation improvements as a first priority and for sand replenishment and retention as secondary priorities where an analysis done by the City determines that there are no near-term, priority public recreation or public access CIP identified by the City where the money could be allocated. The Public Recreation funds shall be released for secondary priorities only upon written approval of an appropriate project by the City Council and the Executive Director of the Coastal Commission.

Policy 4.503: The erosion rate, being critical to the fair and accurate calculation of the Sand Mitigation Fee shall be reviewed, after notice and public hearing, at least every ten years, and more often if warranted by physical circumstances, such as major weather events, or large-scale sand replenishment projects and possible changes in coastal dynamics due to, among others, climate change, and future changes in sea level. If warranted, the erosion rate should be adjusted by the City with input from a licensed Civil or Geotechnical Engineer based upon data that accurately reflects a change in the rate of erosion of the bluff. Any such change shall be subject to the public hearing and a vote of the City Council.

Policy 4.514: An upper bluff system shall be approved only if all the following applicable findings can be made and the stated criteria will be satisfied. The permit shall be valid **until the currently existing structure requiring protection is redeveloped (per definition of Bluff Top Redevelopment in the LUP), is no longer present, or no longer requires a protective device, whichever occurs first** ~~for a period of 20 years commencing with the building permit completion certification date~~ ~~date of CDP approval~~ and subject to an encroachment**/removal** agreement approved by the City.

A. Based on the advice and recommendation of a licensed Geotechnical or Civil Engineer, the City makes the findings set forth below.

1. A bluff failure is imminent that would threaten a bluff home, city facility, city infrastructure, and/or other principal structure in danger from erosion. ~~and, that~~

2. The bluff home, city facility, city infrastructure, and/or principal structure is more likely than not to be in danger within one year after the date an application is made to the City.

Taking into consideration any applicable conditions of previous permit approval for development at the subject site, determination must be made based on a detailed alternatives analysis that none of the following alternatives to the upper bluff system are then currently feasible, including:

- No upper bluff system;
- Vegetation;
- Controls of surface water and site drainage;
- A revised building footprint and foundation system (e.g., caissons) with a setback that avoids future exposure and alteration of the natural landform;
- A smaller upper bluff system;
- Other remedial measures capable of protecting the bluff home, city facility, non-city-owned utilities, and/or city infrastructure which might include tie-backs, other feasible non-beach and bluff face stabilizing measures, taking into account impacts on the near and long term integrity and appearance of the natural bluff face, the public beach, and, contiguous bluff properties; ~~and,~~ or
- Removal and relocation of all, or portions, of the affected bluff home, city facilities or city infrastructure.

3. The bluff property owner did not create the necessity for the upper bluff system by unreasonably failing to implement generally accepted erosion and drainage control measures, such as reasonable management of surface drainage, plantings and irrigation, or by otherwise unreasonably acting or failing to act with respect to the bluff property. In determining whether or not the bluff property owner's actions were reasonable, the City shall take into account whether or not the bluff property owner acted intentionally, with or without knowledge, and shall consider all other relevant credible scientific evidence as well as relevant facts and circumstances.

4. The location, size, design and operational characteristics of the proposed upper bluff system will not create a significant adverse effect on adjacent public or private property, natural resources, or public use of, or access to, the beach, beyond the environmental impact typically associated with a similar upper bluff system and the upper bluff system is the minimize size necessary to protect the existing principal structure, has been designed to minimize all environmental impacts, and provides mitigation for all coastal and environmental impacts, as provided for in this LCP.

B. The upper bluff system shall meet City Design Standards applicable to bluff retention devices, including ensuring the natural bluff face is preserved to the greatest extent feasible, by using soft systems such as Geogrid, Geoweb,

and planted with native species. The upper bluff system shall be designed to minimize alterations of natural landforms and shall not have a material adverse visual impact. The upper bluff slope shall be designed to have both vertical and horizontal relief.

C. All upper bluff systems shall be subject to the same permitting time frames as specified for a coastal structure, and may be subject to removal based upon the same time frames and similar criteria set forth for removal of coastal structures, as reasonably determined by the City.

D. Mitigation for the impacts to shoreline sand supply, public access and recreation and any other relevant coastal resource impacted by the upper bluff system is required and shall be assessed in 20-year increments, starting with the building permit completion certification date. Property owners shall apply for a CDP amendment prior to expiration of each 20-year mitigation period, proposing mitigation for coastal resource impacts associated with retention of the upper bluff system beyond the preceding 20-year mitigation period and shall include consideration of alternative feasible measures in which the permittee can modify the upper bluff system to lessen the upper bluff system's impacts on coastal resources. Monitoring reports to the City and the Coastal Commission shall be required every five years from the date of CDP issuance until CDP expiration, which evaluate whether or not the upper bluff system is still required to protect the existing structure it was designed to protect. The permittee is required to submit a CDP application to remove the authorized upper bluff system within six months of a determination that the upper bluff system is no longer required to protect the existing structure it was designed to protect.

Policy 4.525: All permits for bluff retention devices shall expire ~~**20 years after** approval of the CDP,~~**~~the building permit completion certification date,~~** **when the currently existing blufftop structure requiring protection is redeveloped (per definition of Bluff Top Redevelopment in the LUP), is no longer present, or no longer requires a protective device, whichever occurs first** and a new CDP must be obtained. Prior to expiration of the permit, the bluff top property owner shall apply for a coastal development permit to remove, modify or retain the protective device. In addition, expansion and/or alteration of a legally permitted existing bluff retention device shall require a new CDP **and be subject to the requirements of this policy.**

The CDP application shall include a re-assessment of need for the device, the need for any repair or maintenance of the device, and the potential for removal based on changed conditions. The CDP application shall ~~evaluate~~ include an evaluation of:

- ~~the~~The age, condition and economic life of the existing principal structure;
- changed geologic site conditions **including but not limited to, changes relative to sea level rise,** ~~**including**~~ implementation of ~~**the City's long-term USACE beachnourishment program or similar**~~ **a** long-term, large scale sand replenishment or shoreline restoration program; and
- any impact to **coastal resources, including but not limited to** public access and recreation.

~~relative to sea level rise and the age, condition, and economic life of principal structure including whether it was an existing structure on January 1, 1977 (prior to implementation of the Coastal Act). Prior to expiration of the permit, the bluff top property owner shall apply for a coastal development permit to either remove or retain the protective device.~~ The CDP shall include a condition **requiring ~~of~~** reassessment **~~and reauthorization~~ of the impacts** of the device in 20-year**s mitigation periods pursuant to Policies 4.48 and 4.51**.

No permit shall be issued for retention of a bluff retention device unless the City finds that the bluff retention device is still required to protect an existing principal structure **in danger from erosion**, that it will minimize ~~avoid~~ further alteration of the natural landform of the bluff, and that adequate mitigation for **coastal resource** impacts**, including but not limited to impacts** to the public beach has been provided.

Policy 4.536: Any bluff retention device shall be reasonably maintained and repaired by the bluff property owner on an "as needed" basis, at the bluff property owner's expense, in accordance with the implementing ordinances and any permit issued by the City. Any authorized assessing entity in which the project lies shall ensure such payments are reimbursed to the City if the bluff property owner fails to perform such work and the City elects to do so, subject to mandatory reimbursement. However, in all cases, after inspection, it is apparent that repair and maintenance is necessary, including maintenance of the color of the structures to ensure a continued match with the surrounding native bluffs, the bluff property owner or assessing entity shall contact the City or CCC office to determine whether permits are necessary, and, if necessary, shall subsequently apply for a coastal development permit for the required maintenance.

Policy 4.~~54~~7: To achieve a well maintained, aesthetically pleasing, and safer shoreline, coordination among property owners regarding maintenance and repair of all bluff retention devices is strongly encouraged. This may also result in cost savings through the realization of economies of scale to achieve these goals by coordination through an assessing entity. All bluff retention devices existing as of the date of certification of the LCP, to the extent they do not conform to the requirements of the LCP, shall be deemed

non-conforming. A bluff property owner may elect to conform his/her/its bluff property or bluff retention device to the LCP at any time if the City finds that an existing bluff retention device that is required to protect existing principal structures in danger from erosion is structurally unsound, is unsafe, or is materially jeopardizing contiguous private or public principal structures for which there is no other adequate and feasible solution, then the City may require reconstruction of the bluff retention device.

Policy 4.558: A program should be developed in conjunction with state and federal agencies, to provide incentives to relocate existing development out of hazardous areas and to acquire bluff properties that have been damaged by storm activities, where relocation of development to a safer location on the site is not feasible and additional protection measures are not feasible.

Policy 4.569: Siting and design of new shoreline development and bluff retention devices shall take into account predicted future changes in sea level. In particular, an acceleration of the historic rate of sea level rise shall be considered and based upon up-to-date scientific papers and studies, agency guidance (such as the 2010 Sea Level Guidance from the California Ocean Protection Council), and reports by national and international groups such as the National Research Council and the Intergovernmental Panel on Climate Change. Consistent with all provisions of the LCP, new structures shall be set back a sufficient distance landward to eliminate or minimize, to the maximum extent feasible, hazards associated with anticipated sea level rise over the expected economic life of the structure.

Policy 4.5760: Development on the bluffs, including the construction of a bluff retention device, shall include measures to ensure that:

- No stockpiling of dirt or construction materials shall occur on the beach;
- All grading shall be properly covered and sandbags and/or ditches shall be used to prevent runoff and siltation;
- Measures to control erosion shall be implemented at the end of each day's work;
- No machinery shall be allowed in the intertidal zone at any time to the extent feasible;
- All construction debris shall be properly collected and removed from the beach. Shotcrete/concrete shall be contained through the use of tarps or similar barriers that completely enclose the application area and that prevent shotcrete/concrete contact with beach sands and/or coastal waters.

Policy 4.5861: All new swimming pools and in-ground spas on bluff property shall contain double wall construction with drains and leak detection systems. All new swimming pools and in-ground spas shall be located landward of the geologic setback line.

Policy 4.5962: Existing bluff retention devices which are not considered preferred bluff retention solutions and do not conform to the provisions of the LCP, including the

structural or aesthetic requirements may be repaired and maintained to the extent that such repairs and/or maintenance conform to the provisions of the LCP.

4. Beach Sand Replenishment and Retention

Policy 4.603: Establish a wide, safe, sand beach to: (a) maintain, and when feasible, provide increased public access and recreational opportunities; (b) minimize impacts on sensitive marine resources; (c) protect water quality; (d) mitigate adverse impacts of bluff retention devices.

Policy 4.614: Continue to coordinate with SANDAG, the USACE, the State Lands Commission, California Department of Boating and Waterways, and others to establish and fund programs for periodic sand nourishment of beaches which are vulnerable to wave damage and erosion. Beach nourishment programs should include measures to minimize potential adverse biological resource impacts from deposition of material, including measures such as timing or seasonal restrictions and identification of environmentally preferred locations for deposits. Any program for beach sand nourishment shall not be effective until certified as an amendment to the LCP by the CCC or permitted as an independent project subject to a CDP.

Policy 4.625: Subject to coastal development permit requirements, the beneficial reuse and placement of sediments removed from erosion control or flood control facilities at appropriate points along the shoreline may be permitted for the purpose of beach nourishment. Any beach nourishment program for sediment deposition shall be designed to minimize adverse impacts to beach, intertidal and offshore resources, shall incorporate appropriate mitigation measures, and shall consider the method, location, and timing of placement. Sediment removed from catchment basins may be disposed of in the littoral system if it is tested and found to be of suitable grain size and type and a coastal development permit for such disposal has been obtained. The program shall identify and designate appropriate beaches or offshore feeder sites in the littoral system for placement of suitable materials from catchment basins.

Policy 4.636: Implement a series of projects implemented within the regulatory and permitting framework of the SCOUP program to provide data for planning of a long-term beach replenishment and retention program. This series of SCOUP projects may be used to determine the quantity and quality of sand needed to effectively widen the beach without being detrimental to offshore biological resources. Quantities of sand in the pilot projects and the specific sand placement locations will be determined based on the assessment of opportunities and constraints within the City.

Policy 4.647: Pursue a demonstration/temporary pilot project for a sand retention device such as a submerged, or emergent reef, groin field, or short T-head groin or other structure if approved through the coastal development permit and/or Federal consistency review by the CCC. The environmental, recreational, and aesthetic effects of any sand retention structure will be considered in its planning and design in

compliance with CEQA and NEPA. The City will also consider any implementation of sand replenishment and retention structures in a regional context and in cooperation with other cities' beach sand retention efforts.

Policy 4.658: Monitor SCOUP projects according to their regulatory permit requirements by using standardized aerial photography, LIDAR, and/or other appropriate technologies as they become available and accepted for use in monitoring beach conditions, examining several beach profiles and the condition of the beach sand retention structures, sediment sampling, and evaluation of effects on the beach and near shore ecology. Any such SCOUP project will also be monitored for recreational resource impacts, turbidity, sediment compatibility, traffic, and hazardous materials. These data will be analyzed to identify the effectiveness of any such sand replenishment and retention efforts at the end of the SCOUP program. The level of effect on sensitive biological resources (e.g., surfgrass, threatened or endangered species) and other effects on high quality hard bottom reefs will be quantified, and rates, and patterns of sand loss, and deposition will be determined. If feasible, changes in beach user patterns will also be identified and reported.

Policy 4.669: Develop a long-term beach replenishment program based on data and analysis from the Regional Beach Sand Project (RBSP) and SCOUP programs. Longer-term projects will be implemented at regular intervals in the future as determined by sand loss rates or as needed after severe storm seasons. Planning and budgeting will be established to carry out the program to a pre-determined date. The City should take into account climate change research and projections of future sea level rise using the most relevant, valid, and peer-reviewed data sets relative to long term planning assumptions to ensure regional planning consistency. The most relevant research into design and maintenance plans for the long-term beach sand replenishment and retention program should also be considered. The effectiveness of any such program will be reassessed after a specified period, but at least every five years, to identify any needed modifications.

Policy 4.6770: Participate in and encourage other long-term beach sand replenishment and retention programs at the federal, state, and regional level.

Policy 4.6871: Install or maintain a sand retention structure or structures based on analysis of the performance of any temporary structures. The design of a long-term structure or structures will be based on the monitoring results of the pilot project and of projects at other locations. The environmental and aesthetic effects of any long-term structure will be fully taken into account in its planning, design, and implementation.

~~**Policy 4.72:** Use the funds in the Shoreline District Account to pay for projects such as beach sand replenishment and retention structures, including feasibility and impact studies, operating expenses, insurance, litigation; and to pay to conduct surveys and monitoring programs. Sand Mitigation Fees may only be expended for sand~~

~~replenishment and potentially retention projects, and Land Lease/Recreation Fees may be expended for public access and public recreation improvements.~~

Policy 4.6~~9~~73: Inform applicants, for new development in the City and in surrounding areas that do not have permitted SCOUP programs, of the City's SCOUP program and encouraged them to participate. Development on upland sites that will result in 5,000 cubic yards, or more, of export should be required to test the material for suitability for beach deposition. If suitable, the material should be placed on the beach via the SCOUP program.

5. Fire Hazard Management in the Wildland Urban Interface

Policy 4.704: All new development in the WUI or adjacent to ESHA shall be sited and designed to minimize required fuel modification to the maximum extent feasible in order to avoid environmentally sensitive habitat disturbance or destruction, removal or modification of natural vegetation, while providing for fire safety

Policy 4.71~~5~~: All discretionary permit applications for projects shall be reviewed by the City's Fire Marshal to determine if any thinning or clearing of native vegetation is required to determine if any thinning or clearing of native vegetation is required. The Fire Marshal may reduce the 100' fuel management requirement for existing development, when equivalent methods of wildfire risk abatement are included in project design.

Policy 4.72~~6~~: Equivalent methods of fire risk reduction shall be determined on a case-by-case basis by the Fire Marshal and may include the following, or a combination of the following, but are not limited to:

- Compliance with Building Code and Fire Code requirements for projects located in the WUI (State Fire Code Chapter 7A);
- Installation of a masonry or other non-combustible fire resistant wall up to six feet in height;
- Exterior sprinklers to be used in an emergency for fire suppression;
- Boxed eaves;
- Reduced landscaping that is compliant with the County of San Diego fire hazard risk reduction plant list and planting guidelines;
- Other alternative construction to avoid the need for vegetation thinning, pruning or vegetation removal.

Policy 4.73~~7~~: Within the WUI (Exhibit 4-7), the area within 100 feet of a habitable structure is divided into two zones as follows. Zone 1 is located from 0 - 30 feet from the residence and Zone 2 located from 30-100 feet from the residence.

Policy 4.74~~8~~: Required fuel modification that may take place in both zones is defined as follows: In Zone 1, thin, prune or remove and replace vegetation and in Zone 2 thinning

of non-natives and removal of dead vegetation. Vegetation shall be thinned to a height of 18 inches. Root systems and stumps will be left in place to minimize soil disturbance and soil erosion. All fuel modification work will be done by hand crews only.

Policy 4.759: The City Fire Marshal retains the discretion to reduce or expand the fire zones on a case-by-case basis, with specific findings due to factors that may include, but are not limited to: building material, topography, vegetation load, and type.

Policy 4.7680: Fuel Modification Requirements for Existing Development - The City shall encourage property owners to implement fire risk reduction alternatives, including those listed in Policy 4.726 as a priority over fuel modification in ESHA. However, the City Fire Marshal may require fuel modification to occur adjacent to existing development as outlined in the established zones. If fuel modification is required by the Fire Marshal for existing development that would encroach into ESHA, the alternative that has the least impact on ESHA shall be implemented where feasible.

Policy 4.7781: Fuel Modification Requirements for Additions to Existing Structures – Where a new addition would encroach closer than 100 feet to an ESHA, the City Fire Marshal shall review the project for fuel modification requirements. If a 100 foot fuel modification zone would encroach into ESHA, the additions shall not be permitted unless the addition would not encroach any closer to ESHA than existing principal structures on either side of the development.

Policy 4.7882: Fuel Modification Requirements for New Development – New development, including but not limited to subdivisions and lot line adjustments shall be sited and designed so that no brush management or the 100 ft. fuel modification encroaches into ESHA.

Policy 4.7983: For purposes of this section, "encroachment" shall constitute any activity which involves grading, construction, placement of structures or materials, paving, removal of native vegetation including clear-cutting for brush management purposes, or other operations which would render the area incapable of supporting native vegetation or being used as wildlife habitat, including thinning as required in Zone 2. Modification from Policy 4.7882 may be made upon the finding that strict application of this policy would result in a taking of private property for public purposes without just compensation.

Policy 4.804: If fuel modification is required by the Fire Marshal, a fuel modification plan will be required to be submitted to the City as part of the application for any development located in WUI Fire Hazard Severity Zones (Exhibit 4-7). Applications shall include a site plan describing and quantifying the potential thinning, pruning or removal of brush, if any, that would be required to provide fire safety for the project or would be needed to accommodate any/all project elements.

Policy 4.815: All discretionary permit applications for projects in the City's WUI shall be required to include landscape plan that has been prepared in accordance with the County of San Diego "Suggested Plant List for a Defensible Space" http://www.sdcounty.ca.gov/dplu/docs/SuggestedPlants.pdf and planting guidelines emphasizing the use of fire-resistant, native, non-invasive, drought-tolerant and salt-tolerant species. These plants grow close to the ground, have a low sap or resin content, grow without accumulating dead branches, needles or leaves, are easily maintained and pruned. Any new vegetation planted must meet Planning Department guidelines.

Policy 4.826: Any required thinning of flammable vegetation in the WUI shall be conducted by hand crews between September 15 through February 15. To minimize impacts to habitat, sensitive plant spcies will not be thinned or removed. Sensitive species such as Quercus Dumosa (Coastal Scrub Oak), Ceanothus Verrucosus (Coastal White Lilac), Arcto staphylos Glandulosa (Del Mar Manzanita) and Corethrogyne Filaginifolia var. Linifolia (Del Mar Sand-Aster) will not be thinned or disturbed in any way.

6. Emergency Actions and Response

Policy 4.837: The City Manager or his/her designee may grant an emergency permit, which shall include an expiration date of no more than one year and the necessity for a subsequent regular CDP application, if the City Manager or his/her designee finds that:

(1) An emergency exists that requires action more quickly than permitted by the procedures for a CDP and the work can and will be completed within thirty (30) days unless otherwise specified by the terms of the permit.

(2) Public comment on the proposed emergency action has been reviewed, if time allows.

(3) The work proposed would be consistent with the requirements of the certified LCP.

(4) The emergency action is the minimum needed to address the emergency and shall, to the maximum extent feasible, be the least environmentally damaging temporary alternative.

Policy 4.848: An emergency permit shall be valid for 60 days from the date of issuance unless otherwise specified by the City Manager or his/her designee, but in no case more than one year. Prior to expiration of the emergency permit, if required, the permittee must submit a regular, CDP application for the development even if only to remove the development undertaken pursuant to the emergency permit and restore the site to its previous condition.

Policy 4.859: All emergency permits shall be conditioned and monitored to insure that all authorized development is approved under a regular coastal development permit in a timely manner, unless no follow up permit is required.

Policy 4.8690: Maintain the permit tracking and monitoring system to identify and prevent the illegal and unpermitted construction of bluff retention devices as a component of the code enforcement program.

RESOLUTION 2013 - 047

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLANA BEACH, CALIFORNIA, APROVING THE MARCH 2013 LOCAL COASTAL PROGRAM LAND USE PLAN AMENDMENT FOR SUBMITTAL TO THE CALIFORNIA COASTAL COMMISSION FOR PROCESSING AT A DATE CERTAIN PUBLIC HEARING IN OCTOBER 2013

WHEREAS, at a public hearing of the Solana Beach City Council on February 27, 2013 the City Council adopted the California Coastal Commission (CCC) modified/approved Local Coastal Program (LCP) Land Use Plan (LUP) under Solana Beach City Council Resolution 2013-018; and

WHEREAS, at the February 27, 2013 public hearing, the City Council also directed City Staff to prepare a Land Use Plan Amendment (LUPA) to modify some of the key provisions in the LUP relating primarily to bluff top development, shoreline protection and private beach accessways; and

WHEREAS, the draft LUPA was developed in conjunction with CCC staff and interested stakeholders and was issued for a six-week public review and comment period on March 29, 2013 through May 10, 2013; and

WHEREAS, following the six-week public review period, and a public hearing before the Solana Beach City Council, it was anticipated that the LUPA would be submitted to the CCC for processing and formal consideration at a Commission meeting in October 2013; and

WHEREAS, during the six-week public comment period the City received comment letters on the draft LUPA and the Adopted LUP. No new issues of disagreement were raised, and the range of issues where there is disagreement remains narrowly focused; and,

WHEREAS, additional public comments that were received after the close of the six-week review period, and prior to the public hearing, v
consideration; and,

WHEREAS, the City has reviewed and considered
in response to the public review and comment period and
LUPA at the May 22, 2013 public hearing; and

EXHIBIT #4
Council Resolution 2013-047
LCPA # SOL-MAJ-1-13
California Coastal Commission

WHEREAS, the City Council of the City of Solana Beach acknowledges that the LUP will be carried out in a manner fully consistent with the Coastal Act and the City Council desires to apply the basic policies and provisions contained in the LUP to current and future projects in the City; and

WHEREAS, this decision is based upon the comments provided by staff reports, testimony, input of CCC staff and additional information presented during the City Council public hearing on May 22, 2013 on this matter.

NOW THEREFORE, the City Council of the City of Solana Beach, California does resolve as follows:

1. That the foregoing recitations are true and correct.

2. The City finds the LCP/LUP Amendment exempt from the California Environmental Quality Act pursuant to Section 15265 of the State CEQA Guidelines.

3. The City Council hereby makes the following Findings:
   a. The City's LCP's consists of (1) the adopted Land Use Plan (LUP) and a future (2) Local Implementation Plan (LIP) which together meet the Coastal Act requirements and implement its provisions and policies within the City.
   b. The City's LCP/LUP will be implemented in a manner fully consistent with the Coastal Act.
   c. The LIP will consist of specific sections within the Solana Beach Municipal Code and maps that describe actions, which carry out provisions of the LCP/LUP and Coastal Act policies.
   d. In order for the City's LCP/LUP to take full force and effect, a public hearing on the LIP will be required.

4. The City Council agrees to issue coastal development permits for the total area covered by the certified LCP.

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5. The City adopts this Resolution in accordance with the provisions of the Coastal Act Public Resources Code (PRC) Sections 30510(a) and 30514(a), and Section 13551 of Title 14 of the California Code of Regulations.

6. The City Council hereby adopts the LUPA and directs Staff to transmit the LUPA to the California Coastal Commission for formal review and consideration at a CCC public hearing as soon as possible.

PASSED AND ADOPTED this 22nd day of May 2013, by the City Council of the City of Solana Beach, California by the following vote:

AYES:	Councilmembers – Nichols, Heebner, Zito, Zahn
NOES:	Councilmembers – Campbell
ABSTAIN:	Councilmembers – None
ABSENT:	Councilmembers – None

MIKE NICHOLS, Mayor

APPROVED AS TO FORM:

JOHANNA CANLAS, City Attorney

ATTEST:

ANGELA IVEY, City Clerk

RESOLUTION 2013-108

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLANA BEACH, CALIFORNIA, AUTHORIZING THE CITY MANAGER TO REVISE OR AMEND THE LOCAL COASTAL PROGRAM LAND USE PLAN AMENDMENT LANGUAGE, INCLUDING MAKING ADDITIONS OR DELETIONS, PERTAINING TO THOSE POLICIES FROM THE CITY'S APPROVED LAND USE PLAN THAT THE COUNCIL AUTHORIZED FOR AMENDMENT AS MAY BE NEEDED

WHEREAS, at a public hearing of the Solana Beach City Council on February 27, 2013 the City Council adopted the California Coastal Commission (CCC) modified/approved Local Coastal Program (LCP) Land Use Plan (LUP) under Solana Beach City Council Resolution 2013-018; and

WHEREAS, at the February 27, 2013 public hearing, the City Council also directed City Staff to prepare a Land Use Plan Amendment (LUPA) to modify some of the key provisions in the LUP relating primarily to bluff top development, shoreline protection and private beach accessways; and

WHEREAS, the draft LUPA was developed in conjunction with CCC staff and interested stakeholders and was issued for a six-week public review and comment period on March 29, 2013 through May 10, 2013; and

WHEREAS, following the six-week public review period, and a public hearing before the Solana Beach City Council, the City Council approve the LUPA and authorized City staff to submit it to the CCC for processing and formal consideration at a Commission meeting in October 2013; and

WHEREAS, City staff prepared the LUPA application and submitted those materials to the CCC for review in order to set a hearing for the LUPA to be considered by the CCC; and

WHEREAS, CCC staff and City staff have continued to meet to refine the language of the proposed LUPA to be internally consistent with the rest of the LUP and to meet the goals of the LUPA as set forth by the Council; and

WHEREAS, during the discussions with CCC staff, some revisions to the LUPA have been made, and CCC staff has requested confirmation from the City that the City Manager has authority to make revisions as necessary to the LUPA; and

WHEREAS, such authority for the City Manag
the Council to City staff when the Council approved t

WHEREAS, the City Manager is the member of City staff who is the most familiar with the City Council's approved actions and policies and with the approval process for the LUPA; and

WHEREAS, any revisions to the LUPA resulting from discussions with CCC staff or provided as suggested modifications by the CCC will not be adopted or take effect until such time a public hearing on the matter is conducted before the City Council.

NOW THEREFORE, the City Council of the City of Solana Beach, California does resolve as follows:

1. That the foregoing recitations are true and correct.

2. That the City Manager has authority to revise or amend the Local Coastal Plan Land Use Plan Amendment language that was approved on May 22, 2013, including making additions or deletions, pertaining to those policies from the City's approved Land Use Plan that the Council authorized for amendment.

3. That any revisions to the LUPA resulting from discussions with CCC staff or provided as suggested modifications by the CCC will not be adopted or take effect until such time a public hearing on the matter is conducted before the City Council.

PASSED AND ADOPTED this 11th day of September 2013, at a regular meeting of the City Council of the City of Solana Beach, California by the following vote:

AYES: Councilmembers – Nichols, Campbell, Heebner, Zito, Zahn
NOES: Councilmembers – None
ABSENT: Councilmembers – None
ABSTAIN: Councilmembers – None

MIKE NICHOLS, Mayor

APPROVED AS TO FORM:

JOHANNA CANLAS, City Attorney

ATTEST:

ANGELA IVEY, City Clerk

CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF SAN DIEGO) *SS.*
CITY OF SOLANA BEACH)

I, ANGELA IVEY, City Clerk of the City of Solana Beach, California, DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of **Resolution 2013-108** authorizing the City Manager's authority to revise the Local Coastal Program Land Use Plan Amendment language as duly passed and adopted at a Regular Solana Beach City Council meeting held on the 11th day of September 2013 and the original is on file in the City Clerk's Office.

ANGELA IVEY, CITY CLERK

Date of this Certification: 9-12-13

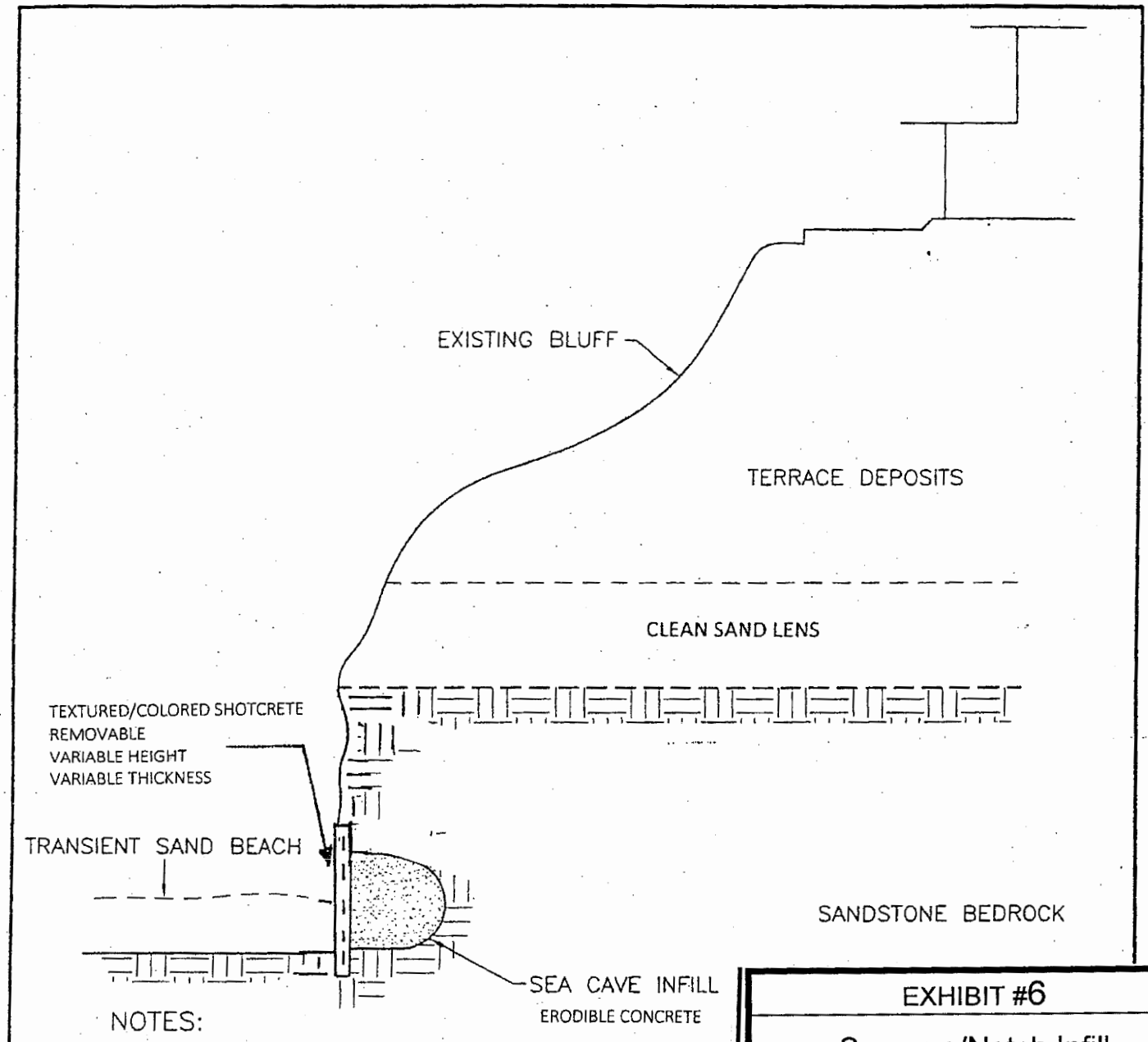


EXHIBIT #6

Seacave/Notch Infill

LCPA # SOL-MAJ-1-13

California Coastal Commission

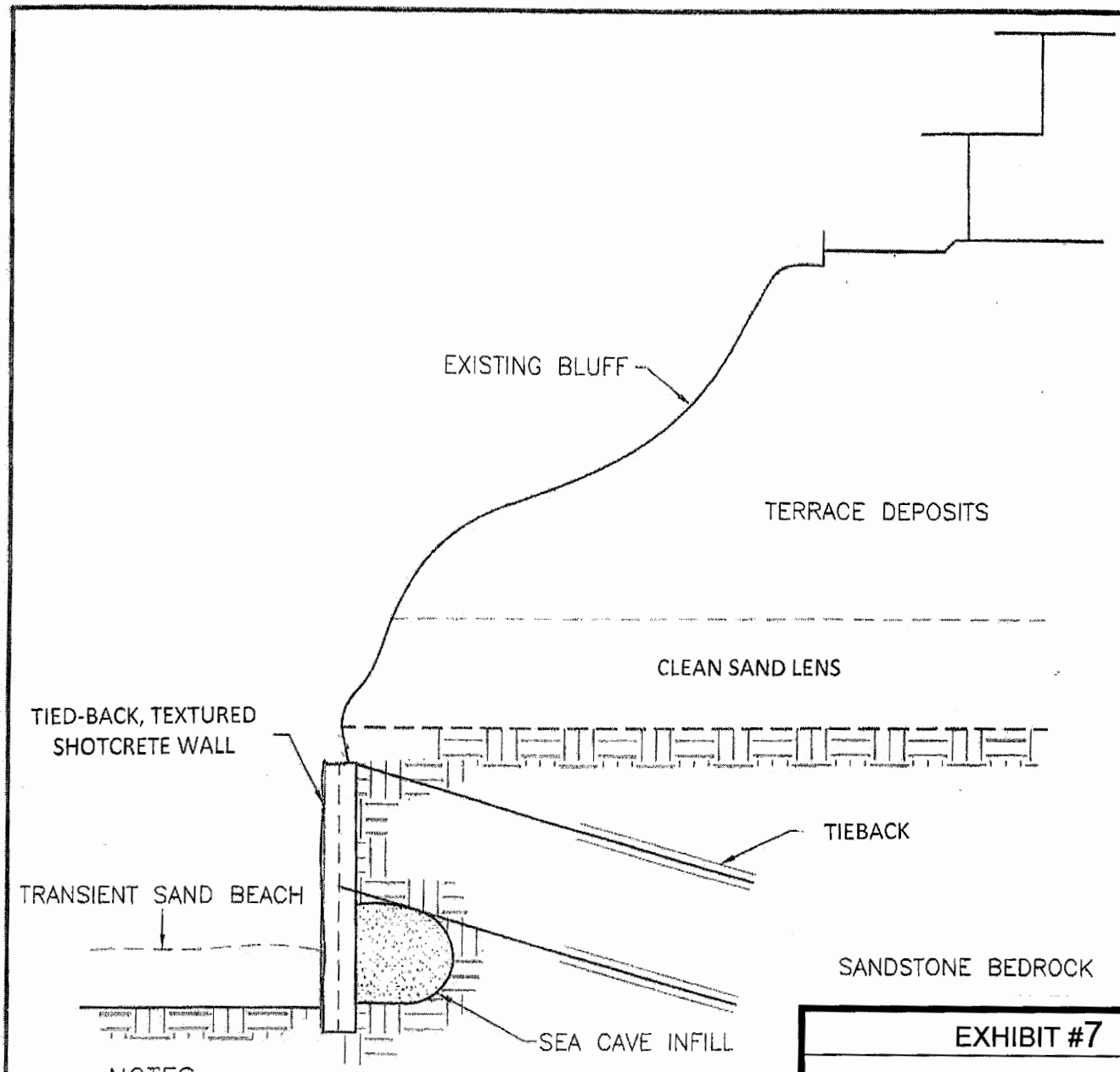
NOTES

1. GEOTECHNICAL REPORT
2. NOTCHED TO BEDROCK(4 DIRECTIONS), REINFORCEMENT TO ATTACH TO ERODIBLE CONCRETE
3. MINIMIZE ALTERATION OF BLUFF – FACE OR MIMIC EXISTING
4. INCLUDE MONITORING FOR FUTURE MAINTENANCE
5. NO SEAWARD ENCROACHMENT
6. BLUFF FACE TO HAVE "NATURAL COLOR AND TEXTURE"(SBMC 17.62) .

Alternate Preferred Solution – Infill Stabilization

City of Solana Beach

FIGURE NO. 1A



NOTES:

1. FACTOR OF SAFETY NEAR 1.0
2. GEOTECHNICAL REPORT
3. STRUCTURAL CALCULATIONS
4. LOCATED AS FAR LANDWARD AS POSSIBLE
5. MINIMIZE ALTERATION OF BLUFF–FACE OR MIMIC EXISTING.
6. INCLUDE DETAILED METHODOLOGY FOR MONITORING AND MAINTENANCE OVER THE LIFE OF THE DEVICE.
7. MINIMIZE THE NEED FOR ANY MAINTENANCE THAT NECESSITATATES ADDITIONAL SEAWARD ENCROACMENT OF THE DEVICE.
8. BLUFF FACE TO HAVE "NATURAL COLOR AND TEXTURE" (SBMC 17.62)

EXHIBIT #7

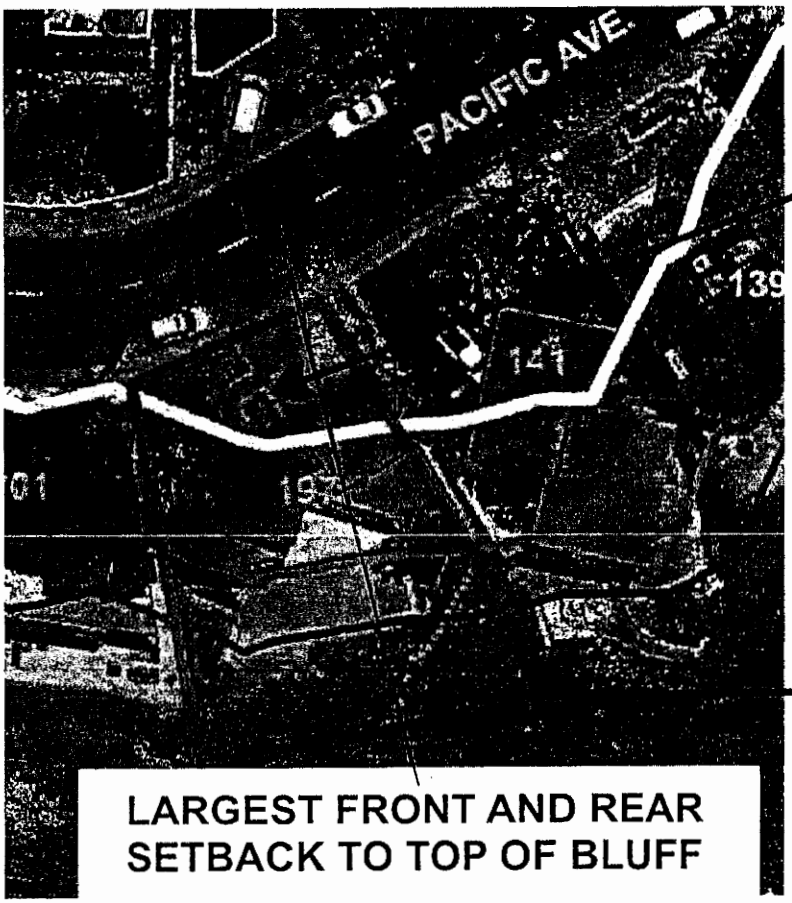
Lower Seawall

LCPA #SOL-MAJ-1-13

California Coastal Commission

Preferred Solution – Infill/Bluff Stabilization – Lower Seawall

City of Solana Beach	CCC – Approved LUP, February 2013	FIGURE NO. 1



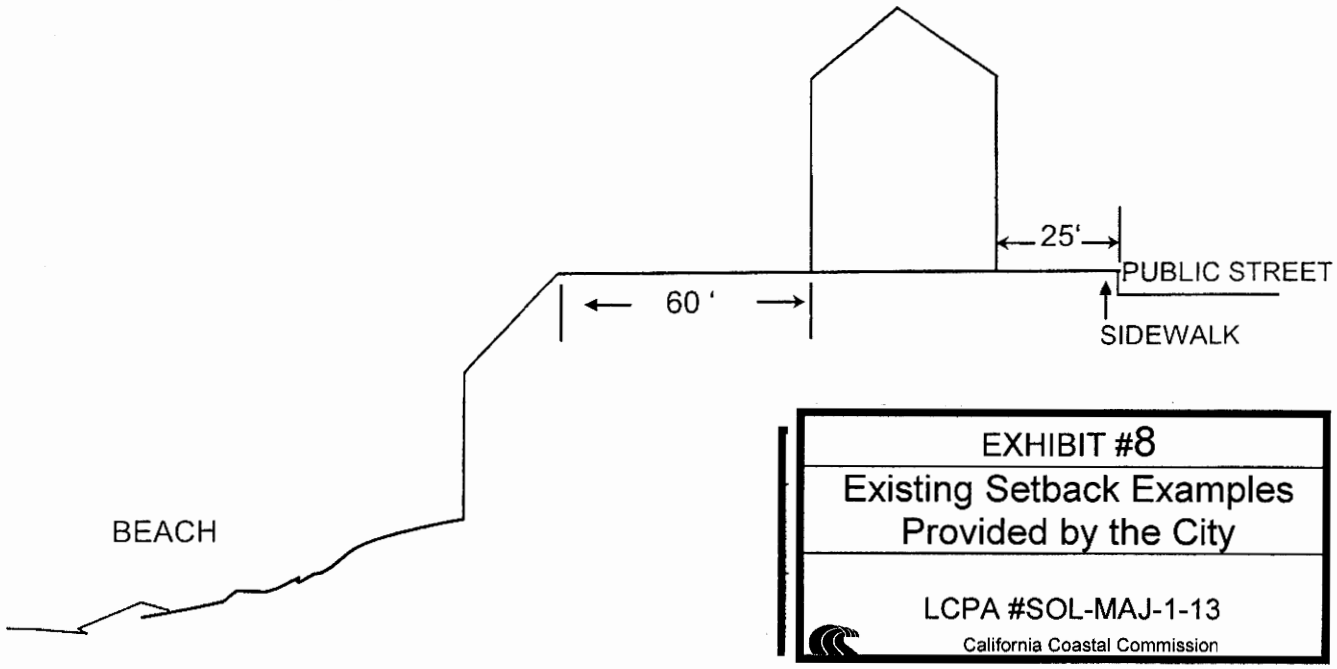
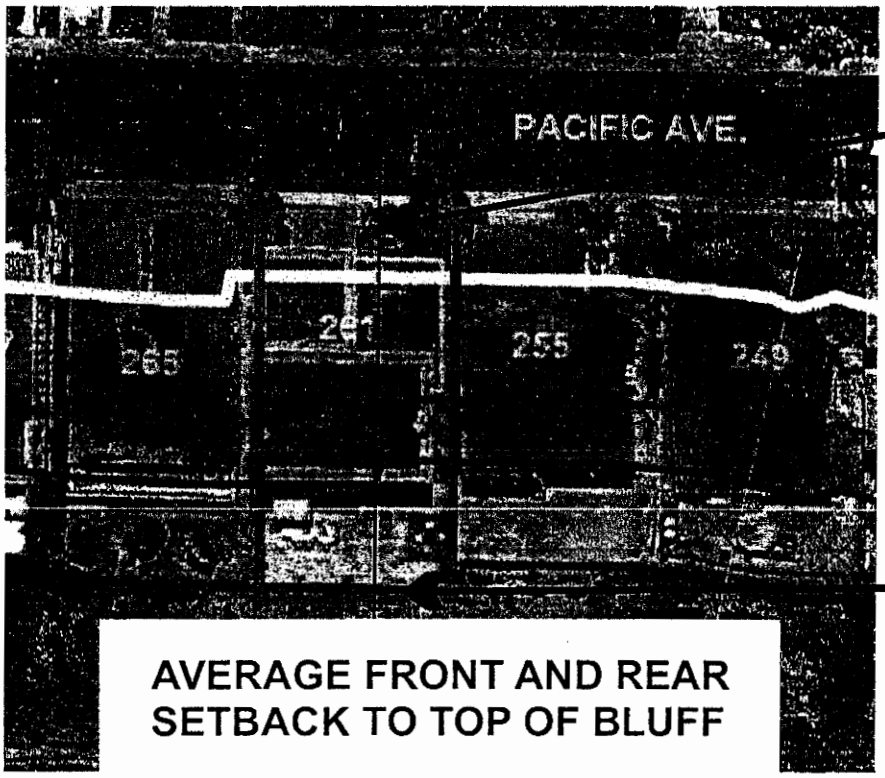


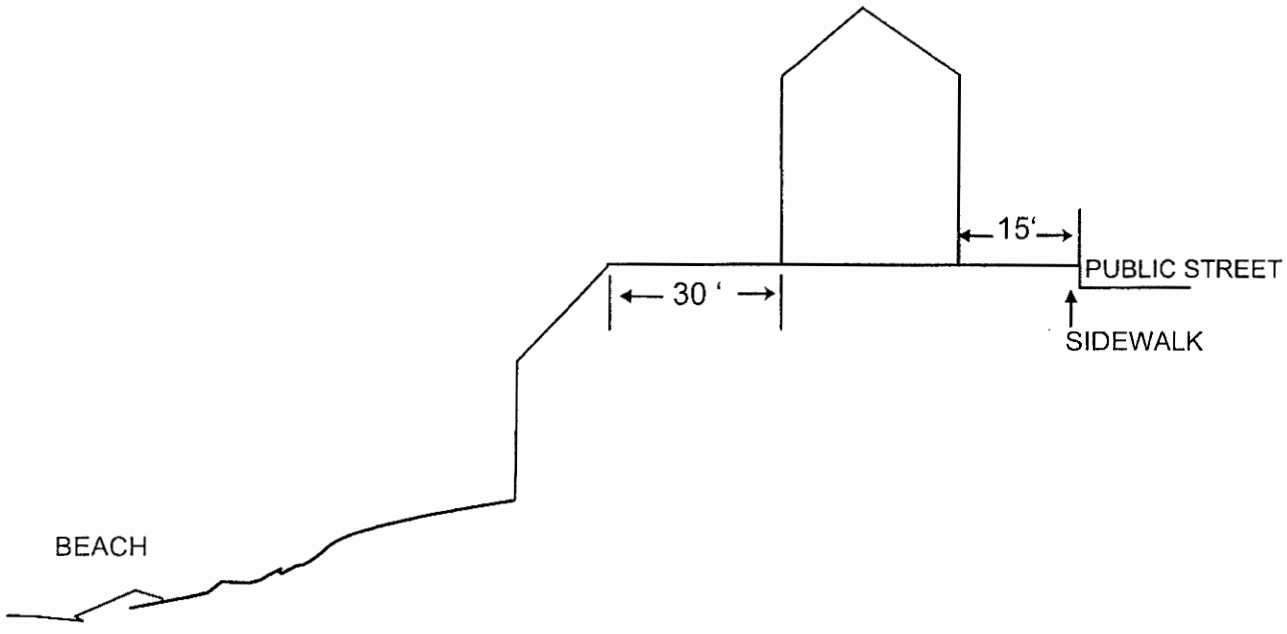
EXHIBIT #8
Existing Setback Examples Provided by the City

LCPA #SOL-MAJ-1-13
California Coastal Commission

Largest Front & Rear Setback

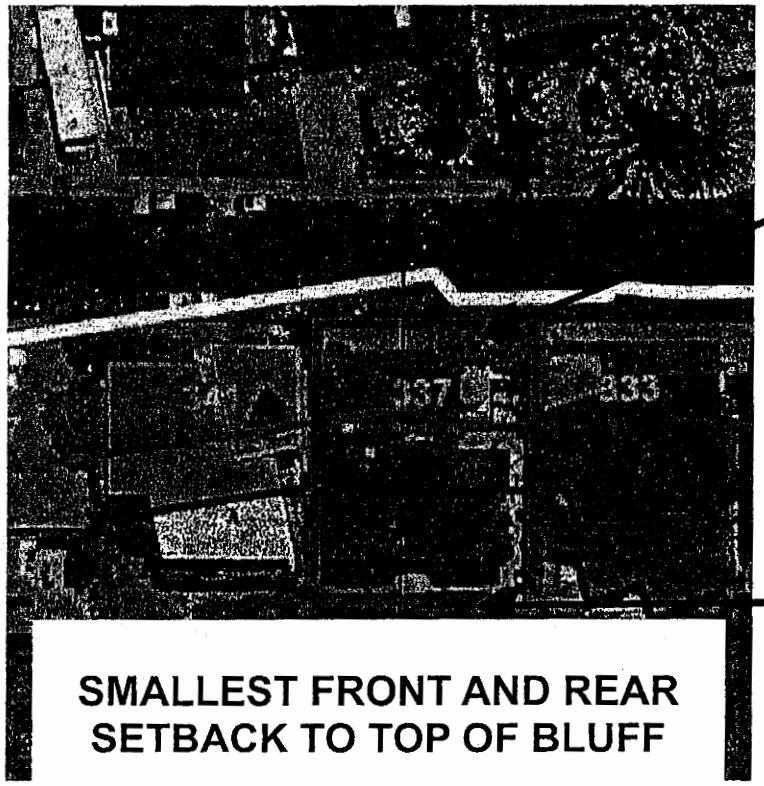
City of Solana Beach	Draft LUPA	FIGURE I

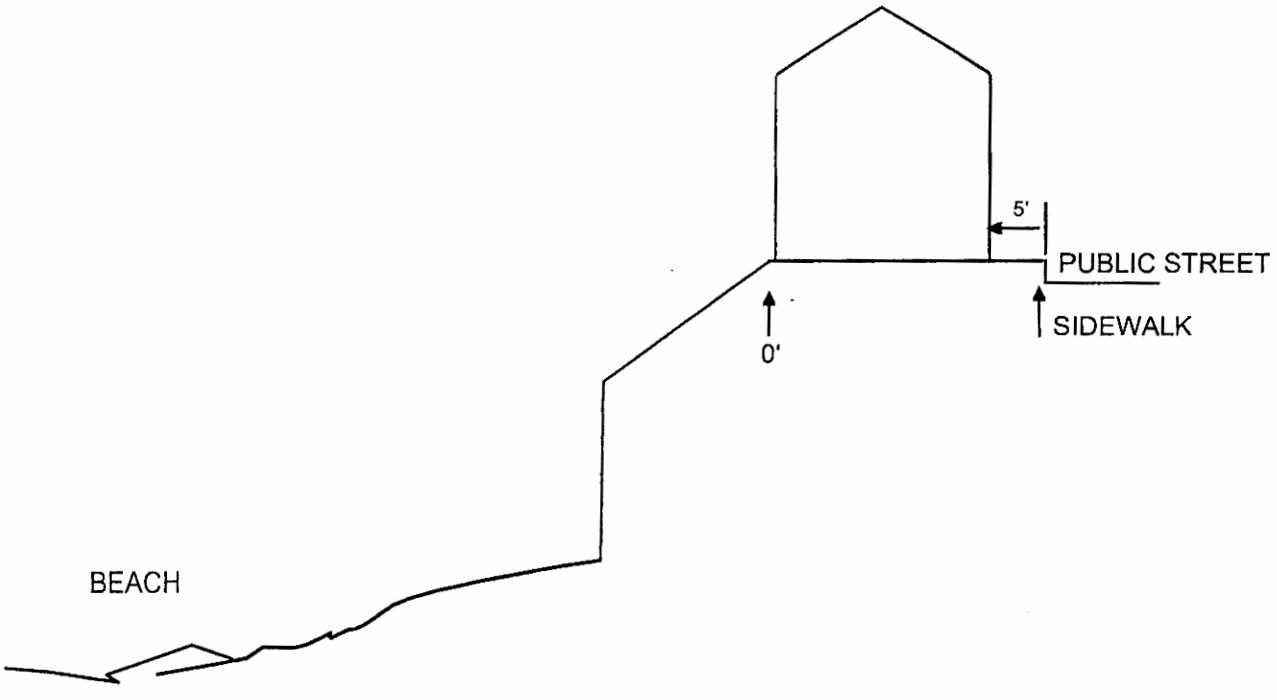




Cross-Section - Average Front & Rear Setback

City of Solana Beach	**Draft LUPA**	**FIGURE J**





Smallest Front & Rear Setback to Top of Bluff

City of Solana B	**Draft LUPA**	**FIGURE K**

EXHIBIT #9

Existing Shoreline Armoring

LCPA #SOL-MAJ-1-13

California Coastal Commission

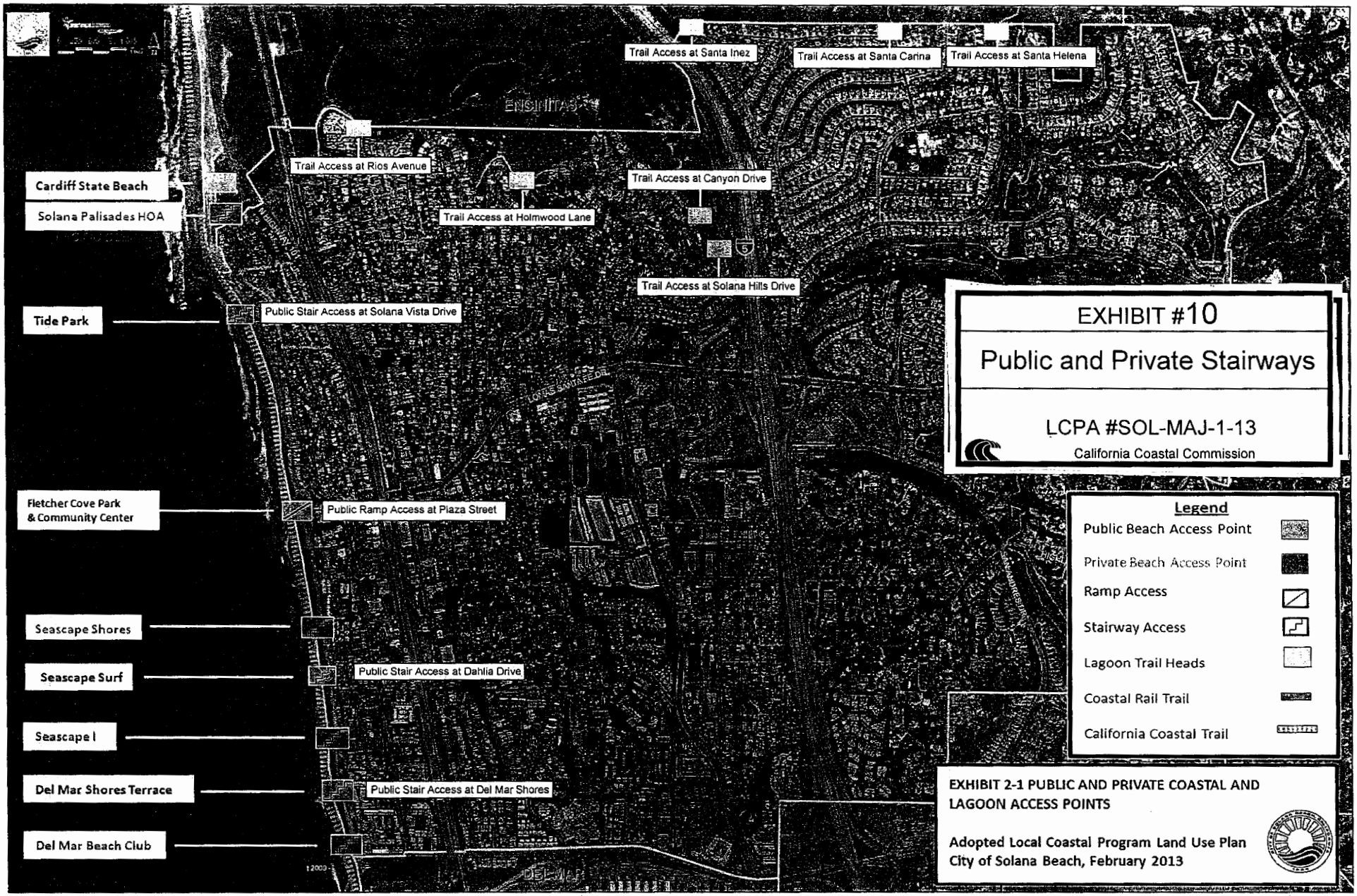
City of Solana Beach - Existing Shoreline Armoring Inventory October 2013

**Information regarding existing shoreline armoring was provided by City Staff and confirmed by CCC staff. While generally correct, some errors may exist.

Address	Condo Complex	Seawall	Seacave or Notch Infill	Upper Bluff Caissons	Mid or Upper Bluff Wall	Geogrid	Rip Rap
825 S. Sierra	Del Mar Beach Club	Yes (Low wall)					
675 S. Sierra	Del Mar Shores		Yes				Yes
707 S. Sierra	Seascape Chateau	Yes (partial)			Yes		
675 S. Sierra	Seascape 1	Yes					
585 S. Sierra	Seascape Sur						
347-459 S. Sierra	Solana Beach Tennis Club						
325 S. Sierra	Seascape Shores	Yes (partial)	Yes (partial)		Yes		
205 S. Helix Ave	Surfsong	Yes (partial)			Yes		
135 S. Sierra	Las Brisas	Yes (partial)					
Fletcher Cove	Public Beach						
139 Pacific Ave			Yes				
141 Pacific Ave			Yes				
197 Pacific Ave			Yes				
201 Pacific Ave			Yes				
205 Pacific Ave			Yes				
211 Pacific Ave		Yes					
215 Pacific Ave		Yes					
219 Pacific Ave		Yes					
225 Pacific Ave		Yes					
231 Pacific Ave		Yes					
235 Pacific Ave					Upperbluff sprayed shotcrete		
241 Pacific Ave				Yes			
245 Pacific Ave							
249 Pacific Ave		Yes					
255 Pacific Ave		Yes					
261 Pacific Ave		Yes				Yes	
265 Pacific Ave		Yes					
269 Pacific Ave		Yes					
301 Pacific Ave		Yes					
309 Pacific Ave		Yes					
311 Pacific Ave		Yes					
319 Pacific Ave		Yes					

City of Solana Beach - Existing Shoreline Armoring Inventory October 2013

Address	Condo Complex	Seawall	Seacave or Notch Infill	Upper Bluff Erosion	Mid or Upper Bluff Vegetated	Geogrids	Rip Rap
325 Pacific Ave		Yes (15' wall)		Yes			
327 Pacific Ave		Yes (15' wall)		Yes			
333 Pacific Ave		Yes		Yes		Yes	
337 Pacific Ave		Yes				Yes	
341 Pacific Ave		Yes					
347 Pacific Ave		Yes				Yes	
355 Pacific Ave		Yes		Yes		Yes	
357 Pacific Ave		Yes		Yes			
365 Pacific Ave		Yes				Yes	
367 Pacific Ave		Yes				Yes	
371 Pacific Ave		Yes				Yes	
403 Pacific Ave		Yes				Yes	
407 Pacific Ave		Yes	Yes				
417 Pacific Ave		Yes				Yes	
423 Pacific Ave		Yes				Yes	
435 Pacific Ave			Yes				
Tide Park Beach	Public Beach	Yes (north of cove)	Yes (south of cove)				
501 Pacific Ave		concrete bagwall	Yes				
503 Pacific Ave		concrete bagwall	Yes				
505 Pacific Ave		concrete bagwall	Yes				
509 Pacific Ave		concrete bagwall	Yes				
517 Pacific Ave							
521 Pacific Ave		Yes				Yes	
523 Pacific Ave	Vacant Lot		Yes				
525 Pacific Ave			Yes				
529 Pacific Ave							
533 Pacific Ave (House on Caissons)			Yes				
601 Circle Dr							
611 Circle Dr				Yes			
617 Circle Dr							
629 Circle Dr							
633 Circle Dr							
637 Circle Dr		Yes (Encinitas)					


Trail Access at Santa Inez
Trail Access at Santa Carina
Trail Access at Santa Helena
ENCINITAS
Trail Access at Rios Avenue
Cardiff State Beach
Solana Palisades HOA
Trail Access at Canyon Drive
Trail Access at Holmwood Lane
Trail Access at Solana Hills Drive
Tide Park
Public Stair Access at Solana Vista Drive
Fletcher Cove Park & Community Center
Public Ramp Access at Plaza Street
Seascape Shores
Seascape Surf
Public Stair Access at Dahlia Drive
Seascape I
Del Mar Shores Terrace
Public Stair Access at Del Mar Shores
Del Mar Beach Club
DEL MAR
EXHIBIT #10
Public and Private Stairways
LCPA #SOL-MAJ-1-13
California Coastal Commission
Legend
Public Beach Access Point
Private Beach Access Point
Ramp Access
Stairway Access
Lagoon Trail Heads
Coastal Rail Trail
California Coastal Trail
EXHIBIT 2-1 PUBLIC AND PRIVATE COASTAL AND LAGOON ACCESS POINTS
Adopted Local Coastal Program Land Use Plan
City of Solana Beach, February 2013

General Beach/Bluff Ownership Information

North of Fletcher Cove:
-Single Family Homes
-Beach is public
-Bluffs are public**

Fletcher Cove

South of Fletcher Cove:
-Condominiums
-Beach is public
-Bluffs are private

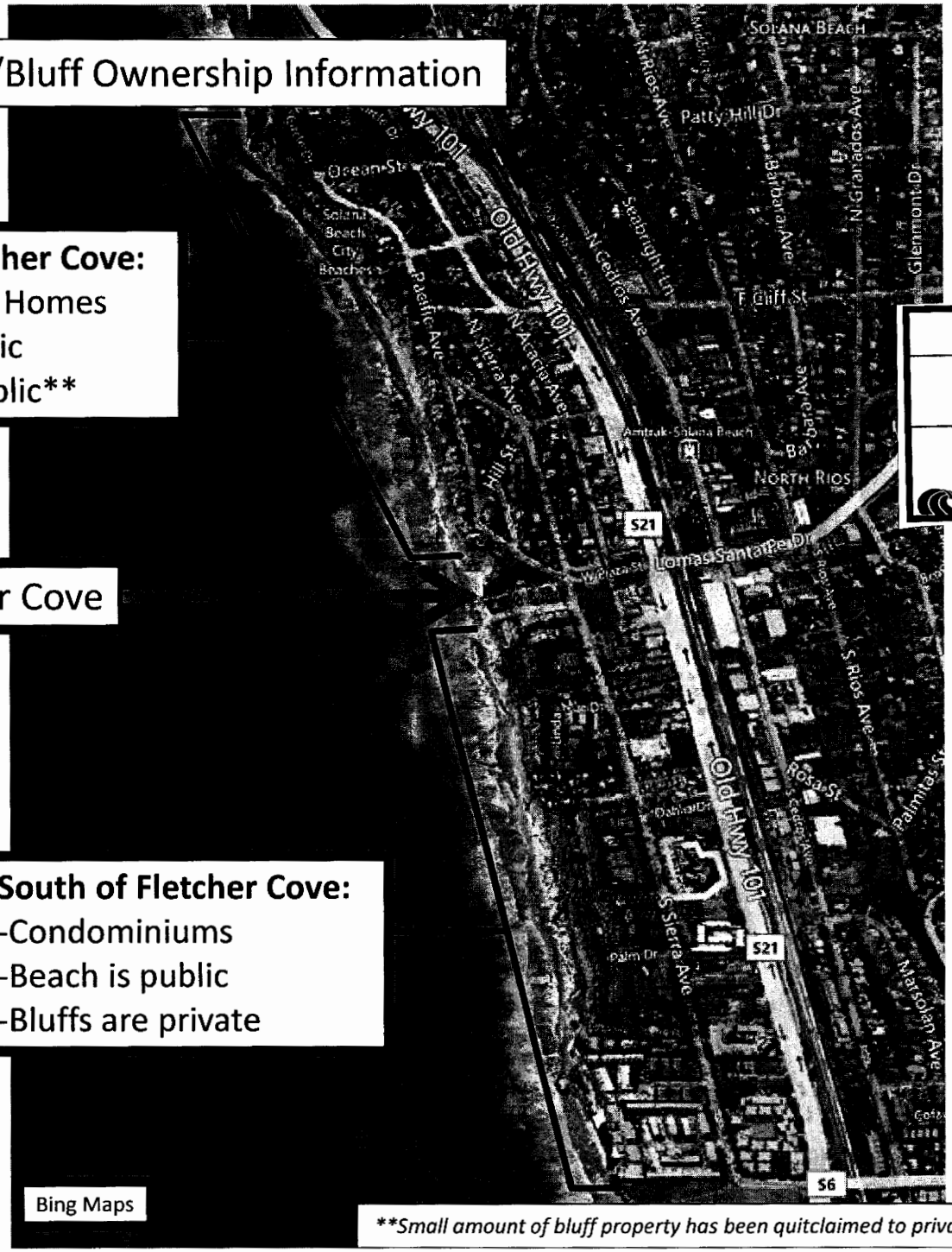


EXHIBIT #11

Beach/Bluff Ownership

LCPA #SOL-MAJ-1-13

California Coastal Commission

***Small amount of bluff property has been quitclaimed to private ownership north of Fletcher Cove*

SURFRIDER FOUNDATION
SAN DIEGO COUNTY CHAPTER

Surfrider Foundation San Diego County Chapter
9883 Pacific Heights Blvd, Suite D
San Diego, CA 92121
Phone: (858) 622-9661 Fax: (858) 622-9961

September 20, 2013 Delivered via email

Eric Stevens, Coastal Program Analyst
Deborah Lee, District Manager
Coastal Commissioners and Chairwoman Mary Shallenberger

RE: City of Solana Beach Land Use Plan Amendments

Dear Chairwoman, Commissioners and Staff,

The Surfrider Foundation is a non-profit, environmental organization dedicated to the protection and enjoyment of the world's oceans, waves and beaches through a powerful activist network. The Surfrider Foundation has over 250,000 supporters, members and activists worldwide. Please accept these comments on behalf of the San Diego Chapter of the Surfrider Foundation on the proposed Land Use Plan Amendments (LUPA) for Solana Beach.

The City of Solana Beach has been working on their Local Coastal Program (LCP) for over ten years; Surfrider San Diego County Chapter has been a stakeholder and provided comments throughout the entire process. Additionally, Jim Jaffee, the Co-Chair of our Beach Preservation Committee, was a volunteer on the Citizen's Committee and later was selected by the City Council as a representative on the Committee that met with the City and Coastal Commission to resolve differences in interpretation of the LUP as approved by the Commission in March 2012.

We would like to remind you of our comments, previously submitted into the record, in preparation for the City's hearing on the draft LUPA. While many of our concerns are provided there, we would like to reiterate those concerns and supplement those comments with additional information in case the Commission is receiving pressure to make further changes to the LUPA in light of the recent Land's End/Pacifica decision.

We understand the LUPA currently offer only minor tweaks to the LUP, however, should the Commission receive pressure to make additional substantive changes in light of the recent Land's End decision or Lynch case, we would like to proactively address the facts that distinguish those cases.

First of all, during the discussion surrounding the Land's End application at the August Coastal Commission (CCC) hearing, there were significant questions as to whether the removal of the 20-year permit provision was meant to be a precedent-setting decision or not. Executive Director Charles Lester stated something to the effect of, "the 20 years in Solana Beach and Santa Cruz were dictated by the facts in those cases".

EXHIBIT #12
Public Comment Letter
LCPA #SOL-MAJ-1-13
California Coastal Commission

SURFRIDER FOUNDATION

Surfrider Foundation San Diego County Chapter

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The Pacifica/Land's End project was conditioned with a $1.6 million mitigation fee for adverse impacts to beach access and recreation. The fee was imposed for a 640 ft. long wall and included a credit for the construction of ~$1.2 million public access stairway that improved access in the area suffering from the seawall's adverse impact. In addition, the applicants granted an ambulatory easement to guarantee lateral and vertical access across the site and if this access is threatened, they must come back for a permit amendment. Therefore, impacts to access are more substantially mitigated in the Pacifica project than in the Lynch case or in Solana Beach. In addition, Lynch in itself is not applicable to Solana Beach's facts or the facts in Pacifica according to the Coastal Commission.

Furthermore, we would like to remind the Commission that the 20-year provision is not an arbitrary time frame. When many of the residents of Solana Beach originally sought Coastal Development Permits (CDPs) for seawalls, including the Las Brisas complex, their engineers stated that the seawalls were only designed to last 22 years. As such, project proponents asked that the mitigation be calculated based on the anticipated life of the seawall. Since that time, many seawall applicants have acknowledged and accepted the 22-year condition in their seawall CDP 6-05-72. Prior to the end of that 22-year period, Las Brias must apply to either remove the seawall or provide additional mitigation.

Similarly, Chris Hamilton, President of the Beach and Bluff Conservancy, accepted a similar condition except over a 20-year period in 6-08-68. If any precedent has been set it is the precedent of those building nearly a mile of seawalls in Solana Beach through their expert Geotechnical Engineer's Walter Crampton or Anthony-Taylor Consultants.

Additionally, in the above mentioned CDP's, substantial impacts were deemed to occur over the 20 year interval associated with these seawalls. Solana Beach also published an Environmental Impact Report that deemed seawalls would have significant impacts.

The fact that (in most cases) the City of Solana Beach either directly owns the land or controls the land by easements meant for public access where the seawalls are constructed further differentiates Solana Beach from the Land's End decision. Furthermore, throughout the development of the LUP the Public Recreation Fee associated with seawalls is referred to as the "Public Recreation/Land Lease Fee". This is in direct contrast with Pacifica and Lynch, which have no Lease component. The City further calls attention to their land ownership in chapter 4 of the LUP:

> *"In association with approval of any bluff retention device on public land, the City will also require an encroachment removal agreement to be renewed at least every 20 years. Additional mitigation for impacts to public access and recreation may also be required through site-specific review and approval of the coastal development permit."*

We also wish to share a video edit we compiled to argue Solana Beach approve the LUP with modifications from the CCC. Note that the CCC voted unanimously for approval and made significant

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statements in deliberations on public ownership. Similarly, the City in their submission to Coastal Commission had similar discussions. https://www.youtube.com/watch?v=ZYclYw8LodA

Attached here you will find:

1. Our comments to the May LUP Amendment Hearing in Solana Beach.
2. A PowerPoint summary of key issues in our position (from May 22, 2013 local hearing).
3. Evidence that State Parks, as owner of the beach and bluff adjacent to a property requesting a seawall, denied use of their land for seawalls. In fact they denied use of land for Mr. Joseph Steinberg, plaintiff in the lawsuit vs. the (CCC) California Coastal Commission being litigated with respect to the 20-year provision in Solana Beach. This letter from State Parks says: "There is no allowance for State Parks to grant an easement for private use...". This is all true despite Steinberg having a Staff Report recommending approval under 30235. It clearly shows an agency with deed to land may prevent use of such land for seawalls. Like State Parks, Solana Beach has an ownership position in the beach and bluffs. This ownership position is clearly stated in the June 2011 LUP as submitted to the CCC and as was recently certified.

There are additional cases in support of a position of ownership (See below for details) such as:

1. Scott v. City of Del Mar (1997) 58 Cal. App. 4th 1296 [68 Cal. Rptr. 2d 317] where the City of Del Mar was able to relocate seawalls from public property.
2. CCC CDP 6-00-009 where the Del Mar Beach Club was unable to construct a seawall on land in the City of Del Mar
3. Schooler v. State of California (2000) 85 Cal. App. 4th 1004 [102 Cal. Rptr. 2d 343] where State Parks was not required to abate a nuisance and construct a seawall on State Park Land.

There are likely other precedents but these are the ones that give the City extra discretion in permitting seawalls beyond that of the CCC and allow for a more restrictive LUP. An example of an LUP with more restrictive provisions is what Solana Beach approved including without limitation the 20-year provision.

Specific to the Lynch and Frick application, I would like to direct your attention to the CCC Staff Report page 38-40 from which we provide the following excerpts:

Complete report available at http://documents.coastal.ca.gov/reports/2011/6/W16c-6-2011.pdf

> *"The proposed seawall, which will be 100 ft.-long and approximately 2 ½ ft.-wide, will be constructed adjacent to and inland of the mean high tide line at Leucadia State Beach. Unlike the subject application request, most if not all of the seawall applications approved by the Commission in Encinitas and in nearby Solana Beach have been located on the public beach, seaward of the mean high tide line."*

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As you can see by the above first quote in the Staff Report, public land is not involved in the Lynch and Frick application, while in most cases in Solana Beach and Encinitas, public land is involved. The circumstances of the approval of this project and related litigation are likely different. This report continues:

> *"According to the Commission's Technical Services Division, the seawall will not directly impede the public access or recreational uses typically considered by the Commission over its 20 year authorization period because there will be no direct encroachment of the proposed development onto public beach area. And, since the proposed wall and the beach platform upon which the proposed wall be constructed are both inland of the mean high tide line, the creation of beach area inland of the proposed seawall location would, for the foreseeable future, also be inland of the mean high tide line. Thus, while the proposed seawall will fix the back of the beach, the effects of fixing the back beach will not have an adverse impact upon available public beach area. Over time, the mean high tide elevation may be adjusted to a higher level and the beach platform will be worn down due to repeated wave attack, and the current wall location may become the inland limit for the mean high tide line. Therefore, in this case, the Commission is not requiring mitigation for direct public access/recreational use impacts at this time. Also, at the end of the authorized 20 year period, the beach conditions and mean high tide elevation should be re-evaluated to determine if this condition has changed."*

The second excerpt states that there are no impacts to access and recreation over the 20 year period as proposed in the Lynch application. This is in stark contrast to seawalls in Solana Beach. However, the CCC allows for a review at the end of the 20-year period to make certain this is still the case.

Attached is the Schooler case and Scott vs. Del Mar, which is an important case in our seawall position. This case ruled that a seawall built on public property could be removed and declared as a nuisance. Full documents can be downloaded at
http://caselaw.lp.findlaw.com/data2/californiastatecases/D034587.PDF
and http://caselaw.lp.findlaw.com/data2/californiastatecases/d026338.pdf

Excerpted is some of the key information in the ruling:

> *"As discussed above, the evidence established (1) the Public Sidewalk on Map 1450 was dedicated to public use in 1912, and (2) the private seawalls, rip rap and patios on the Scott and Lynch properties completely obstructed public access to the Public Sidewalk area. Accordingly, the improvements were nuisances per se, and Del Mar had the power to declare them such and remove them, after complying with due process requirements."*

> *"Likewise, Scott's and Lynch's claims that Del Mar's removal of the protective structures caused their properties to decrease in value fails to establish a constitutionally compensable*

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"taking or damaging." To the contrary, as discussed above, Del Mar's abatement of the encroachments on public land was a reasonable exercise of its police power, which does not give rise to an inverse condemnation action."

While the seawall was ultimately removed from public property it was later built on private property.

Thank you for your time and consideration. Please do not hesitate to contact us for additional information or with questions.

Sincerely,

Julia Chunn-Heer
Campaign Coordinator
San Diego Chapter of the Surfrider Foundation

Jim Jaffee
Advisor, San Diego County Chapter of the Surfrider Foundation
Resident of Solana Beach

Kristin Brinner
Beach Preservation Committee, San Diego County Chapter of the Surfrider Foundation
Resident of Solana Beach

State of California - The Resources Agency
Arnold Schwarzenegger, *Governor*
DEPARTMENT OF PARKS AND RECREATION
Ruth Coleman, *Director*

October 6, 2006

Lee McEachern, District Regulatory Supervisor
California Coastal Commission
San Diego Area
7575 Metropolitan Drive, Suite 103
San Diego, CA 92108-4421

Dear Mr. McKechern,

California State Parks has had the opportunity to review the Staff Report and Preliminary Recommendation to the Commission for Application Number 6-05-134, dated September 28, 2006, and provides the following input:

The project proposes the construction of an approximately 145 foot long and 22 foot high tied-back concrete seawall on Cardiff State Beach, owned and managed by California State Parks. Special conditions for the issuance of the permit, included in Section III, Item 11 of the Staff Report, requires the applicant to provide the Executive Director of the Coastal Commission for review and written approval, a written determination that either no state lands or State Park properties are involved in the development, or that all permits are obtained by the applicant from state entities such that the project may move forward. The property boundaries of State Park lands in the project vicinity are shown on the attached documents. State Parks owns that land above mean high tide to the top of the bluff where it abuts private residential property within the City of Solana Beach.

California State Parks is operated under the provision of the Public Resources Code (PRC) with reference to other California Codes, as appropriate. Provisions are incorporated that allow the issuance of easements of State Park lands to a public entity for a public benefit. There is, however no allowance for State Parks to issue an easement to a private party for their personal use. Additionally, the property at Cardiff State Beach, included in this permit request, was purchased with public monies that put restrictions on the use of the property to ensure it is managed for the public good, in perpetuity.

While we understand and are sympathetic to the owners of bluff-top properties, the situation faced by this applicant is not unique. Coastal developments statewide are subject to the same threats of coastal erosion. The issue of bluff erosion is not a simple one and bluff slumping is a natural process, exacerbated by ocean waves, as well as by movement of groundwater, lawn and garden watering, and surface and subsurface runoff.

In conclusion, California State Parks does not have the authority to approve this project as proposed with the special conditions of the Coastal Commission's Staff Report. If you have any questions, please feel free to contact me at 619.688.3260.

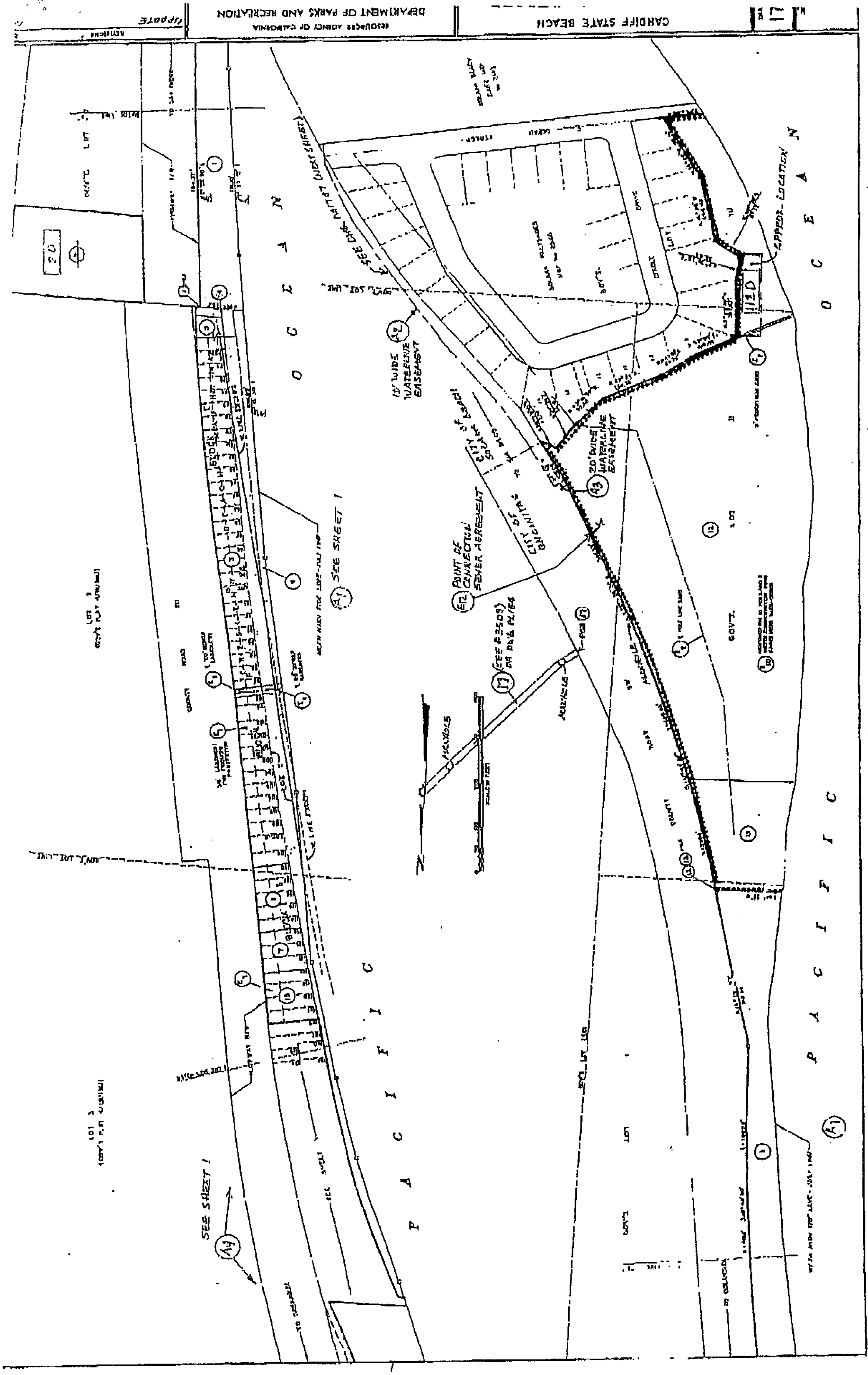
Sincerely,

Ronilee A. Clark

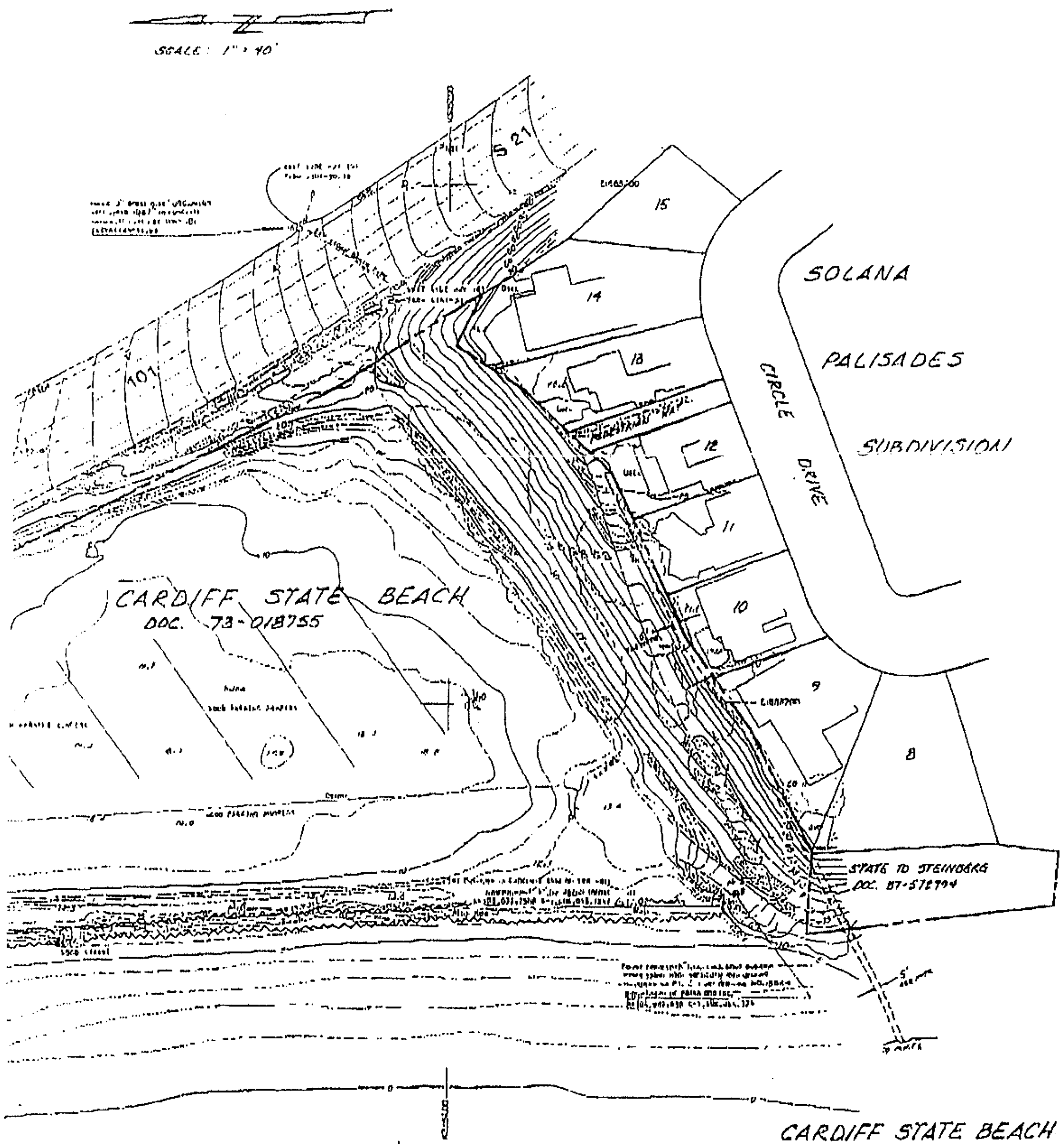
Ronilee A. Clark, Superintendent
San Diego Coast District
California State Parks

Attachments

cc: Tony Perez, Southern Division Chief
Denny Stoufer, N. Sector Superintendent, SD Coast District
Warren Westrup, Chief, Acquisitions and Real Property Services
Rick Rayburn, Chief, Natural Resources Division
Syd Brown, Senior State Park Geologist


DEPARTMENT OF PARKS AND RECREATION
CARDIFF STATE BEACH
SEE SHEET 1
APPROX. LOCATION
15' WIDE WATERLINE EASEMENT
20' WIDE WATERLINE EASEMENT
POINT OF CONNECTION SEWER AGREEMENT
CITY OF ENCINITAS
CITY OF SOLANA BEACH
MANHOLE
GOV'T
P A C I F I C
O C E A N

PA 1716



CARDIFF STATE BEACH SOUTH BOUNDARY

SURVEYS & OWNERSHIP SECTION
OCTOBER 1994

NOTE

APPROXIMATE PARK BOUNDARY POSITION COMPUTED FROM: 1961 FIELD PLAT BY D. [illegible] (DWG. FA#39), CALTRANS R/W MAPS, XI-SD-2-A SHEETS 11 & 12 OF 22 (SURVEY UNIT DWG. FES 466) AND SOLANA PALISADES SUBDIVISION MAP NO. 2560 (SURVEY UNIT DWG. FES 3144)

NOT FIELD VERIFIED

5 FOOT WIDE PEDESTRIAN WALK EASEMENT GRANTED TO NADIA D. LIBB 4/21/49 PER 3170 O.R. 159.

TOPO SOURCE:
D.P.R. AERIAL TOPO PREPARED BY [illegible] ENGINEERING AND SURVEYING, INC. FLOWN 1/19/83 (SEE DWG. 26076)

SURFRIDER FOUNDATION

Surfrider Presentation Solana BeachProposed LUP Amendment

Jim Jaffee, Co-Chair Beach Preservation Committee. Surfrider Foundation and Solana Beach Resident

Options Surfrider Foundation can support

- Do nothing
  - Allow any amendments or clarifications to be considered in preparation of the Local Implementation Plan
- Adopt the proposed amendments as noticed
  - Allow the CCC to either accept, reject or suggest further modifications to the proposed amendments
- Adopt the proposed amendments with suggested changes in our comment letter or May 9th.
  - Allow the CCC to either accept, reject or suggest further modifications to the proposed amendments

Seawalls Impede Access To The Shoreline

- Four Environmental Impact Reports (EIRs) the city has prepared found that seawalls will impede access to the shoreline (EIR Examples 1-4 are listed in our comment letter.
- Impacts to recreation and coastal access have been identified as a result of the construction of seawalls and other bluff retention devices, therefore under Sections 30604(c) and 30200, specific findings must be made if such impacts were to occur under implementation of the LCP. When a conflict arises between policies,"Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts."

BBC, COOSA and Others Have Accepted Coastal Permit Conditions Similar to the LUP and the LUPA

- BBC President Hamilton permit 6-08-68
  - "The developed mitigation plan covers impacts only through the identified 20-year design life of the seawall. No later than 19 years after the issuance of this permit, the permittees or their successor in interest shall apply for and obtain an amendment to this permit that either requires the removal of the seawall within its initial design life or requires mitigation for the effects of the seawall on shoreline sand supply for the expected life of the seawall beyond the initial 20-year design life."

BBC, COOSA and Others Have Accepted Coastal Permits with findings seawalls impede access

- BBC President Hamilton permit 6-08-68
  - "During the 20 year life of the seawall, as the beach area available to the public is reduced, dry sandy beach will become less available seaward of the seawall such that beachgoers will not want to sit or lay a towel in this area. In addition, over time as the surrounding unprotected bluffs recede, the seawall structure, along with others constructed to the south, will likely impede or completely eliminate public access to the beach south of Tide Beach Park at the subject site."

BBC, COOSA and Others Have Accepted Coastal Permits with mitigation

- BBC President Hamilton permit 6-08-68
  - "During the 20 year life of the seawall, as the beach area available to the public is reduced, dry sandy beach will become less available seaward of the seawall such that beachgoers will not want to sit or lay a towel in this area. In addition, over time as the surrounding unprotected bluffs recede, the seawall structure, along with others constructed to the south, will likely impede or completely eliminate public access to the beach south of Tide Beach Park at the subject site."
  - Hamilton was required to provide for mitigation for this loss of beach access and agreed.

All Development **Must** Provide Beach Access (It is a right!)

- Section 30212 of the Coastal Act requires "Public access from the nearest public roadway to the shoreline and along the coast **shall be provided in new development projects...**".
  - This is one of many Coastal Act provisions that gives broad discretion to regulating seawalls.
  - Seawalls or modified seawalls are new development.

City Owned Land Must Not be Deeded to Seawall Developers

- The twenty year provision is legally defensible since the City at any time has the right to forbid the encroachment on its easements or land with seawalls and other such devices. The twenty year renewal should not be automatic and should be discouraged if impacts to access and recreation cannot be mitigated.

Lynch Case in Encinitas Has Different Facts

- Seawall is on private land over the 20 year life
  - Not generally the case in Solana Beach
  - CDP 6-88-464-A2 **"However, in this particular case, the proposed seawall will not be located directly on public beach,** but rather will be located upland of the mean high tide. In fact, the proposed project places the seawall as far as approximately eight ft. landward of the originally approved seawall, which is a significant reason for approving the proposed 100 ft. wall"

Lynch Case in Encinitas Has Different Facts

- Seawall has no impacts over the 20 year life
  - Not the case in Solana Beach (see earlier slides and comment letter)
  - "According to the Commission's Technical Services Division, the seawall will not directly impede the public access or recreational uses typically considered by the Commission over the 20 year authorization period because there will be no direct encroachment of the proposed development onto public beach area. And, since the proposed wall and the beach platform upon which the proposed wall be constructed are both inland of the mean high tide line, the creation of beach area inland of the proposed seawall location would, for the foreseeable future, also be inland of the mean high tide line. Thus, while the proposed seawall will fix the back of the beach, the effects of fixing the back beach will not have an adverse impact upon available public beach area."

Seascape I 1979 (No Seawall) vs 1987 (Seawall and altered stairs clearly installed after the Coastal Act. Seawall and or stairs are likely over public easement or in an area where construction on bluffs was prohibited.

1972 vs 1979 Del Mar Beach Club – Note that stairway was significantly altered and a seawall built to protect it. Seawall and or stairs are likely over public easement or in an area where construction on bluffs was prohibited.

Options Surfrider Foundation can support

- Do nothing
  - Allow any amendments or clarifications to be considered in preparation of the Local Implementation Plan
- Adopt the proposed amendments as noticed
  - Allow the CCC to either accept, reject or suggest further modifications to the proposed amendments
- Adopt the proposed amendments with suggested changes in our comment letter or May 9th.
  - Allow the CCC to either accept, reject or suggest further modifications to the proposed amendments

BACKUP

Section 4 of Article X of the California Constitution

- No individual, partnership, or corporation, claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this State, shall be permitted to exclude the right of way to such water whenever it is required for any public purpose, nor to destroy or obstruct the free navigation of such water; and the Legislature shall enact such laws as will give the most liberal construction to this provision, so that access to the navigable waters of this State shall be always attainable for the people thereof.

Conflict and Compromise

- 30007.5. The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such ***conflicts be resolved in a manner which on balance is the most protective of significant coastal resources.***

The Seawall Part of the Coastal Act

- Section 30235 requires that:
- 30235. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or ***to protect existing structures*** or public beaches in danger from erosion and ***when designed to eliminate or mitigate adverse impacts on local shoreline sand supply.***

Seawall and Bluff Retention Device Permits are More than Section 30235 Typical CCC Staff Report

- Coastal Act Section 30604(c) requires that every coastal development permit issued for any development between the nearest public road and the sea "shall include a specific finding that the development is in conformity with the public access and public recreation policies of [Coastal Act] Chapter 3."
- ***Note Seawalls or Bluff Retention Devices are development and require a Coastal Development Permit***

An LUP MUST protect access and recreation in all development including seawalls

- Section 30210 referencing Section 4 of Article X of the California Constitution, which states that it is illegal to prevent access to the water.
- Section 30211 requires that "Development shall not interfere with the public's right of access to the sea..."
- Section 30212(a) protects access to and along the shoreline in development projects. As seawalls are development, this provision must be weighed. Specifically, 30212 (a) states in part that "Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects..."

An LUP MUST protect access and recreation in all development including seawalls

- Section 30220 protects recreational uses: "Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses."
- Section 30221 protects recreational uses: Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Coastal Act Recreation/Access Policies

- Seawalls in Solana Beach are seaward of the first through public road, on the beach. Coastal Act Sections 30210 through 30213, as well as Sections 30220 and 30221 specifically protect public access and recreation, and state:
  - Section 30210: In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.
  - Section 30211: 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.

Coastal Act Recreation/Access Policies

- Seawalls in Solana Beach are seaward of the first through public road, on the beach. Coastal Act Sections 30210 through 30213, as well as Sections 30220 and 30221 specifically protect public access and recreation, and state:
  - Section 30212(a): Public access from the nearest public roadway to the shoreline and *along* the coast shall be provided in new development projects...
  - Section 30213: Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. ...
  - Section 30220: Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.
  - Section 30221: Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

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May 9, 2013 **Delivered via email**

Mr. David Ott
City Manager - City of Solana Beach for distribution to City Council
635 S. Highway 101
Solana Beach, California 92075

RE: Summary of Requested Action for LUP

Dear City Manager Ott,

Thank you for the opportunity to comment on the first proposed amendment of the Land Use Plan (LUP) element of the Local Coastal Plan (LCP) for Solana Beach. In March 2012, the LUP was approved by the Coastal Commission with suggested modifications and was subsequently adopted by the City Council as modified on February 27, 2013. We believe the LUP as adopted is fully compliant with the Coastal Act.

Background

The Solana Beach City Council requested clarification of the intent of the policies in the certified LUP on several occasions. We appreciate the opportunity to work with your staff, David Winkler representing the Beach and Bluff Conservancy (BBC) and Condominium Organization of South Sierra Avenue (COOSSA), as well as the California Coastal Commission (CCC) Staff in bringing these clarified policies as close to consensus as possible.

We remind the Council and the public that even the U.S. Constitution has twenty seven Amendments. The first amendments to the Constitution, the Bill of Rights, were proposed a mere six months after the Constitution went into effect. Compared to the Bill of Rights, the number of policies for which the present LUP requires clarification is small in scope and impact. Those that state otherwise are misguided. We are in favor of the proposed list of amendments as long as they strike a balance in favor of protecting Coastal Resources, as this balance is a core tenet of the Coastal Act. We have crafted our comments with this intent as well as balancing the needs of the local conditions.

Unfortunately, the threat of litigation was part of the amendment negotiation process with Mr. Winkler, making it difficult at best to proceed. We believe that any constructive feedback Surfrider Foundation, the City, or Coastal Staff provided during the process was being crafted into a litigation strategy against the City and the public interest. None of us should waiver in the face of these challenges.

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General Principles

We have two overarching principles in our comments. The first is that seawalls in Solana Beach are generally on public land or easements. No rights to such land should be granted to a private party. Second, seawalls and other development must be intensely conditioned and regulated when impacts to access and/or recreational use of such lands cannot be mitigated. Our basis for this requirement is that as per Section 30604(c) of the Coastal Act, Coastal Development must promote free and open access to the coastline. Therefore, Coastal Development must conform with at least the following Coastal Act Sections (30210, 30211, 30212, 30220, 30221), as well as Section 4 of Article X of the California Constitution[1]. Likewise, per Section 30604(c), any LCP or Coastal Development permit approved under a certified LUP/LCP must comply with the access and recreation policies of Chapter 3 of the Coastal Act, starting at Section 30200. It is encoded within the Coastal Act that discretionary decisions should be weighted in a manner which is most protective of significant coastal resources, including access and recreation:

> "Section 30007.5 Legislative findings and declarations; resolution of policy conflicts:
>
> The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies."

Seawalls Are Not A Right

A small minority of coastal property owners wishes this body to believe that they have a right to a seawall under Section 30235[2] of the Coastal Act. However, Section 30235 allows for construction of seawalls when designed to protect principal structures in danger from erosion and when designed to mitigate impacts to shoreline sand supply. The position of this vocal minority is in sharp contrast with numerous policies of the Coastal Act and the balance required under Section 30007.5.

Seawalls Impede Access To The Shoreline

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[1] The text of the noted relevant sections of the Coastal Act and Constitution are appended to this document.

[2] The text of the noted relevant sections of the Coastal Act and Constitution are appended to this document.

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The position that this interpretation of a right to seawalls should supercede other provisions more protective of coastal resources, including access and recreation, is in direct conflict with the findings in numerous Environmental Impact Reports (EIRs) the city has prepared. These EIRs have found that seawalls will impede access to the shoreline (EIR Examples 1-4 follow):

EIR Example 1

As recently as the Draft Integrated Feasibility Study & Environmental Impact Statement/ Environmental Impact Report developed by the Army Corps of Engineers (ACOE) for the Encinitas-Solana Beach Coastal Storm Damage Reduction Project[3] released in December 2012, seawall construction would result in the complete loss of recreational beaches. Page 320 reads,

> 5.1.4 Potential Environmental Impacts of the No Action Alternatives (EN-3 and SB-3)
>
> Under Alternatives EN-3 and SB-3, the No Action Alternative, baseline conditions and trends are assumed to continue over the next 50 years. This alternative assumes the continued piecemeal approach to shoreline protection, including maintenance of existing structures and construction of seawalls along all remaining unprotected segments of shoreline in Encinitas and Solana Beach. Under certain sea level rise predictions, the No-Project Alternative would result in a complete loss of the beaches (for shoreline protective and recreational benefit) and accelerated shoreline and bluff erosion.

Page 458 explicitly states that recreation, including surfing, will be impacted by seawalls.

> 5.12.4 No Action Alternative
>
> Under the No Action Alternative, there would be the potential for further loss of recreational uses as beaches continue to erode and coastal bluffs continue to retreat with corresponding individual seawall permit proposals over the next 50 years. Erosion of beaches would limit the amount of space on which beach goers can recreate. In some areas, loss of sand may limit access along the coastline. Beach and bluff erosion pose a threat to park facilities including beach access paths and stairs, parking areas, and other facilities close to the edge of the bluffs. It is probable that under the 50-year without project condition, one or more major storms would result in damage to coastal park facilities, coastal access paths, and/or stairs.
>
> Loss or degradation of recreational opportunities under the No Action Alternative would increase the impacts within the next 50 years as demands for coastal recreation increase. Population growth, combined with a decrease in open space as residential

[3] http://www.spl.usace.army.mil/Missions/CivilWorks/ProjectsStudies/SolanaEncinitasShorelineStudy.aspx

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and commercial development increase, means more people would be seeking recreational opportunities in the project area. Therefore, loss of recreational facilities under the No Action Alternative would affect increasing numbers of people. Furthermore, if some parking areas, beach access points, or beaches themselves are lost due to storm damage, the pressure on remaining parking and access areas would increase. The increased pressure on remaining areas would degrade the recreational experience for many, as parking becomes difficult to find and more people are crowded into smaller areas.

A substantial long term loss of recreational opportunities including surfing could result under the No Action Alternative.

EIR Example 2

In 2002, the City released a Master Environmental Impact Report (MEIR) on its approval process over seawalls and notch fills. The city re-certified this document in 2007.[4] This document also acknowledged that the approval of seawalls and similar structures in Solana Beach would have adverse impacts on recreation and access.

> "The No Project Alternative and subsequent projects would have significant long-term impacts to recreation and lateral public access from the construction of seawalls and sea cave notch fills and aesthetics from the construction of seawalls." (page S-8 to S-13 and page 6-1)

EIR Example 3

In revising its Shoreline Ordinance in 2007 with the approval of Ordinance 351, the City adopted a Statement of Overriding Considerations noting that the the impacts of seawalls, notch fills,

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[4] http://www.ci.solana-beach.ca.us/vertical/sites/%7B840804C2-F869-4904-9AE3-720581350CE7%7D/uploads/SB_Shoreline_Report.pdf

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and sand replenishment could not be mitigated at the time of adoption, but that the LCP under consideration would address these at some time in the future.[5]

EIR Example 4

The RBSPII EIR similarly concludes there are adverse impacts from seawalls on page 7-7:[6]

> "Steep cliffs (approximately 80 feet tall) abut the Solana Beach receiver site and the beach consists of a gently sloping sand beach with scattered rocks and cobbles. Riprap, notch fills, and seawalls line the cliffs in an ongoing effort to slow wave-induced erosion. At high tide, no dry beach exists along the majority of the receiver site as waves reach the cliffs and existing sea walls. Similar to the Oceanside and North Carlsbad receiver sites, less sand was present along the cliffs and sea walls in June 2010 compared to September 2009. Several pocket beaches exist along the receiver site, with a small sandy beach at Fletcher Cove, which sits above the high tide mark."

Specific impacts to recreation and coastal access have been identified as a result of the construction of seawalls and other bluff retention devices, therefore under Sections 30604(c)

---

[5] From Ordinance 351 Approval,

"SECTION 3.

1. In accordance with CEQA Guidelines sections 15091, 15092 and 15093, the City Council finds that significant environmental effects of the Project will be mitigated to less than significant levels by the mitigation measures adopted by the City, with the exception of certain impacts to Aesthetics, Geology and Soils, and Recreation and Public Access, which though substantially lessened by adopted mitigation measures, are nevertheless still considered significant and unavoidable.

2. Council hereby makes and adopts CEQA Findings of Fact as contained in Exhibit A hereto.

3. The City Council hereby adopts a Statement of Overriding Considerations, as contained in Section XII of Exhibit A hereto, explaining how the benefits of the Project in balancing the competing private and public interests and taking a proactive approach to shoreline and coastal bluff protection and favoring smaller shoreline defense structures, among other considerations, justify the Project's significant and unavoidable impacts."

and

6. Direct staff to implement, as soon as possible, all appropriate actions to establish and begin collecting Land Lease Fees and Sand Mitigation Fees, in a manner consistent with the Draft LUP. The fee structure will include a mechanism for credits or other procedures to prevent duplicative fees assessed by other agencies for the same purposes as the City imposed fees.

7. By adopting this Ordinance, including Section XII of Exhibit A attached hereto, the City has satisfied its obligation pursuant to Public Resources Code section 21081, subdivision (b), which requires the issuance of a Statement of Overriding Considerations whenever a project's environmental effects cannot be mitigated to less than significant levels."

[6] http://www.sandag.org/uploads/projectid/projectid_358_14427.pdf

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and 30200, specific findings must be made if such impacts were to occur under implementation of the LCP. Section 30604(c) requires every Coastal Development Permit, including those that might be approved under a certified LUP/LCP, to comply with the access and recreation policies of Chapter 3 of the Coastal Act starting at Section 30200. Section 30200 of the Coastal Act requires that an LCP and/or development comply with all elements of Chapter 3 including those protective of access and recreation. When a conflict arises between policies,"Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts."

LCP Must Protect Coastal Access and Recreation

As mentioned, numerous policies protect access to the coast, access along the coastline, and recreational resources. An LCP must comply with the following:

- Coastal Act Sections 30210 through 30212, as well as Sections 30220 and 30221, which specifically protects public access and recreation.
- Section 30210 referencing Section 4 of Article X of the California Constitution, which states that it is illegal to prevent access to the water.
- Section 30211 requires that "Development shall not interfere with the public's right of access to the sea..."
- Section 30212(a) protects access to and along the shoreline in development projects. As seawalls are development, this provision must be weighed. Specifically, 30212 (a) states in part that "Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects..."
- Section 30220 protects recreational uses: "Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses."
- Section 30221 protects recreational uses: Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

All of the above noted sections are absolute in that they contain a "shall" in reference to protecting Coastal Access and Recreation. Many wish to convince this body that these "shall's" protecting access and recreation should be eliminated or ignored in favor of the 30235 "shall" in permitting seawalls. However, the Section 30235 provision permitting seawalls is limited. It allows seawalls only under certain conditions, and under all and any of these conditions it must comply with 30604(c) 30200, 30007.5 and all policies relating to access and recreation.

Inconsistencies between Public Record and Filed Lawsuits

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Specific to the litigation and LUP amendments at hand, many of the signatories of the lawsuits against the City for the City's adoption of the LUP, accepted Conditions and Findings from the Coastal Commission in sharp contrast to the positions they now take. For example, BBC President Hamilton in his acceptance of Coastal Development Permit (CDP) 6-08-68[7] approved at the February 2009 Coastal Commission meeting, accepted the following conditions, acknowledged the impacts of seawalls, agreed to a permit life if mitigation cannot be achieved, and agreed that public rights including ownership would not be waived via Coastal Commission approval of a CDP.

CDP 6-08-68: Acknowledges Impact and Permit Life

> "2. Mitigation for Impacts to Sand Supply. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall provide evidence, in a form and content acceptable to the Executive Director, that a fee of $17,297.44 has been deposited in an interest bearing account designated by the Executive Director, in-lieu of providing the total amount of sand to replace the sand and beach area that will be lost due to the impacts of the proposed protective structure."...
>
> "The developed mitigation plan covers impacts only through the identified 20-year design life of the seawall. No later than 19 years after the issuance of this permit, the permittees or their successor in interest shall apply for and obtain an amendment to this permit that either requires the removal of the seawall within its initial design life or requires mitigation for the effects of the seawall on shoreline sand supply for the expected life of the seawall beyond the initial 20-year design life. If, within the initial design life of the seawall, the permittees or their successor in interest obtain a coastal development permit or an amendment to this permit to enlarge or reconstruct the seawall or perform repair work that extends the expected life of the seawall, the permittee shall provide mitigation for the effects of the seawall on shoreline sand supply for the expected life of the seawall beyond the initial 20-year design life."
>
> "3. Mitigation for Impacts to Public Access and Recreational Use. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the applicants shall provide evidence, in a form and content acceptable to the Executive Director, that the interim mitigation fee of $50,000.00, required by the City of Solana Beach to address adverse impacts of the shoreline protection on public access and recreational, has been satisfied."
>
> "11. Public Rights. The Coastal Commission's approval of this permit shall not constitute a waiver of any public rights that exist or may exist on the property. The

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[7] CDP 6-08-68 Staff report is available at http://documents.coastal.ca.gov/reports/2009/2/F8a-2-2009.pdf

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> permittee shall not use this permit as evidence of a waiver of any public rights that exist or may exist on the property."

A similar condition was attached to the permit of David Winkler on permit CDP 6-08-122[8] and for Surfsong on permit 6-03-33[9]. Numerous other permits have similar conditions and have been accepted by COOSSA members, BBC members, and/or officers or representatives of these two litigious organizations (including attorney Jon Corn).

6-08-68 Acknowledges Seawalls Cause Loss of Beach

In addition to accepting the above conditions, Hamilton accepted the following language in his Staff Report that explained the nexus of his seawall fixing the back of the beach thereby impeding access. From the Staff report for approval of 6-08-68 accepted by Hamilton.

> "During the 20 year life of the seawall, as the beach area available to the public is reduced, dry sandy beach will become less available seaward of the seawall such that beachgoers will not want to sit or lay a towel in this area. In addition, over time as the surrounding unprotected bluffs recede, the seawall structure, along with others constructed to the south, will likely impede or completely eliminate public access to the beach south of Tide Beach Park at the subject site.
>
> As explained in Section 2 of this report, the proposed seawall will result in the encroachment and the fixing of the back of the beach, which will result in the immediate loss of 100 square feet of beach and after 20 years, with no recession of the bluff, will result in the loss of a total approximately 370 square feet of public beach. The sand that would have reached the beach were it not for the proposed seawall is generally mitigated by the applicant's proposal to pay an in-lieu fee for the purchase of an equal amount of sand for future placement. However, the loss of this approximately 370 sq. ft. of recreational area is not mitigated by the one-time placement of sand since that area will not be available for public use (or placement of sand) over the estimated 20 year life of the seawall. Since any loss of public beach area will significantly affect public access and recreational opportunities along the beach adjacent to Tide Beach Park, additional mitigation is required.
>
> Development along the shoreline which may burden public access in several respects has been approved by the Commission. However, when impacts can't be avoided and have been reduced to the maximum extent feasible, mitigation for any remaining

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[8] CDP 6-08-122 Staff report is available at http://documents.coastal.ca.gov/reports/2009/6/Th15a-6-2009.pdf

[9] CDP 6-03-33 Staff report is available at http://documents.coastal.ca.gov/reports/2009/3/W20a-3-2009.pdf

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adverse impacts of the development on access and public resources is always required."

Specific Amendment Comments

We offer the following comments with respect to the Suggested Amendments with the identified impacts to access and recreation in mind. Where we offer no comment, we generally believe at this time that the additions are useful in the proposed amended LUP and provide more guidance for the drafting of the LIP.

1. Proposed amendment to policy 2.7 and the original 2.7 are inconsistent with at least Section 30212 of the Coastal Act which requires "Public access from the nearest public roadway to the shoreline and along the coast ***shall be provided in new development projects...***". Proposed Section 2.7 reads, "New development shall be sited and designed to avoid impacts to public access and recreation along the shoreline and trails. If there is no feasible alternative that can eliminate or avoid all access impacts, then the ***feasible*** alternative that would result in the least significant adverse impact shall be required." The added language on feasibility is not included in the corresponding Section of the Coastal Act. In fact, this provision has somehow shifted "shall" language in the original Coastal Act provision to "avoid" language. Better language for this provision would be, "New development shall be sited and designed to ***provide*** ~~avoid impacts to~~ public access and recreation along the shoreline and trails. If there is no feasible alternative that can ***provide public*** ~~eliminate or avoid all~~ access ~~impacts~~, then the alternative that would result in the least significant adverse impact ***to access*** shall be required."

2. Proposed Amendments to policies 2.60 and 2.60.5 - Private beach stairways are non-conforming uses inconsistent with at least Coastal Act sections 30251 and 30253. Sections 30251 and 30253 protect alteration of views and natural landforms. The proposed amendment adds language clarifying that rebuilding more than 50% of a private stairway constitutes new development. As previously noted, new development under Section 30212 requires for access to and along the shoreline. The proposed amendment language is not as strict as to require such access unless the stairways are on public lands or easements. We believe that this limitation requires further analysis and if not required should be eliminated.

It is also unclear if the few private stairways covered by Section 2.60 are subject to easements or were developed in areas that prohibited development on the bluffs at the time of such development and were either completed over public access easements or encroached on areas where development was prohibited.

Much is being said regarding the development history of the stairways in Solana Beach. In particular, Seascape I claims that, "The stairway in our community, Seascape I, was installed prior

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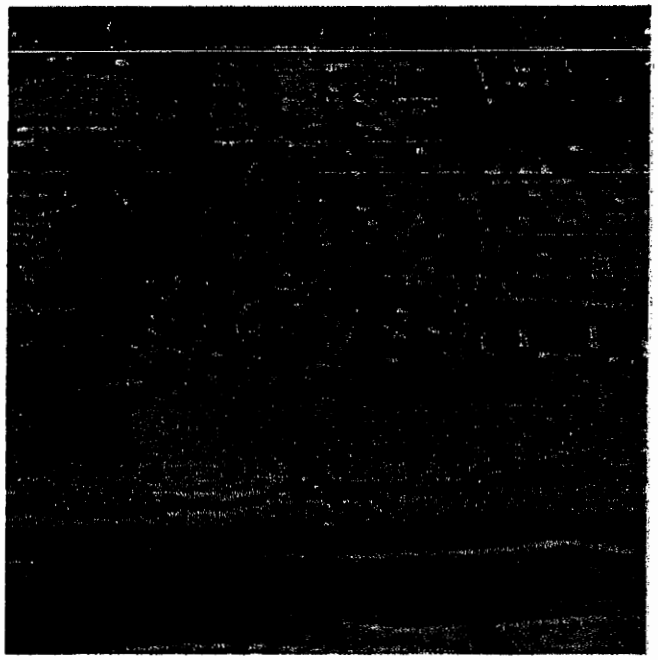
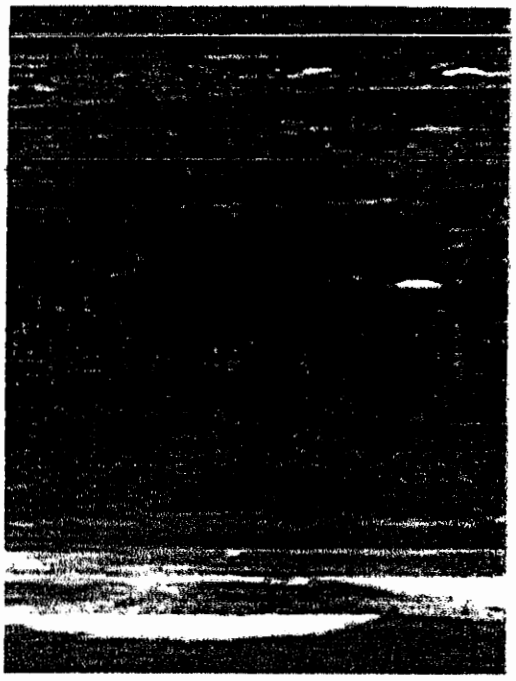
to February 1, 1973 (the effective date of the Coastal Conservation Act). Our Homeowners Association has a vested legal right to the continued existence of this stairway."

While it may be true there was a stairway that existed prior to the Coastal Act effective date, the stairway as it now exists, did not exist prior to the Coastal Act. Sometime after 1979, the stairway was significantly reconstructed and a seawall was added to protect the stairs and possibly to protect the structures above. This is shown in the Figure below.

Seascape 1 1979 (No seawall) vs 1987 (seawall and altered stairs clearly installed after the Coastal Act. Seawalls and/or stairs are likely over public easement or in an area where construction on bluffs was prohibited





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Therefore it is not clear if Seascape indeed has a vested right as alleged. The stairway and seawall appears to be new development after the Coastal Act.

It is also unclear how stairways were permitted under zoning ordinances at the time of development. While a title search has not revealed any easements on the bluff face, it is our understanding that the Coastal Development Overlay Zone as well as the interim Shoreline Ordinance (Ord. No. 3534) prohibited development on Coastal Bluffs. One or both of these may have been the instrument to approve such stairways if indeed they were approved at all. Therefore the right to build stairs on the bluff should have required an easement. The Coastal Act does not waive rights to such easements where they exist. Additionally the title report is not insured for failure to record such easements. Specifically, the title report reads,

> "EXCEPTIONS FROM COVERAGE
>
> This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) that arise by reason of:
>
> 3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records."

Similar to Seascape I, Del Mar Beach Club appears to have added its final stair configuration and the seawall that now protects it after the Coastal Act enforcement. As shown in the Figure below, there is even a record of Coastal Permit for the seawall. In 1980, the Commission approved the construction of an approximately 540 foot-long, 15 foot-high concrete seawall at the base of the bluff below the condominiums (CDP #F4051/Del Mar Beach Club [DMBC]).

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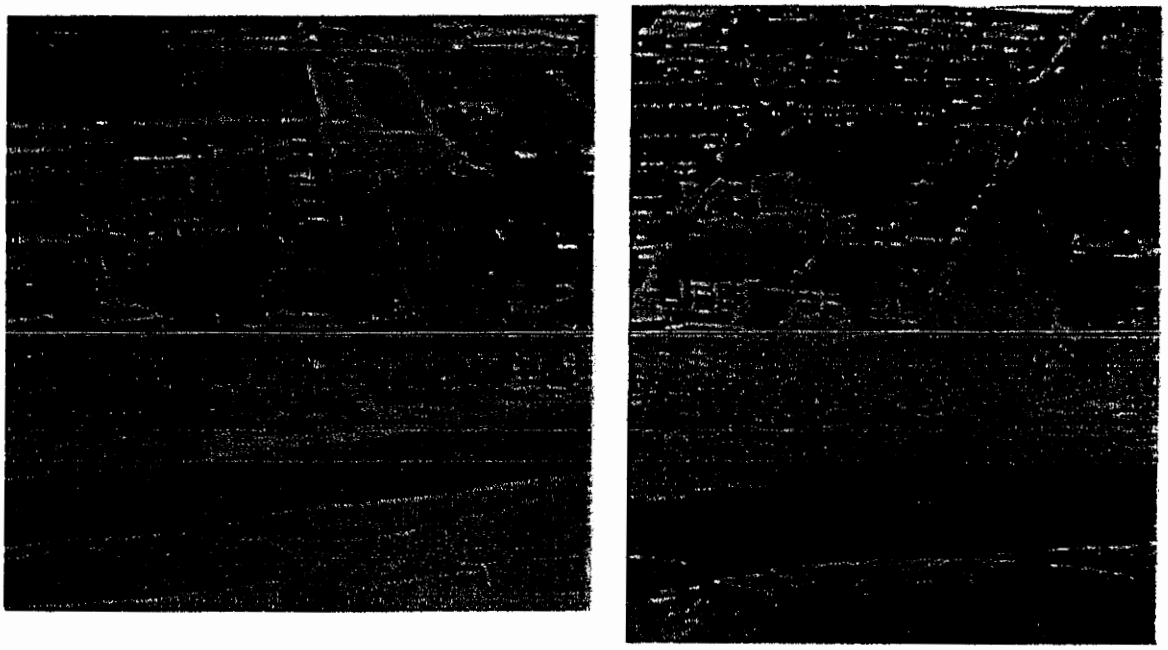
1972 vs 1979 Del Mar Beach Club - Note that the stairway was significantly altered and a seawalls built to protect it. Seawall and/or stairs are likely over public easement or in an area where construction on bluffs was prohibited.



Similar evidence as shown for Seascape I and DMBC exists for the stairway at Seascape Shores, specifically a seawall was installed after the Coastal Act and the Stairs were reconfigured.

The intent of providing this information is to provide policymakers with a more complete understanding of any perceived vested rights. It is not clear what has been put in the public record thus far.

Again as mentioned, new development of the small number of private stairways triggered by more than 50% cumulative reconstruction must provide access to the shoreline as required in Section 30212 and must avoid alteration of natural landforms per Section 30251. Therefore, the proposed amendment is less restrictive than the Coastal Act as drafted and limitations on feasibility must be eliminated.

3. The proposed language adding "where feasible" in the Section titled 'Caisson and Tieback Alternatives' (starting on Page 3 of the March 27 proposed amendments) is inconsistent with Section 30251 of the Coastal Act. Specifically, 'where feasible' should be removed from the language requiring that caissons "avoid alteration of the natural

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landform of the bluffs ~~where feasible~~". 30251 does not include this limitation. Other revisions in the Caisson section Amended language provide property owners with specific criteria for approval and design. These additions are useful in the proposed amended LUP and provide more guidance for the drafting of the LIP.

4. The amended language in 4.14 provided additional clarification of the LUP policy intent as to what constitutes Bluff Top Redevelopment and allows for maintenance of existing structures not deemed as Bluff Top Redevelopment. These additions are useful in the proposed amended LUP and provide more guidance for the drafting of the LIP.

5. The deletion of Policy 4.18, and addition of Policies 4.25, 4.25.5, 4.25.6, 4.57 are not consistent with either the Coastal Act Section 30253 nor with the intent of the original approved LUP. There are a few issues to cover with these Policies.

1. Section 30235 requires that, "New development shall do all of the following: ...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." The original policy 4.18 had an implicit equivalent shall requirement that new development could not rely on a bluff retention devices in a setback calculation. The proposed amendment now adds this policy to 4.25 however the language has been change from "shall" to "should". The clause in Policy 4.25 must be changed as follows in order to comply with 30253 "Any existing bluff retention devices ***shall*** ~~should~~ not be factored into the establishment of the GSL for the proposed blufftop development."

2. Policy 4.57 incorporates the element originally in the proposed deleted Policy 4.18 regarding the expansion/alteration of existing legally permitted bluff retention devices. The addition of the assessment of the impacts of the bluff retention device to public access and recreation are welcome and required to comply with 30604(c) and the requirement that a CDP comply with all Chapter 3 policies on access and recreation as well as applying for a new 20 year permit. It would be even more clear if the the last sentence were modified as follows, "that adequate mitigation for impacts to the public ***access and recreation*** ~~beach~~ has been provided."

3. An additional but important point with respect to the twenty year provision in these policies, the City at any time has the right to forbid the encroachment on its land with seawalls and other such devices. The twenty year renewal should not be automatic and should be discouraged if impacts to access and recreation cannot be mitigated.

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4. The remaining proposed modifications to 4.25, including 4.25.5 and 4.25.6, that provide guidance and exceptions for new development criteria are useful in the proposed amended LUP and provide more guidance for the drafting of the LIP.

6. With respect to mitigation fees (4.54 and elsewhere as applicable)

1. In the proposed amendment to Section 4.54 and elsewhere, the term "near term ... project" is indefinite and troublesome. A definition is needed. Capital improvement projects for access such as stair replacement, conversion of parklands such as the one at Ocean Street and at the southern border of Solana Beach must be funded over the long term. Thus it is not clear that these important projects would qualify as "near term....project(s)" as funding for these projects must occur over the long term. Acquisition and renting of blufftop property for funding of ultimate removal are additional projects with long timelines.

2. We strongly believe that Sand Mitigation fees must only be used for restoring lost sand and that Land Lease and Recreation Fees only be used for these impacts. There is a nexus to these specific impacts. If the city were to allow discretion for Recreation Fees to be used for sand then the converse should also be true. Sand Fees could be used for access. In fact, the funding for the stairs project at Del Mar Shores (Rockpiles) is a near term project that might benefit from the sand fees if they were made available. Therefore, we agree that the new language clarifies this point.

3. Policy 4.51 must be clear that mitigation fees apply to all types of coastal armoring including Coastal Structures, upper bluff retention, in addition to to the language already included for notch fills and seawalls. References specifying assessment of such fees must be included in the specific sections for approval all such structures.

4. Policy 4.54 – In a previous versions of the proposed language that ultimately became the LUP Amendment, City staff voiced concern that "Upon further review, there is a question as to why Policies 4.51 (coastal structures which would include seawalls) and 4.54 (upper bluff systems) do not include a section similar to 4.50(c), setting forth financial and mitigation requirements for the applicant." Any coastal structure should be subject to fees and encroachment permits.

7. Bluff Top Redevelopment definition – Omitting Interior Load Bearing Walls from the "Bluff Top Redevelopment" definition (Chapter 8) is problematic. We prefer that it is more inclusive, and this is consistent with what the Coastal Commissioners envisioned at last year's hearing. The language as drafted may allow a savvy owner to avert the intent by using footings tied to headers that provide significant redevelopment without altering the overall foundation or exterior framing significantly.

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In summary, we have cited specific policies for our position in protecting the public's interest in (among other things) public access, public recreation opportunities, visual impacts, natural coastal ecosystems, coastal water quality, and wave integrity. We ask that the council also make their decisions on the LUP based on the protection of the public interest in maintaining public ownership of public lands and providing for access and recreation in development.

Regards,

Jim Jaffee
Advisor, San Diego County Chapter of the Surfrider Foundation
Resident of Solana Beach

Kristin Brinner
Beach Preservation Committee Communications Chair, San Diego County Chapter of the Surfrider Foundation
Resident of Solana Beach

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Appendix - Relevant Coastal Act and other Law

Section 4 of Article X of the California Constitution

No individual, partnership, or corporation, claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this State, shall be permitted to exclude the right of way to such water whenever it is required for any public purpose, nor to destroy or obstruct the free navigation of such water; and the Legislature shall enact such laws as will give the most liberal construction to this provision, so that access to the navigable waters of this State shall be always attainable for the people thereof.

30007.5 The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.

30604 (c) Every coastal development permit issued for any development between the nearest public road and the sea or the shoreline of any body of water located within the coastal zone shall include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3 (commencing with Section 30200).

30200. (a) Consistent with the coastal zone values cited in Section 30001 and the basic goals set forth in Section 30001.5, and except as may be otherwise specifically provided in this division, the policies of this chapter shall constitute the standards by which the adequacy of local coastal programs, as provided in Chapter 6 (commencing with Section 30500), and the permissibility of proposed developments subject to the provisions of this division are determined. All public agencies carrying out or supporting activities outside the coastal zone that could have a direct impact on resources within the coastal zone shall consider the effect of such actions on coastal zone resources in order to assure that these policies are achieved.

(b) Where the commission or any local government in implementing the provisions of this division identifies a conflict between the policies of this chapter, Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts.

Section **30210** Access; recreational opportunities; posting:

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

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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. (Amended by Ch. 1075, Stats. 1978.)

Section **30211** Development not to interfere with access:

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.

30212. (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 (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

(b) For purposes of this section, "new development" does not include:

(1) Replacement of any structure pursuant to the provisions of subdivision (g) of Section 30610.

(2) The demolition and reconstruction of a single-family residence; provided, that the reconstructed residence shall not exceed either the floor area, height or bulk of the former structure by more than 10 percent, and that the reconstructed residence shall be sited in the same location on the affected property as the former structure.

(3) Improvements to any structure which do not change the intensity of its use, which do not increase either the floor area, height, or bulk of the structure by more than 10 percent, which do not block or impede public access, and which do not result in a seaward encroachment by the structure.

(4) The reconstruction or repair of any seawall; provided, however, that the reconstructed or repaired seawall is not seaward of the location of the former structure.

(5) Any repair or maintenance activity for which the commission has determined, pursuant to Section 30610, that a coastal development permit will be required unless the commission determines that the activity will have an adverse impact on lateral public access along the beach.

As used in this subdivision, "bulk" means total interior cubic volume as measured from the exterior surface of the structure.

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(c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution.

Section **30220** Protection of certain water-oriented activities: Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Coastal Act Section **30221**: Oceanfront land suitable for recreational use shall be protected for recreational use and development, unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

30235 Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.

30251 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 subordinate to the character of its setting.

30253. New development shall do all of the following:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(b) 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.

(c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.

(d) Minimize energy consumption and vehicle miles traveled.

(e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.