

3.3 Regulations (page 34)

3.3.9 Coastal Hazards Analysis (page 60)

Add new Section 3.3.9 below after Flood Plain District Section 3.3.8 (page 60). (Entire section below is a sug mod but not in bold underline to make reading easier):

3.3.9 Coastal Hazards Analysis

All new development including major remodels proposed within the Sunset Beach Specific Plan Boundaries (as shown on Exhibits 1.1 Vicinity Map, 1.2 Aerial Photograph, 1.3 Zoning Map, 21. Land Use Plan, 3.1 Specific Plan Districts, and in Appendix A Legal Description) shall provide the information and comply with the requirements identified below. All new development proposals shall be designed in conjunction with sea level rise scenarios described in (b) and (c) below.

1. Coastal Hazards Analysis Report

All coastal development permit applications for new development including major remodel in the Sunset Beach area (described above) shall submit a Coastal Hazards Analysis Report with the information identified below, prepared by an appropriately licensed professional(s) with expertise in coastal processes. The Coastal Hazards Analysis Report shall include:

- a) Analysis of potential coastal hazards from erosion, flooding, wave attack, wave run-up, scour, storm surge, seiches, tsunamis and other hazards/conditions. These shall be evaluated in conjunction with sea level rise scenarios indicated below and shall also consider localized uplift or subsidence, tide range, wave climate, local topography, bathymetry, geologic conditions, water table elevation, and potential tsunami inundation areas. The status of the U.S. Army Corps of Engineers led periodic sand replenishment program and the width of the ocean fronting beach at the time of the report and over the economic life of the development shall also be considered.
- b) Conditions that shall be considered must include: a seasonally eroded beach combined with long-term projections for beach erosion over the economic life of the development (minimum 75 years), high tide conditions combined with long-term (minimum 75 year) projections for sea level rise, storm waves from a 100-year event or a storm that compares to the 1982/83 El Nino event, and at least one scenario shall consider long-term erosion that assumes that one or more replenishment cycles are missed, such that there is a 15 year period between nourishment projects.
- c) The hazard analysis shall be used to identify current and future site hazards, to help guide site and development design and hazard mitigation and to identify sea level rise thresholds above which limitations in the development's design and siting would cause the improvements to become significantly less stable.
- d) A statement of the preparer's qualifications.
- e) Identification of coastal hazards affecting the site.

- f) Identification of all legally existing principle structures.
- g) All input parameters for hazard analysis shall be clearly described in the analysis and, if a range of values is considered, the basis for the selection shall be described.
- h) Any additional sea level rise related impacts that could be expected to occur over the life of the project, such as saltwater intrusion or elevated water table must also be evaluated. This may be especially significant for areas with a high groundwater table, wetlands, or coastal resources that might rely upon groundwater.
- i) On harbor front sites, the Coastal Hazards Analysis Report shall include an assessment of the effectiveness of existing bulkheads or the need for a new bulkhead on unbulkheaded sites for the life of the structure (75 years).
- j) The best available scientific information with respect to the level of future sea level rise and effects of long-range sea level rise shall be considered in the preparation of findings and recommendations for all requisite geologic, geo-technical, hydrologic, engineering investigations, and wave uprush studies used to prepare the Coastal Hazards Analysis Report.
- k) Accepted sea level rise scenarios shall be based on best available science. As a starting reference point, the current best available science is the National Research Council's 2012 report, *Sea-Level Rise for the Coasts of California, Oregon and Washington: Past, Present and Future* (NRC 2012). This report provides sea level rise projections of 2-12 inches by 2030, 5-24 inches by 2050, and 17-66 inches by 2100 for Southern California. Within these ranges, the high scenarios should be selected, at minimum. Sea level rise amounts expected by years other than 2030, 2050, and 2100 should be calculated by interpolating or extrapolating data points using best fit equations. Sea level rise projections that match the anticipated project life of the development under consideration should be used. Significant community support functions (such as waste water treatment, provision of potable or firefighting water, or fire and life safety command and equipment centers), energy production and distribution infrastructure, critical community shelter facilities used in an emergency, or structures that house vulnerable populations that cannot readily be evacuated, including hospitals, schools, and care facilities for the elderly and/or disabled, shall be subject to a higher level of design scrutiny with analysis based on a minimum of either 55 inches (4.6 feet) of sea level rise or an extrapolation of projected sea level rise rates for the expected economic life of the structure (assumed to be no less than 75 years) whichever is greater.
- l) Identification of necessary mitigation measures to address the current and reasonably expected future hazardous conditions identified in the Coastal Hazard Analysis Report. Mitigation measures to address current hazards include siting development away from hazardous areas and/or elevating the finished floor of structures to be at or above the base flood elevation (as calculated pursuant to this Section 3.3.9 and to Sea Level Rise Policies 2.4.3 through 2.4.5 of this Specific Plan. Mitigation measures to address reasonably expected future hazards include waterproofing, flood shields, watertight doors, moveable floodwalls, partitions, water-resistive sealant devices, sandbagging and other similar flood-proofing techniques. The basis for the expected

effectiveness of all mitigation measures proposed shall be described in the Coastal Hazard Analysis Report.

- j) Assessment of the availability of and potential risks to services to the site, including risks to public or private roads, stormwater management, water, sewer, electricity, etc. facilities over the life of the development (minimum 75 years), when taking sea level rise into account, as described above.

2. Siting of Development

Based upon the information and analysis provided by the Coastal Hazards Analysis Report, as required in Subsection 1 above, new development shall be sited outside areas subject to hazards (including, but not limited to, beach erosion, inundation, wave run-up, or flooding as modified by projected sea level rise) at all times during the full projected economic life of the development (assumed to be no less than 75 years). If complete avoidance of hazard areas is not feasible, all new development shall be designed to avoid areas subject to hazards to the maximum extent practicable and to withstand anticipated hazard impacts (including, but not limited to, beach erosion, inundation, wave run-up, or flooding). Such design considerations shall include, but are not limited to, elevating development above the Base Flood Elevation¹ as modified to reflect sea level rise scenarios, to the maximum extent practicable. Development plans shall consider hazards currently affecting the property as well as hazards that can be reasonably anticipated over the economic life of the structure.

All new development shall be designed to assure stability, assure that it will not be endangered by erosion, and to avoid the need for protective devices (other than necessary bulkheads on harbor-fronting sites consistent with Section 5 below)) during the economic life of the structure (a minimum of 75 years). If there is an existing protective device on the property (other than necessary bulkheads on harbor-fronting sites consistent with Section 5 below), any proposed new development (including major remodels) shall not rely on the protective device to meet the minimum factor of safety for the development or to assure that the development will be geologically stable for life of the project (a minimum of 75 years).

Except as expressly described Subsection 3.3.11 *Encroachments*, no private development shall be allowed seaward of an oceanfront site property line.

3. Shoreline Protection Device on Oceanfront Sites

Development on oceanfront sites shall be sited and designed to minimize risk from wave run-up, flooding and beach erosion hazards without requiring a shoreline protection device at any time during the economic life of the development. Development on oceanfront sites shall be required to utilize a foundation system adequate to protect the structure from wave and erosion hazard without requiring the construction of protective devices that would substantially alter natural landforms along the coast.

¹ Base flood elevation” (BFE) means the elevation shown on the Flood Insurance Rate Map for zones AE, AH, A1-30, VE and V1-V30 that indicates the water surface elevation resulting from a flood that has a one percent or greater chance of being equaled or exceeded in any given year.

4. Existing Structure

“Existing structure” for purposes of this section shall consist only of a legally existing principal structure(s), e.g. residential dwelling, and required garage existing as of the effective date of certification of this Sunset Beach Specific Plan by the Coastal Commission, and shall not include accessory or ancillary structures such as decks, patios, pools, tennis courts, cabanas, stairs, landscaping etc. No shoreline protective device shall be allowed for the sole purpose of protecting an accessory structure.

5. Harbor Bulkheads

Development on harbor-front sites shall be sited and designed to minimize risk from coastal hazards (including erosion, flooding, wave attack, wave run-up scour, storm surge, seiches) over the economic life of the development (a minimum of 75 years).

a) Harbor Front Sites with Existing Bulkheads

For properties with legally constructed bulkheads as of the effective date of certification of this Sunset Beach Specific Plan, evaluation of the need for and effectiveness of the bulkhead to protect existing principal structures shall be included as part of the Coastal Hazards Analysis required in Subsection A.1 above.

New development on harbor front sites shall be permitted only when the bulkhead at the site is necessary to protect existing principal structures and is deemed adequate, based upon the information required by this Coastal Hazards Analysis section, to support the proposed and existing development. Modifications to an existing bulkhead shall be required as a condition of approval to meet this requirement; however, fill of coastal waters shall be avoided to the extent feasible. Revisions to an existing bulkhead shall be accommodated no further channelward than the footprint of the existing bulkhead to the extent feasible. New fill of coastal waters shall be avoided, and, if unavoidable, shall be minimized and mitigated.

b) Harbor Front Sites with No Bulkheads

For properties where no legally constructed bulkhead exists as of the effective date of certification of this Sunset Beach Specific Plan, a new bulkhead shall only be allowed when it is demonstrated, based upon the information contained in the required Coastal Hazards Analysis Report, that it is required to serve coastal-dependent uses or to protect legally existing principal structures (as of the effective date of this Sunset Beach Specific Plan) or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Fill of coastal waters shall be avoided to the extent feasible, and any fill shall be minimized and mitigated.

c) Bulkhead Condition Report. Where a coastal hazards analysis report shows that an existing bulkhead on the site cannot be removed and/or an existing or replacement bulkhead is required to protect existing principal structures, public facilities or beaches in danger from erosion, the applicant shall submit a bulkhead condition report that includes the following:

1. A statement of the preparer's qualifications;
2. An analysis of the condition of any existing bulkhead including whether the top elevation meets current City standards, the condition of the sheetpiles or panels, the condition of existing tiebacks and/or deadmen or similar, and any other relevant conditions;
3. Recommendations regarding the need for repair, augmentation or replacement of the bulkhead or any parts thereof;
4. If augmentation or replacement in the existing alignment is necessary, recommendations that will avoid channelward encroachment of the bulkhead;
5. If replacement is necessary and the existing bulkhead is channelward of adjacent bulkheads, recommended alternatives that will relocate the bulkhead in as much alignment with adjacent bulkheads, and as far landward, as necessary to minimize fill of coastal waters.

6. Required Findings and Analysis

In addition to any other required findings, written findings of fact, analysis and legal conclusions addressing coastal hazards must be included in support of all coastal development permit approvals, conditional approvals, or denials. These findings shall support a determination of whether or not the proposed development conforms to the requirements of this section. Such findings shall address the specific project impacts identified by the Coastal Hazards Analysis as required by Section 1 above or shall substantiate why such impacts are not anticipated. The findings shall explain the basis for the conclusions and decisions on the coastal development permit and shall be supported by substantial evidence in the record. Findings for approval or conditional approval shall conclude that the project as proposed, or as conditioned, conforms to the certified Local Coastal Program. A coastal development permit shall be granted only if the decision making body finds:

- i. The project, as proposed or as conditioned, assures stability and structural integrity, and neither creates nor contributes significantly to erosion, geologic instability, or destruction of the site or surrounding area; and,
- ii. If the project involves new development, and/or an addition to an existing structure on an oceanfront site, that the development does not rely on existing or future shoreline protection devices to establish geologic stability or protection of the development from coastal hazards; or,
- iii. If the development includes a shoreline protective device, that it is necessary to protect an existing principal structure, public facility or beach in danger from erosion, and that it is designed or conditioned: 1) to be sited as far landward as feasible, 2) to eliminate or mitigate to the maximum feasible extent adverse impacts on local shoreline sand supply and public access, 3) to assure that there are no alternatives that would avoid or lessen impacts on shoreline sand supply, public access or coastal resources, and 4) to assure that it is the least environmentally damaging alternative.

- iv. No shoreline protective device shall be allowed for the sole purpose of protecting an accessory structure.

7. Conditions

- a) If found necessary to conform to the development standards contained in this specific plan or any other applicable policy or standard of the certified LCP, the proposed new development shall be modified, by special condition, relative to height, setback, size, design, or location on the site and may be required to incorporate other project design approaches or otherwise make the project conform to the requirements of the LCP to avoid or minimize the adverse impacts that the proposed development may have on coastal resources. If special conditions of approval are required in order to bring the project into conformance with the certified Local Coastal Program, the findings shall explain how the special condition(s) alleviate or mitigate the adverse effects which have been identified. Mitigation shall not be permitted to substitute for implementation of a feasible project alternative that would lessen or avoid impacts to shoreline sand supply, public access or other coastal resources.
- b) Except as provided in Section 6iii above, a condition of any permit for new development (which includes an addition to an existing structure) on oceanfront sites, shall expressly require the applicant to waive on behalf of itself (or himself or herself, as applicable) and all successors and assigns, any rights to construct a new shoreline protection device in the future to protect the development approved pursuant to the permit, and record this waiver of future shoreline protection device on the title of the property as a deed restriction.
- c) Assumption of Risk. As a condition of approval of all new development where coastal hazards have been identified pursuant to the Coastal Hazards Analysis as required pursuant to this section (3.3.10), the applicant and property owner shall acknowledge any hazards present at the site, or that could affect services to the site (e.g. stormwater management, roads, water, sewer, electricity, etc.), assume the risk of injury and damage from such hazards, unconditionally waive any claim of damage or liability against the decision making authority from such hazards, including damage or liability caused by the abandonment or other loss of services to the site, and to indemnify and hold harmless the decision making authority against any and all liability, claims, demands, damages, costs, expenses, and amounts paid in settlement arising from any injury or damage due to such hazards. The applicant shall record this assumption of risk on the title of the property as a deed restriction.
- d) Development Duration. Development shall be removed and the affected area restored to a natural condition if: (a) any government agency has ordered that the structures are not to be occupied due to coastal hazards, or if any public agency requires the structures to be removed; (b) services to the site can no longer be maintained (e.g., utilities, roads); (c) the development is no longer located on private property due to the migration of the public trust lands; (d) removal is required pursuant to LCP policies for sea level rise adaptation planning, including through the Community Resilience Program and/or a Shoreline Management Plan; or (e) the development requires new and/or augmented shoreline protective devices. The applicant shall record this development duration requirement on the title of the property as a deed restriction.