### CALIFORNIA COASTAL COMMISSION

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### STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 5-11-168 **APPLICANT: Desmond Fischer** AGENT: John McInnes & Associates, Inc., ATTN: John McInnes **PROJECT LOCATION:** 3725 Ocean Boulevard, Newport Beach (Corona Del Mar) (Orange County) **PROJECT DESCRIPTION:** Demolition of an existing 833 square foot, two-story single-family residence with a 456 square foot, two (2)-car garage and construction of a new 6,814 square foot, four-story single-family residence with a 390 square foot two-car garage on a bluff face. The rooftop of the proposed residence would be above the curb height on Ocean Boulevard. A caisson foundation system would support the proposed residence. The project also includes paving, retaining walls, landscaping and irrigation. Grading would consist of 2,750 cubic yards of cut and export to an area outside of the Coastal Zone.

#### SUMMARY OF STAFF RECOMMENDATION:

The proposed project is located on a rectangular shaped bluff face property seaward of Ocean Boulevard. There is a narrow rocky shoreline at the toe of the bluff, and the toe of the bluff is subject to direct wave attack. The proposed project would consist of demolition of the existing two-story single-family residence, further excavation of the bluff face, and construction of a new 6,814 square foot, four-story single-family residence with a 390 square foot two-car garage on the bluff face.

The proposed residence would result in significant development that extends 28-feet below the finished floor of the existing residence on the bluff face. Additionally, 2,750 cubic yards of grading is proposed to accommodate construction of the residence into and on the bluff face. The proposed residence would result in significant landform alteration by encroaching upon the bluff face well below the existing residence, as well as below the level of the two adjacent residences (i.e. below the predominant line of existing development (PLOED). The bottom floor of the adjacent residence to the north and would daylight 11-feet more down the bluff face than the finished floor of the adjacent residence to the adjacent residence to the south. The City's certified Land Use Plan contains policies prohibiting structures from going below the PLOED. Also, the proposed residence would extend above the top of the curb at Ocean Boulevard, which is contrary to specific prohibitions against such extensions in the City's certified Land Use Plan. This

significant landform alteration and view obstruction would impact public views to and along the shoreline, contrary to Section 30251 of the Coastal Act and the City's certified Land Use Plan.

Furthermore, the subject site is not stable. The applicant's geological analysis shows that the existing factor of safety is below the typically accepted 1.5 factor of safety. The applicant's geologist recommended at least a 17-foot setback from the existing edge of the graded pad on the bluff face. As submitted, the proposed project does not adhere to that recommended setback. While the proposed residence does have a maximum 32-foot setback from the edge of the graded pad (rear north of the site), it also has a minimum 13-foot setback from the edge of the graded pad (located rear south of the site). The Commission's geologist recommended an additional 10-feet be added to the 17-foot setback (total of 27 feet) in order to accommodate anticipated erosion over the life of the proposed development. Thus, the proposed home is clearly not sited to minimize risk to life and property in an area of high geologic hazard.

As proposed, the project would result in adverse visual impacts, be inconsistent with the character of the surrounding area and would have cumulative adverse impacts because of the proposed significant landform alteration and inconsistency with the Predominant Line of Existing Development (PLOED). Additionally, the proposed project raises concerns with geologic stability as the proposed project does not minimize risks to life and property in areas of high geologic hazard, does not assure stability and structural integrity and creates or contribute significantly to erosion and geologic instability. Therefore, Commission staff recommends that the Commission **DENY** the proposed project.

Alternatives to the proposed project exist. For example, the existing residence could be remodeled or reconstructed so that it is consistent with the character of the surrounding area and designed to ensure geologic stability. Therefore, staff recommends that the proposed project be **DENIED**, as it would be inconsistent with the character of the surrounding area and Predominant Line of Existing Development (PLOED) in the area and have adverse impacts on the naturally appearing landform, have a cumulative adverse impact on visual resources and would result in geotechnical stability concerns. Achieving the necessary redesign would not be possible through conditions of approval.

**LOCAL APPROVALS RECEIVED:** Approval in Concept (#2011-034) from the City of Newport Beach Planning Department dated June 9, 2011; Variance (VA2010-001) and Modification Permit (MD2010-006); and Planning Commission Resolution (PA2010-034).

**SUBSTANTIVE FILE DOCUMENTS:** City of Newport Beach Certified Land Use Plan; *Report of Geotechnical Investigation for Proposed Residence at 3725 Ocean Boulevard, Corona Del Mar Area, City of Newport Beach, California (Project No. 11-5195-1)* prepared by Associated Soils Engineering, Inc. dated June 30, 2011; Letter to John McInnes from Commission staff dated August 5, 2011; Letter to Commission staff from John McInnes dated September 1, 2011; Letter to Commission staff from David Miertschin, Landscape Architect dated August 29, 2011; *Report* prepared by Associated Soils Engineering, Inc. dated August 31, 2011; and Plans received on December 7, 2012 from John McInnes.

#### EXHIBITS

- 1. Vicinity Map
- 2. Site Plan
- 3. Floor Plans
- 4. Elevation Plans
- 5. Elevation Plan Showing the Existing SFD Overlayed on the Proposed SFD in Relation to the Adjacent Neighbors
- 6. Elevation Plan Showing Proposed SFD in Relation to the Adjacent Neighbors
- 7. Section Plan from Geotechnical Investigation

### STAFF RECOMMENDATION:

### I. STAFF RECOMMENDATION OF DENIAL

Staff recommends that the Commission <u>**DENY</u>** the coastal development permit application by voting <u>**NO**</u> on the following motion and adopting the following resolution.</u>

#### A. MOTION

I move that the Commission approve Coastal Development Permit No. 5-11-168 for the development proposed by the applicant.

#### B. STAFF RECOMMENDATION OF DENIAL

Staff recommends a <u>NO</u> vote. Failure of this motion will result in denial of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

#### C. RESOLUTION TO DENY THE PERMIT

The Commission hereby **DENIES** a coastal development permit for the proposed development on the ground that the development will not conform with the policies of Chapter 3 of the Coastal Act and will prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit would not comply with the California Environmental Quality Act because there are feasible mitigation measures or alternatives that would substantially lessen the significant adverse impacts of the development on the environment.

### **II. FINDINGS AND DECLARATIONS:**

The Commission hereby finds and declares as follows:

## A. PROJECT LOCATION, DESCRIPTION AND PRIOR COMMISSION ACTION IN SUBJECT AREA

#### 1. PROJECT LOCATION AND DESCRIPTION

The proposed project is located on a rectangular shaped coastal bluff face property at 3725 Ocean Boulevard in the community of Corona Del Mar that is part of the City of Newport Beach, County of Orange (Exhibits #1 and #2, page 1). There is a narrow rocky shoreline at the toe of the bluff, and the toe of the bluff is subject to direct wave attack. The project site is near the easterly end of Ocean Boulevard, a scenic overlook and a pedestrian walkway to Little Corona Beach.

The area located at the front property line along Ocean Boulevard (bluff top) of each of the lots in this area generally slope slightly downward from the easterly side toward the westerly side of the lot (bluff face). The northerly area of this specific lot is steeply sloped at the front area along Ocean Boulevard and then steps down the slope on the northerly side to its lowest elevation in the northwesterly corner near the existing coastal seaward edge of graded pad. The southerly side of the lot slopes more evenly and is higher than the northerly side of the lot.

East (landward) of the project site is an approximate 43-foot wide public right-of-way and then Ocean Boulevard. West (seaward) of the project site is a bluff face with a 50-foot drop to a rocky shoreline below and then the Pacific Ocean. Surface elevations range from approximately 90-feet above sea level at Ocean Boulevard to approximately 50-feet above sea level at the lowest terrace along the edge of the graded pad (Exhibit #7). North and south of the project site are residential developments comprising of multi-level, single-unit dwellings constructed on the upper elevation of the bluff face.

The subject lot size is 6,986 square feet, and the City of Newport Beach Land Use Plan (LUP) designates the site as Single-Unit Residential Detached (RSD-A) and the proposed project adheres to this designation.

Vehicular access to the project site is available from Ocean Boulevard.

The site is currently developed with an existing pre-coastal (built in the 1950's) 2-story, flat roof, 833 square foot, single-unit dwelling with a 456 square foot, two (2)-car garage on the bluff face. When viewing the site from the seaward side, there is an existing area below the existing home that appears to be a third lower level (without windows), but that area is all soil retained by a wall, and not living space. An exterior staircase leads from the garage at the street level to the residence level located below. The northerly corner of the roof of the existing garage is 4'-6" high above the top of curb at Ocean Boulevard. An existing wall attached to the garage that extends from the front corners of the garage to each side property line extends 7'-8-3/4" high above the top of curb at Ocean Boulevard at the southerly property line. These existing projections above the top of curb are non-

conformities to current standards. Within the public right-of-way separating the subject property and the street are overgrown hedges and landscape plantings.

The rear area (bluff face) of the lot between the existing residence and the seaward edge of the existing graded pad that was notched into the bluff face to accommodate the existing residence has been altered and is developed with terraced retaining walls to provide a usable rear yard space. A chain link fence currently sits atop a retaining wall along the western property line that extends to the seaward edge of the graded pad. This retaining wall is at the furthest point landward on the bluff face.

The proposed project would consist of: demolition of the existing two-story single-family residence, excavation of 2,750 cubic yards of soil to notch out additional soil below the existing finished floor of the home and to notch out bluff face below the level of the existing graded pad, and construction of a new 6,814 square foot, four-story single-family residence with a 390 square foot two-car garage. The rooftop of the proposed residence would be above the curb height on Ocean Boulevard (Exhibits #2-4). A caisson foundation system would support the proposed residence. The project also includes paving, retaining walls, landscaping and irrigation. Grading soils would be exported to an area outside of the Coastal Zone.

Portions of the upper level consisting of the garage, entry level, and a mechanical equipment area located at the rear of the garage, exceed the top of curb height at Ocean Boulevard by 2-to 4-feet (Exhibits #4, page 1 and #5, page 2). The roof areas of all levels of the proposed residence are flat and portions of the upper level exceed the 24-foot height limit in the City's code for flat roofs in the R-1 Zoning District. Additionally, all four (4) levels encroach into the 10-foot front yard (street front) setback. Also, the proposed caissons and retaining walls would encroach into both 4-foot side yard setbacks.

The existing driveway would be relocated to the southerly side of the property and graded to provide a maximum slope of 19% from the street to the garage face. The remainder of the public right-of-way would be terraced and landscaped as proposed by the applicant and shown on the submitted project plans. However, work in this area requires a separate encroachment permit from the City and no such approval from the City for work in this area has been submitted.

The existing retaining wall located at the rear yard property line along the coastal seaward edge of the graded pad on the bluff face would be demolished and reconstructed and reinforced with new caissons. New site retaining walls and related safety railings would be constructed adjacent to the side yard property lines beginning at the front (east) of the lot and ending at the face (rear) of the reconstructed retaining wall to the west. The landward side (bluff face) of the existing retaining wall would be lowered by grading to allow construction of the residence and a basement level patio area.

The proposed residence would result in development that extends 28-feet below the finished floor of the existing residence and require 2,750 cubic yards of grading to excavate soils underneath the existing finished floor of the home and to excavate the bluff face below the existing graded pad (i.e. additional notching below the existing notch) to accommodate three (3) of the proposed residential floors of the new residence. Additionally, the proposed residence would be 478% larger than the existing residence. The existing residence consists of a total of 1,289 square feet and the proposed residence

consists of 7,454 square feet. Furthermore, the proposed residence would result in significant landform alteration by excavating more of the bluff face than already exists on the subject site, as well as below the level of the two adjacent residences. The proposed residence would go down the bluff face 24-feet below the finished floor level of the adjacent residence to the north and would go down 11-feet more into the bluff face than the finished floor level of the adjacent residence would extend above the top of curb at Ocean Boulevard, which is contrary to specific prohibitions against such extensions in the City's certified Land Use Plan (and City code).

#### 2. LOCAL APPORVAL: VARIANCE AND MODIFICATION PERMIT

The applicant obtained approval of a Variance (VA2010-001) to allow the proposed residence to exceed the 24-foot height limit for flat roofs within the R-1 (Single-Use Residential) Zoning District. Additionally, the proposed residence was allowed to exceed the "top of curb" height limit for properties on the bluff side of Ocean Boulevard. The applicant also obtained a Modification Permit (MD2010-006) to allow the proposed residence to encroach into the required 10-foot front-yard and 4-foot side yard setbacks due to caissons; and site-retaining walls and caissons with related railings adjacent to the side-yard property lines which exceed the 6-foot height limit allowed within side-yard setbacks.

#### 3. PRIOR COMMISSION ACTIONS ON ADJACENT SITES

#### a. <u>3729 Ocean Boulevard</u>

On July 7, 1998, the Commission approved Coastal Development Permit No. 5-98-135 for: the demolition of an existing single-family residence and garage and construction of a three (3)-story, 7,501 square foot single-family residence with a 590 square foot two (2) car garage on a coastal bluff face lot (17,787 square foot lot). Grading consisted of 736 cubic yards of cut and 34 cubic yards of fill. Staff recommended approval of the project subject to three (3) Special Conditions: **SPECIAL CONDITION NO. 1** required an assumption of risk. **SPECIAL CONDITION NO. 2** required a future development deed restriction. **SPECIAL CONDITION NO. 3** required conformance with geotechnical recommendations. **SPECIAL CONDITION NO. 4** required submittal of a landscape plan.

This residence is roughly in alignment with the residences adjacent to it (i.e. it doesn't extend further down the bluff face than its neighbor). This lot is almost double the size of the lot of the proposed project.

#### b. <u>3719 Ocean Boulevard</u>

On July 13, 1989, the Commission approved Administrative Permit No. 5-89-346 for: the addition of 518 square feet to the master bedroom and living room of a 29-foot high, 3,396 square foot single-family residence on a coastal bluff face lot. (6,150 square foot lot). The addition added 192 square feet to the building footprint and a loss of 23 square feet of landscaping and 170 square feet of paved area. Staff recommended approval of the project subject to one (1) Special Condition: **SPECIAL CONDITION NO. 1** required conformance with geotechnical recommendations.

On February 22, 1990, the Commission approved an Immaterial Amendment to Administrative Permit No. 5-89-346 for: the extension of the upper floor 3-1/2-feet seaward to make flush with lower floor and widen existing deck 11-feet to the south wall of the master bedroom. No new Special Conditions were imposed. The original Special Conditions remained in effect.

Like 3729 Ocean Boulevard., this residence is roughly in alignment with the residences nearby (i.e. it doesn't extend further down the bluff face than its neighbor).

#### 4. <u>STANDARD OF REVIEW</u>

The City of Newport Beach has a certified LUP but the Commission has not certified an LCP for the City. As such, the Coastal Act polices are the standard of review with the certified LUP providing guidance.

#### **B. SCENIC RESOURCES**

Section 30251 of the Coastal Act states, in relevant part:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas...

The proposed project is located on a bluff face. West (seaward) of the existing residence is the edge of the pad that was graded to accommodate it, then a 50-foot drop to a rocky shoreline below and then the Pacific Ocean. The project site is visible from a public viewpoint (Inspiration Point) upcoast of the site, and more distant views from Big Corona beach. The site is also visible from Ocean Boulevard and the public sidewalks along the street. Existing views across the site toward the ocean are partly obstructed by the existing residence. The pattern of development along this segment of Ocean Boulevard is such that development is concentrated on the upper bluff face while the remaining portion of the bluff face is kept intact (i.e., the middle and lower parts of the bluff face) are largely undisturbed and vegetated. That linear alignment forms the predominant line of existing development (PLOED) (Exhibit #5). Development at this site, if approved, must be sited and designed to be visually compatible with the character of the surrounding area and the PLOED. It is also necessary to ensure that new development be sited and designed to protect views to and along the ocean and minimize the alteration of existing landforms consistent with Section 30251 of the Coastal Act and the following policies of the certified City of Newport Beach Land Use Plan:

Scenic and Visual Resources, Policy 4.4.1-1 states,

Protect and, where feasible, enhance the scenic and visual qualities of the coastal zone, including public views to and along the ocean, bay, and harbor and to coastal bluffs and other scenic coastal areas.

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Scenic and Visual Resources, Policy 4.4.1-3 states,

Design and site new development to minimize alterations to significant natural landforms, including bluffs, cliffs and canyons.

Scenic and Visual Resources, Policy 4.4.2-4 states,

Prohibit projections associated with new development to exceed the top of curb on the bluff side of Ocean Boulevard. Exceptions for minor projections may be granted for chimneys and vents provided the height of such projections is limited to the minimum height necessary to comply with the Uniform Building Code

This proposed bluff face development also raises the concern over the cumulative impacts that would occur if others propose to develop the bluff face.

The following LUP policies are also applicable to the proposed project and state:

Natural Landform Protection, Policy 4.4.3-8 states,

Prohibit development on bluff faces, except private development on coastal bluff faces along Ocean Boulevard, Carnation Avenue and Pacific Drive in Corona del Mar determined to be consistent with the predominant line of existing development or public improvements providing public access, protecting coastal resources, or providing for public safety. Permit such improvements only when no feasible alternative exists and when designed and constructed to minimize alteration of the bluff face, to not contribute to further erosion of the bluff face, and to be visually compatible with the surrounding area to the maximum extent feasible.

Natural Landform Protection, Policy 4.4.3-9 states,

Where principal structures exist on coastal bluff faces along Ocean Boulevard, Carnation Avenue and Pacific Coast Drive in Corona Del Mar, require all new development to be sited in accordance with the predominant line of existing development in order to protect public coastal views. Establish a predominant line of development for both principal structures and accessory improvements. The setback shall be increased where necessary to ensure safety and stability of the development.

Natural Landform Protection, Policy 4.4.3-15 states,

Design and site new development to minimize the removal of native vegetation, preserve rock outcroppings, and protect coastal resources.

#### 1. <u>PREDOMINANT LINE OF EXISTING DEVELOPEMNT (PLOED), LANDFORM</u> <u>ALTERATION, AND STRINGLINE</u>

In the City of Newport Beach, the Commission typically imposes a minimum bluff edge setback of 25-feet from the edge of the bluff for primary structures on bluff top lots subject to marine erosion (e.g. the enclosed living area of residential structures). However, the Commission has used a different approach in areas like Corona del Mar where there is already development on the bluff face. Specifically, the Commission has used the City's bluff setback LUP provision to maintain an equitable approach to setback conditions that

are consistent with the prevailing patterns of development in Corona del Mar. In the Corona del Mar community, the City's LUP has specific policies permitting new bluff face development on lots with pre-existing bluff face development if determined to be consistent with the Predominant Line of Existing Development (PLOED), but only when no feasible alternative exists and when designed and constructed to minimize alteration of the bluff face, to not contribute to erosion of the bluff face and to be visually compatible with the surrounding area. The intent of the setback is to substantially reduce the likelihood of new development from grading down further and altering the remaining bluff face (as substantial pre-Coastal Act development on the bluff face exists in this area of Corona del Mar).

The City did prepare an analysis identifying a PLOED. The PLOED on the subject site was drawn by extending a horizontal line between the bottom of a retaining wall located on the site to the north (located at about elevation 57.0-feet) to approximately the finished floor elevation of the home to the south (located at about 56.7-feet) (Exhibit #5). So, the PLOED is at about elevation 56.9-feet. The proposed development drops about 11-feet below this elevation (Exhibit #5).

Development that encroaches seaward of the existing line of development and encroaches lower onto the bluff face than adjacent development which would be inconsistent with the Predominant Line of Existing Development (PLOED) results in development that is inconsistent with the character of surrounding areas and has adverse impacts on a variety of coastal resources. For example, this can have adverse visual impacts because the development extends further below existing adjacent development which visually alters the undeveloped natural landform aesthetic of the bluff face. In addition, the seaward encroachment and the inconsistency of structures with the PLOED can increase the hazards to which the new development would be subjected. In order to prevent any adverse impacts associated with seaward encroachment of development, development should be consistent with the stringline and Predominant Line of Existing Development (PLOED).

The Coastal Act requires new development to be sited to "minimize the alteration of natural land forms." Similar policies are contained in the certified Land Use Plan. The existing bluff face is a natural landform visible from public vantage points. The proposed project includes significant notching and grading into the bluff face below the PLOED to accommodate the proposed project (Exhibit #5). Eliminating the additional notching and grading into the bluff face and the development below the PLOED would minimize landform alteration. The bottom floor of the proposed residence will daylight 24-feet more down the bluff face than the finished floor of the adjacent residence to the north and would daylight 11-feet more down the bluff face than the finished floor elevation of the adjacent residence to the south (Exhibit #5). The new development would also be about 11-feet lower than the PLOED identified by the City. As stated previously, the predominant pattern of development along this segment of Ocean Boulevard is such that development is concentrated on the upper bluff face while the remaining portion of the bluff face is kept intact (i.e., the middle and lower parts of the bluff face) are largely undisturbed and vegetated. That linear alignment forms the PLOED. The proposed project would result in significant disturbance to the bluff face and also go below the PLOED. This would result in a significant adverse visual impact.

#### 2. <u>DEVELOPMENT ABOVE TOP OF CURB HEIGHT AT OCEAN BOULEVARD</u>

Portions of the proposed upper level consisting of the garage, entry level, and a mechanical equipment area located at the rear of the garage, would exceed the top of curb height at Ocean Boulevard by 2-to 4-feet, which is contrary to specific prohibitions against such extensions in the City's certified Land Use Plan. Policy 4.4.2-4 of the LUP prohibits projections to exceed the top of curb on the bluff side of Ocean Boulevard. Exceptions are made for chimney's and vents as long as these projections are limited to the minimum height necessary to comply with the Uniform Building Code. The proposed projections do not fall under these projections. This policy was put in place to protect the public views available from Ocean Boulevard and the public sidewalks along the street; however, allowing the proposed projections would result in impacted public views, as well as, inconsistency with the certified LUP.

#### 3. <u>CUMULATIVE IMPACTS</u>

The proposed residence would be unlike any other development in the vicinity since it would significantly encroach upon the bluff face, where others do not. If allowed, such development would disrupt the existing development pattern, and begin to change the character of the community. Future proposals on surrounding lots may likely seek to expand their development footprint to cover more of the bluff face. Over time, these incremental impacts can have a significant cumulative adverse visual impact. If the proposed development were approved, and others like it were approved as well, the bluff along this area of Ocean Boulevard could eventually become a wall of buildings with little bluff face remaining visible, thus causing significant, cumulative adverse visual impacts since the site is visible from adjacent public vantages. Additionally, allowing development to exceed the top of curb at Ocean Boulevard could lead to incremental impacts and result in adverse visual impacts. If this project were approved and others similar like it, the public view from Ocean Boulevard and adjacent sidewalks would be reduced and limited.

#### **CONCLUSION**

The Commission finds that the proposed project is not sited and designed to protect scenic and visual qualities of coastal areas. Denial of the proposed project would : (1) protect existing scenic resources (2) preserve the existing Predominant Line of Existing Development (PLOED)/stringline where development is concentrated on the upper bluff face while the remaining portion of the bluff face is kept intact (i.e., the middle and lower parts of the bluff face) largely undisturbed and vegetated, thereby ensuring the project is visually compatible with the character of the surrounding area and (3) minimize the alteration of the natural landform, the bluff face, on the subject property. Additionally, approving the project would result in adverse cumulative impacts. Therefore, the Commission finds that the proposed project is inconsistent with Section 30251 of the Coastal Act.

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#### C. HAZARDS

Section 30253 of the Coastal Act states, in pertinent part:

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.

Development on a bluff is inherently risky due to among other things, the potential for bluff erosion and collapse. Bluff top development poses potential adverse impacts to the geologic stability of bluffs and the stability of structures. Bluff instability is caused by a variety of factors. Steep terrain is inherently unstable, but bluffs are especially unstable due to wave attack, which is exacerbated by accelerating sea level rise. Contributing factors include poor site conditions (adverse geologic structure, especially erodible bedrock or soils, high ground water, etc). Human activity can exacerbate bluff instability include building too close to the bluff edge, improper site drainage, over irrigation, use of impermeable surfaces that increase runoff, use of waterdependent vegetation, and breaks in water or sewage lines. Thus, it is necessary that new development minimize risks to life and property in areas of high geologic hazard and that stability and structural integrity are assured and neither create or contribute significantly to erosion and geologic instability to be consistent with Section 30253 of the Coastal Act and the following policy of the certified City of Newport Beach Land Use Plan:

Natural Landform Protection, Policy 4.4.3-7 states,

Require all new development located on a bluff top to be setback from the bluff edge a sufficient distance to ensure stability, ensure that it will not be endangered by erosion, and to avoid the need for protective devices during the economic life of the structure (75 years). Such setbacks must take into consideration expected long-term bluff retreat over the next 75 years, as well as slope stability. To assure stability, the development must maintain a minimum factor of safety of 1.5 against landsliding for the economic life of the structure.

#### 1. <u>SITE SPECIFIC BLUFF INFORMATION</u>

#### a. <u>Geotechnical Data</u>

To address site-specific issues, the applicants have submitted the following geotechnical investigations: *Report of Geotechnical Investigation for Proposed Residence at 3725 Ocean Boulevard, Corona Del Mar Area, City of Newport Beach, California (Project No. 11-5195-1)* prepared by Associated Soils Engineering, Inc. dated June 30, 2011; and *Report* prepared by Associated Soils Engineering, Inc. dated August 31, 2011. The geotechnical investigations state that the sea cliff portion of the bluff exposes Monterey Formation bedrock comprised of resistant sandstone and siltstone beds that dip into the bluff face. The toe of the bluff is protected by rocky debris that has accumulated at the

base of the cliff. These investigations analyzed the onsite bluff retreat/erosion and state that the primary mode of bluff retreat is from the occasional rockfall and isolated wedge failures from oversteepened sections of the bluff and concludes that the process is very slow. Additionally, these investigations determined that while the pseudo-static Factor of Safety of the bluff appears to be satisfactory (1.247), the static Factors of Safety (1.267) does not meet the minimally required value of 1.5. Thus, the geotechnical investigations at first recommend that a minimum setback of 15-feet from the coastal seaward edge of graded pad be applied in order to satisfy the minimum slope stability Factor of Safety. However, they revised that recommendation to be a 17-foot setback to be consistent with the 2010 UBC requirements for foundation setbacks, which is a minimum distance equal to one-third the height, or 17 feet for the subject site. These investigations go on to say that aerial photographs from 1952 to 1999 were analyzed and it did not appear that there had been any measurable bluff retreat and therefore, the applicant's geologist determined that the 17-foot structural setback from the seaward edge of graded pad is considered adequate to protect the proposed development from bluff retreat over the assumed 75 to 100-year life of the project. The applicant's geologist based this 17-foot setback on the Uniform Building Code requirements. The Commission's setback requirements have usually been more conservative as discussed below.

The Coastal Act, and the City's certified Land Use Plan require development to be stable for their economic life (in this area taken to be 75 years). The Commission's definition of stable is having a 1.5 factor of safety. On sites where the 1.5 factor of safety line is inside the lot, such as this site, the Commission has generally found that a geologic setback should be derived by adding the distance that is expected to erode over the life of the proposed development (determined using the bluff retreat rate) to the location of the 1.5 factor of safety line (see also CDP NO. 5-04-125-(Craft). This is necessary to accommodate erosion over the life of the development and maintain the 1.5 factor of safety without reliance on shoreline protective devices. A geologic setback/buffer is also usually needed to account for uncertainties like an increase in bluff retreat rate due to sea level rise or other factors; addition of a margin for safety; to provide an area for access to the building to address erosion; and to assure that at the end of 75 years (typical economic life of new development) there is adequate mass to maintain the 1.5 factor of safety.

The Commission staff geologist has reviewed the reports submitted by the applicant. The applicant's geologist has indicated an average bluff retreat rate of 0.1-feet per year, or 7.5-feet over 75 years. They go on to estimate that the sea cliff could retreat between 5 and 10 feet during the next 50 to 100 years. After review of these investigations, the Commission staff Geologist recommends that the geologic setback in this case include an additional 10-feet to the applicant's geologist's recommendation of 17-feet from the seaward edge of the existing graded pad. The additional 10-feet will provide the extra room necessary to account for the uncertainties identified above (i.e. increases in bluff retreat rate due to sea level rise or other factors). Thus, the setback from the edge would need to be 27-feet (17-feet + 10-feet = 27-feet).

Currently, the proposed residence has a minimum 13-foot setback from the edge of the graded pad (located rear south of the site) and a maximum 32-foot setback from the edge of the graded pad (rear north of the site) (Exhibit #2, page 1). Thus, the project as proposed fails to fully adhere to even the 17-foot setback established in the geotechnical investigations. Thus, clearly the project would also not fully adhere to the 27-foot setback

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recommended by the Commission staff Geologist. Therefore, the project, as proposed, does not minimize risks to life and property in an area of high geologic hazard.

#### b. Coastal Hazards

To analyze the suitability of the site for the proposed development relative to potential wave hazards and sea level rise, Commission staff requested the preparation of a sea level rise, wave run-up, flooding, and erosion hazard analysis, prepared by an appropriately licensed professional (e.g. civil engineer with coastal experience). The purpose of this analysis is to determine the potential for future storm damage and any possible mitigation measures, which could be incorporated into the project design.

The applicant has since submitted the following coastal hazard investigation: *Report* prepared by Associated Soils Engineering, Inc. dated August 31, 2011. For this analysis, the potential maximum sea level and wave crest heights that could impact the bluff during an assumed 100-year life of the structure was taken into consideration. A predicted highest high tide water level of 11.4 feet above mean sea level and adding 12.7 inches, which was the highest recorded seal level rise above predicted high tides in the Los Angeles region during the 1983 El Nino Storm event, results in a sea level high of 13 feet mean sea level. However, adding a 100-year projected sea level rise of 55 inches increases the height to 18 feet mean seal level.

The investigation states that the bluff exposes Monterey Formation bedrock comprised of resistant sandstone and siltstone beds that dip into the cliff face and that only a thin layer of the less resistant marine deposits overlies the bedrock. Additionally, the toe of the bluff is protected from wave action by rocky debris that has accumulated at the base of the bluff and extends halfway up the bluff that offers protection from waves.

Taking these things into account, the investigation concludes that a shoreline protective device is not anticipated over the life of the proposed development.

Although the applicants' report indicates that the site is safe for development at this time, shorelines are dynamic environments, which may be subject to unforeseen changes. Such changes may affect shoreline processes. Therefore, the setback on this site should include space to address uncertainties in the erosion rate. The proposed project does not include such a setback. The Commission also notes that the applicant is proposing use of a caisson foundation system to achieve adequate stability. Reliance on this significant foundation system calls into question the applicant's geologists' determination that the development would be safe over its economic life without reliance on shoreline/bluff protective devices.

#### **CONCLUSION**

The Commission finds that the proposed project is exposed to significant hazards and poses potential adverse impacts to the geologic stability of the bluff face and the stability of residential structure and does not minimize risks to life and property in an area of high geologic hazard. Denial of the proposed project would (1) avert potential adverse impacts to the geologic stability of the bluff face and (2) minimize risks to life and property in an area of high geologic hazard. Therefore, the Commission finds that the proposed project is inconsistent with Section 30253 of the Coastal Act.

#### D. ALTERNATIVES

There are several alternatives to the proposed development that currently exist. Among those possible alternative developments are the following (though this list is not intended to be, nor is it, comprehensive of the possible alternatives):

#### 1. <u>NO PROJECT</u>

No changes to the existing site conditions would result from the "no project" alternative. As such, there would be no additional disturbance of the bluff face. The undeveloped portion of the bluff face would remain undeveloped and vegetated and would be consistent with the PLOED and community character. The applicants would still have full use of the residence. This alternative would result in the least amount of effects to the environment and also would not have any adverse effect on the value of the property.

#### 2. <u>REMODELING OF THE EXSITING RESIDENCE CONSISTENT WITH THE</u> <u>CHARACTER OF THE SURROUNDING AREA AND GEOLOGIC STABILITY</u>

The proposed project would result in adverse visual impacts, inconsistency with the character of the surround area due to proposed significant landform alteration and inconsistency with the PLOED, and would raise concerns with geologic stability. An alternative to the proposed project would be remodeling of the existing residence consistent with the PLOED/stringline and without notching/grading into the bluff face below the existing residence. This alternative would accommodate the applicant's interest in adding habitable and recreational elements, but there would be no additional disturbance to the bluff face and would maintain the character of the area. The undeveloped portion of the bluff face would remain as an undeveloped vegetated slope and would be consistent with community character as development occurs within the PLOED. Additionally, the residence would have to be remodeled so that it avoids potential adverse impacts to the geologic stability of the bluff face and the stability of residential structure and does not minimize risks to life and property in an area of high geologic hazard. For example, the remodeled residence should be designed to maintain an adequate static and pseudo-static Factor of Safety for the economic life of those additions.

#### 3. <u>RECONSTRUCTION OF THE EXSITING RESIDENCE CONSISTENT WITH THE</u> <u>CHARACTER OF THE SURROUNDING AREA AND GEOLOGIC STABILITY</u>

Another potential alternative would be reconstruction of a new residence and garage. Just as described above in the remodeling alternative, the residence would have to be designed so that it avoids visual resource impacts and the character of the surrounding area is maintained be developing it consistent with the PLOED/stringline Adhering to these things would also avoid significant landform alteration. The new residence would also have to be designed to be geologically stable so not to adversely impact the bluff face and minimizes the the risks to life and property in an area of high geologic hazard.

#### E. LOCAL COASTAL PROGRAM (LCP)

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal development permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program that conforms with the Chapter 3 policies of the Coastal Act.

The City of Newport Beach Land Use Plan (LUP) was certified on May 19, 1982. At the October 2005 Coastal Commission Hearing, the certified LUP was updated. In addition, the certified LUP was updated at the October 2009 Coastal Commission Hearing. Since the City only has an LUP, the policies of the LUP are used only as guidance. The following Newport Beach LUP policies relate to development at the subject site: 4.4.1-1, 4.4.1-3, 4.4.3-7, 4.3-8, 4.4.3-9, and 4.4.3-15.

The construction of the proposed project is inconsistent with the policies in the City's certified LUP. The proposed project is not sited and designed to protect and, where feasible, enhance the scenic and visual gualities of the Coastal Zone. Additionally, the proposed project does minimize risks to life and property in areas of high geologic hazard, fails to assure stability and structural integrity and creates and contributes significantly to erosion and geologic instability. Denial of the proposed project would preserve existing scenic resources, preserve the existing Predominant Line of Existing Development (PLOED) and the existing community character where development is concentrated on the upper bluff face while the remaining portion of the bluff face is kept intact (i.e., the middle and lower parts of the bluff face) largely undisturbed and vegetated, minimize risks to life and property in a high geologic hazard area and at the same time assures stability and does not contribute to erosion. The proposed development is inconsistent with the policies in the City's certified LUP, as well as the policies in Chapter 3 of the Coastal Act, as indicated above, and would therefore prejudice the City's ability to prepare a Local Coastal Program for Newport Beach that is consistent with the Chapter 3 policies of the Coastal Act as required by Section 30604(a). Therefore, the project must be denied.

#### F. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). The City of Newport Beach is the lead agency and has determined that in accordance with CEQA, the project is Categorically Exempt from Provisions of CEQA for the construction. However, Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect, which the activity may have on the environment.

While the City of Newport Beach found that the development was Categorically Exempt, the Commission, pursuant to its certified regulatory program under CEQA, the Coastal Act, the proposed development would have adverse environmental impacts. There are feasible alternatives or mitigation measures available, such as remodeling or reconstructing the existing residence so that it is consistent with the character of the surrounding area and geologic stability. Therefore, the proposed project is not consistent with CEQA or the policies of the Coastal Act

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because there are feasible alternatives, which would lessen significant adverse impacts, which the activity would have on the environment. Therefore, the project must be denied.



























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