CALIFORNIA COASTAL COMMISSION

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F20b

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STAFF REPORT: DE NOVO HEARING

Application Number: A-3-CML-16-0057

Applicants: Wellington S. Henderson, Jr.

Project Location: On the bluff at the south end of Carmel Beach fronting 26336

Scenic Road, Carmel-by-the-Sea, Monterey County (APNs 009-

423-001 and -002).

Project Description: Construction of a shoreline protective device designed as an eight-

foot-tall and 63-foot-long upper bluff retaining wall with faux bluff

facing and related drainage and landscaping improvements.

Staff Recommendation: Denial

SUMMARY OF STAFF RECOMMENDATION

The Applicant proposes to construct a shoreline protective device designed as an eight-foot-tall and 63-foot-long upper bluff retaining wall with faux bluff-facing and related development (i.e., drainage and landscaping improvements) on the bluff fronting a residential site at the south end of Carmel Beach. The site is the location of a circa 1948 Frank Lloyd Wright-designed house, which is a notable historical residence in the City of Carmel. The residence is sited on a bedrock outcrop at the south end of Carmel Beach and is highly visible from most vantages along the beach and the Scenic Road recreation trail. The stated purpose of the project is to protect the

The "Walker House" as it is known, was added to the City of Carmel's historic resources inventory in 2001. More recently on July 29, 2016, the residence was approved by the California Historic Resources Commission, for inclusion into the National Register of Historic places and that approval is under review by the National Park Service.

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residence's driveway and driveway gate and associated pillar from potential bluff failure due to future erosion and storm events.

On August 10, 2016, the Commission found that the City's action approving the project raised a substantial issue of conformance with the LCP's shoreline protective device policies and standards, and took jurisdiction over the CDP application. Specifically, the Commission found that the City's approval raised substantial conformance issues with respect to the LCP's shoreline protective device policies and standards, i.e. the Commission found that the City did not adequately identify an existing structure in danger from erosion, did not analyze any alternatives, and did not identify and mitigate for the coastal resource impacts that the approved project would cause. The de novo hearing was postponed at the Applicant's request, including to allow the Applicant an opportunity to provide additional geotechnical information on the question of whether there is a threat from erosion. The Applicant submitted supplemental reports to Commission staff on Thursday August 18, 2016 and Friday August 19, 2016 regarding erosion, project alternatives, sand supply impacts, and archaeological and historic resources.

As noted above, the purpose of the project is to protect the residence's driveway and driveway gate and associated pillar. The proposed upper bluff retaining wall would extend along the upper bluff face fronting the existing driveway and driveway entrance gate, which are both located roughly six-and-a-half feet from the bluff edge. The project's technical reports indicate that the underlying bedrock bluffs are eroding very slowly at this location. The reports cite an erosion rate of the bedrock comprising the lower bluff of between 0.05 feet and 0.1 feet annually, although the Commission's staff geologist can find little supporting evidence for these figures. Similarly, the upper bluff terrace materials are reported to be eroding at an annual rate of 0.1 to 0.15 feet per year, again with no quantitative support for these figures. Nevertheless, with no evidence for rapid episodic erosion of the bluff edge, at these erosion rates, it would be decades before the driveway and gate are undercut by erosion. Thus, there is no documented erosion threat to an existing structure that would allow for a shoreline protective device. Additionally, the 2016 supplemental bluff erosion study identifies an area of exposed marine terrace deposits and suggests that this is evidence that a damaged storm drain system adjacent to the driveway may be causing localized erosion. However, the initial geotechnical reports identified ocean spray as the likely culprit regarding any localized erosion. A failing storm drain facility was not considered a factor in either the mitigated negative declaration for the project or the City's decision on its coastal permit. In any case, there is no evidence that the failing storm drain is causing an imminent threat to the driveway and gate. Even if there were a documented erosion threat to an existing structure from the damaged storm drain, the appropriate manner to abate such a threat would be to repair the damaged storm drain, and not to construct a massive upper bluff retaining wall with all of its resultant coastal resource impacts. Thus, a threat to an existing structure has not been established in such a way as to allow for a shoreline protective device at this location,³ and the proposed project is inconsistent with LCP requirements in this regard and must be denied.

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The geotechnical report estimates the future long-term average erosion rate could be as high as 0.2 to 0.3 feet per year (2.4 to 3.6 inches) due to the influence of sea level rise.

For comparison, in past projects the Commission has deemed a structure to be "in danger" from erosion if it would become unfit for use within the next two or three storm season cycles or generally within the next few years, not decades.

Furthermore, if the existing driveway and gate were shown to be in danger from erosion, the LCP requires a thorough analysis of a range of alternatives designed to address the identified erosion danger, including but not limited to relocation or partial removal of the driveway and gate/pillar or repair of the damaged storm drain, both options which appear feasible at this location. The supplemental materials provided by the Applicant continued to recommend the proposed seawall as the proposed method for addressing an unsubstantiated erosion threat, instead of "soft" alternatives such as relocation or removal of the driveway and the gate/pillar or repair of the storm drain, inconsistent with the LCP. Finally, even if danger were conclusively established, and even if the upper bluff retaining wall were conclusively shown to be the least environmentally damaging feasible alternative to address and abate the danger, the LCP requires that all attendant coastal resource impacts, including impacts to shoreline sand supply, be eliminated and, if the impacts are not able to be eliminated, that they be mitigated. The supplemental materials provided by the Applicant included an analysis of the proposed project's sand supply impacts, which determined a very small loss to the annual sand supply budget of 3.75 cubic yards, which is on par with expectations given the very small average annual erosion rate at the site. The sand supply calculation could be used to determine appropriate mitigation. However, as shown above, there is no empirical evidence of a structure in danger from erosion and thus the discussion on sand supply impacts and required mitigation is moot. Accordingly, the proposed shoreline protective device is wholly inconsistent with the LCP.

In short, the proposed project is inconsistent with LCP shoreline protective device policies and standards, primarily because there is no documented erosion threat to an existing structure that would warrant and allow for such a shoreline protective device. Furthermore, even if danger were established, there has been no bona fide consideration of less-environmentally damaging alternatives, such as repairs to the storm drain or driveway and gate relocation (which appear to be feasible at this location). And finally, although it appears that the supplemental geotechnical reports reasonably estimate project impacts to sand supply, there is no empirical evidence of a structure in danger from erosion and thus the discussion on sand supply impacts and required mitigation is moot. For all of these reasons, the proposed project fails to ensure LCP conformance with LUP Policies P5-5 and P5-6, as well as with IP Sections 17.20.190(C) and (F), and therefore must be denied.

For these reasons, staff recommends that the Commission deny a CDP for the proposed project. **The motion is found on page 5 below.**

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APPENDICES

Appendix A – Substantive File Documents

EXHIBITS

- Exhibit 1 Project Location Maps
- Exhibit 2 Site Photos
- Exhibit 3 Project Plans
- Exhibit 4 Early Commission Staff Correspondence to the Applicant and the City
- Exhibit 5 Visual Simulation of the Proposed Upper Bluff Retaining Wall
- Exhibit 6 -- Correspondence

I. MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, **deny** a coastal development permit for the proposed development. To implement this recommendation, staff recommends a **NO** vote on the following motion. Failure of this motion will result in denial of the CDP and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Motion: I move that the Commission approve Coastal Development Permit Number A-3-CML-16-0057 pursuant to the staff recommendation, and I recommend a no vote.

Resolution to Deny CDP: The Commission hereby denies Coastal Development Permit Number A-3-CML-16-0057 and adopts the findings set forth below on grounds that the development will not be in conformity with the policies of the certified Local Coastal Program.

II. FINDINGS AND DECLARATIONS

In this de novo review of the proposed CDP application, the standard of review is the City of Carmel-by-the-Sea certified LCP.

A. PROJECT LOCATION AND DESCRIPTION

The proposed project is located on the bluff fronting a residentially developed parcel located at 26336 Scenic Road in the City of Carmel-by-the-Sea, in Monterey County (APNs 009-423-001 and -002). The site is situated on a bedrock outcrop at the south end of Carmel Beach and is highly visible from the beach and the Scenic Road public recreation trail. The proposed project is a shoreline protective device designed as an eight-foot-tall and 63-foot-long upper bluff retaining wall with faux bluff facing and related development fronting Carmel Beach along the northeast property line. The device would be located above the mean high tide line, on the upper portion of the coastal bluff (roughly 16 feet above the beach) that defines the downcoast edge of Carmel Beach. Finally, the site is the location of a circa 1948 Frank Lloyd Wright-designed house, which is a notable historical residence in the City of Carmel. The "Walker House," as it is known, was added to the City of Carmel's historic resources inventory in 2001. More recently on July 29, 2016, the residence was approved by the California Historic Resources Commission for inclusion into the National Register of Historic places and that approval is under review by the National Park Service.

The Applicant's stated purpose for the device is to protect the residence's driveway, driveway gate and an associated pillar from potential future bluff failure due to erosion and storm events. The entry gate and pillar were constructed in 1999 and their design was based on plans drafted for the original residence back in the early 1950s. The shoreline armoring device would be tied to the existing bedrock outcrop beneath and would extend from roughly the southeast corner of the residence to a point near the southeast property line. The device would include rock fascia designed to blend with the surrounding bluff.

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See Exhibit 1 for project location maps and Exhibit 2 for site photos. See Exhibit 3 for the proposed project plans.

B. PROJECT BACKGROUND

In early 2015, the Applicant requested a preliminary review from Commission staff of a proposed upper bluff retaining wall/shoreline protective device at the project site. The submitted materials included a document entitled Bluff Stabilization Blufftop Retaining Wall prepared by the Applicant's geotechnical engineers, Haro, Kasunich and Associates (HKA) on September 30, 2014 (see Appendix A: Substantive File Documents, Item 1). On February 17, 2015, Commission staff provided a response to the Applicant and to City of Carmel staff regarding questions about permit jurisdiction and also identified the relevant LCP policies related to shoreline armoring and hazards avoidance. See **Exhibit 4** for this early correspondence. Commission staff further indicated that the geotechnical investigation provided by the Applicant was deficient in terms of identifying the nature of the threat (if any). Specifically, the geotechnical investigation failed to provide a rate of annual erosion needed to establish the degree of threat, and further did not identify precisely what structure or structures were in danger from erosion, which is the LCP's primary threshold to determine whether a structure is potentially allowed some type of armoring for coastal hazards protection. Lastly, staff noted that the materials did not provide an analysis of potential impacts to local sand supply or an assessment of a reasonable range of feasible alternatives to the proposed upper bluff retaining wall, as further required by the LCP. Staff concluded that adequate technical support did not exist for the proposed upper bluff retaining wall/shoreline protective device consistent with LCP and Coastal Act requirements and that more rigorous analysis of shoreline processes was needed to consider a project at this location.

In August 2015, the Applicant's Geotechnical Consultant prepared a second geotechnical engineering report (see Appendix A: Substantive File Documents, Item 2) that identified an area of exposed marine terrace deposits below and slightly west of the driveway gate and attributed the loss of soil and vegetation to focused ocean spray. The report did not provide any evidence of the phenomena or any new empirical evidence of ongoing shoreline erosion; however based on this and the then impending El Niño winter (2015-2016), the report recommended that a shoreline armoring device be installed along the upper bluff.

On April 13, 2016, the City of Carmel Planning Commission approved CDP DS 15-158 with conditions for an upper bluff retaining wall approximately 63 feet in length and roughly eight feet in height. The City concluded in its findings that although the exposed volcanic bedrock surrounding the house is relatively hard, it has been weakened by naturally occurring weathering, joints, and fractures, and that this was leading to focused ocean spray and bluff loss. The City concluded that construction of the upper bluff retaining wall would stabilize the bluff and preserve the driveway and gate.

C. SUMMARY OF APPEAL AND COMMISSION ACTION

On August 10, 2016, the Commission found that the City's action approving the project raised a substantial issue of conformance with the LCP's shoreline protective device policies and

standards, and took jurisdiction over the CDP application. Specifically, the Commission found that the City's approval did not adequately identify an existing structure in danger from erosion, did not analyze any alternatives, and did not identify and mitigate for all resultant coastal resource impacts caused by the approved project. The De Novo hearing was postponed at the request of the Applicant, including to allow the Applicant an opportunity to provide additional geotechnical information on the question of whether there is a threat from erosion. On Thursday August 18, 2016 and Friday August 19, 2016 the Applicant provided Commission staff with supplemental materials regarding shoreline erosion, alternatives analysis, sand supply impacts and mitigation, and historic resources (see Appendix A: Substantive File Documents, Items 3-5).

D. COASTAL DEVELOPMENT PERMIT DETERMINATION

The standard of review for this CDP determination is the City of Carmel-by-the-Sea certified LCP.

1. Shoreline Protective Devices

Applicable Policies

The policies of the City of Carmel-by-the-Sea LCP ensure that development in areas of coastal hazards minimize risks to life and property. Applicable LCP policies include:

LUP Policy P5-5. Protect public access, Scenic Road, and the aesthetic character of the coast by maintaining existing seawalls and engineered revetments. When any existing seawalls or revetments need to be replaced or substantially reconstructed, review seawall and revetment design alternatives, as well as other beach management strategies and determine the best balance among objectives for access, aesthetics and protection of coastal resources (biological, geological, and recreational). Protect the natural character and features of the Del Mar and North Dunes by prohibiting the construction of any new shoreline protective structures unless required to protect existing structures in danger of erosion. For the beach and shoreline area, only consider the installation of new protective structures after careful review of alternatives and when required to protect existing structures in danger of erosion. Mitigate the impacts of shoreline protective structures on visual quality and beach dynamics using landscaping, sand management and prudent engineering. (Emphasis added)

LUP Policy P5-6. Construct new shoreline armoring in areas previously unprotected only when required to protect existing structures in danger of erosion and when designed to eliminate or mitigate adverse impacts on local sand supply. Require any approved structures to include native landscaping (screening), be visually compatible with existing seawall designs, address drainage, incorporate visual mitigation, sand coverage for revetments, and golden granite facing for seawalls. (Emphasis added)

IP Section 17.20.190(C). Shoreline Protective Structures. Shoreline protective structures may be permitted only when the review authority determines that the structure is:

1. Necessary to protect existing structures, coastal-dependent uses, public beaches, public access and beach facilities in danger of erosion;

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- 2. The least environmentally damaging feasible alternative;
- 3. Designed to successfully eliminate or mitigate adverse impacts on local shoreline and sand supply;
- **4.** Designed to avoid significant intertidal and subtidal areas;
- **5.** Designed to avoid, or mitigate if avoidance is infeasible, impacts on beach access; and
- **6.** Designed to respect natural landforms and minimize visual impact to the extent possible, through means including the use of structures, colors and materials that are visually compatible to those already established;

IP Section 17.20.190(F). Shoreline Armoring Alternatives Analysis. Applicants shall submit a complete evaluation of a reasonable range of potential alternatives including (1) project alternatives that will avoid the need for armoring, including but not limited to, relocation of the threatened (infra)structure(s) away from danger, (2) various armor solutions (e.g., vertical seawalls), (3) "soft" options, and (4) the "no project" alternative. The evaluation shall identify the environmentally least damaging feasible alternative that provides effective protection of existing development and minimizes impacts on public access, recreation, scenic resources, and sand supply.

Shoreline structures can have a variety of negative impacts on coastal resources including adverse effects on beaches and sand supply, which ultimately result in the loss of the beach with associated impacts to public recreational access, as well as impacts to visual resources, and to water quality during construction. Accordingly, construing the LCP policies above together, the LCP can be understood to require a three-step evaluation to allow for shoreline protective devices when a structure is threatened: 1) identify an existing structure in danger from erosion; 2) identify a range of alternatives and select the least environmentally damaging alternative to abate the identified threat; and 3) mitigate for all coastal resource impacts caused by the selected project.

Analysis

Degree of Threat

The proposed project is for the construction of a shoreline protective device designed as an eight-foot-tall and 63-foot-long upper bluff retaining wall with faux bluff facing fronting a residential property at the south end of Carmel Beach. The site is the location of a circa 1948 Frank Lloyd Wright-designed house, which is a notable historical residence in the City of Carmel. The Applicant and consulting engineers admit that the residence is not threatened, but assert that the shoreline protective device is necessary to protect the driveway access, entry gate and pillar from erosion.

The first LCP test to allow for a shoreline protective device is to identify whether there is an existing structure in danger from erosion. While the LCP does not define the term "in danger," for other projects seeking approval of shoreline protective devices, the Commission has in the past defined "in danger" from erosion to mean the existing structure would become unfit for use

within the next two or three storm season cycles or generally within the next few years. Initially, two geotechnical reports (dated September 30, 2014 and August 12, 2015) were prepared by HKA, which evaluated erosion and hazards at the site. In the August 12, 2015 report, HKA determined that the driveway and gate could be threatened by erosion *if* two-feet of bedrock material were lost to a sudden or unforeseen erosion event. If such an event occurred, *then* the upper bluff materials could be expected to recede by as much as five to nine feet, threatening the driveway features. The HKA report pointed to the then upcoming 2015-16 El Niño winter as having the potential to produce greater than normal rates of erosion, and thus concluded that the bluff could erode in such a manner as to subject the driveway to erosion danger.

These reports were evaluated by the Commission's Senior Geologist, Dr. Mark Johnsson. Dr. Johnsson concurs with the geotechnical reports' bluff erosion rate of 0.1 feet per year, a fairly slow rate of erosion due to these bluffs being composed of strong underlying volcanic bedrock. He also observes that the reports did not establish an annual erosion rate for the marine terrace deposits on the upper part of the bluff where the proposed device would be built, but rather relied on qualitative analysis and assumption. Of note, Dr. Johnsson disagreed with the 2015 HKA report's assumptions used to establish a potential erosion threat to the driveway and entry gate, which he deemed overly conservative and unwarranted. Dr. Johnsson indicated that such assumptions (i.e., a sudden two-foot erosion event of the stable volcanic lower bluff base and a subsequent five- to nine-foot erosion event of the upper bluff) were not supported by any evidence of their probability or likelihood, and were in conflict with the report's previous findings that the bluffs were stable and eroding at only 0.1 feet (1.2 inches) per year. Dr. Johnsson subsequently performed a site evaluation in April 2016 and confirmed the findings of the geotechnical reports that the underlying bedrock bluffs were comprised of competent bedrock material, consistent with an estimated annual erosion rate of 0.1 feet per year. Dr. Johnsson also observed that the upper bluff marine terrace deposits were stable at roughly 12 to 14 feet above the elevation of the sea. Of note, the 2015-16 El Niño winter conditions did scour the sand down to the sandstone at the south end of Carmel Beach and in the vicinity of the project site. However, there was no evidence of greater-than-normal erosion of the bedrock material or upper marine terrace deposits directly fronting the project site, and thus no evidence to substantiate the assumptions of the Applicant's geotechnical report regarding the probability of such an extreme erosion event (i.e. a sudden two-foot erosion event of stable volcanic lower bluff base and subsequent five- to nine-foot erosion event of upper bluff). Based on the findings in the HKA reports and the firsthand observations of his site visit, Dr. Johnsson concluded that there is no threat from erosion to any structure at this location.

Subsequent to the Commission's action on Substantial Issue, in August 2016, the Applicant's consulting engineers (HKA) prepared a third geotechnical report (see Appendix A: Substantial File Documents, Item 3). This technical report indicates that the underlying bedrock bluffs are eroding even slower than initially reported, i.e. approximately 0.05 feet to 0.1 feet annually. Additionally, the supplemental report included an erosion rate for the upper bluff marine terrace deposits of roughly 0.1 feet to 0.15 feet annually. The report estimates that the future long-term average erosion rate could be as high as 0.2 to 0.3 feet per year (2.4 to 3.6 inches) due to the influence of sea level rise. While these erosion estimates are not supported by empirical evidence of any extant erosion for either the bedrock or marine terrace deposits, even if these rates are accurate, it would take decades before the driveway and gate would be undercut by erosion.

The 2016 HKA engineering report indicates that there is an area of the bluff that shows evidence of "fresh" erosion characterized by barren soils. This supplemental report finds that a failing upper bluff storm drain system could lead to accelerated erosion, in part due to saturation of soils, which may ultimately result in the possible loss of upper bluff marine terrace deposits. The report identifies the presence of a 12-inch corrugated metal pipe located immediately adjacent to the driveway gate pillar, which drains storm water runoff towards the beach. A recent inspection of the pipe revealed that it has corroded and is perforated. The inspection further revealed the recent installation by the City (since summer of 2014) of an unlined storm water catch basin in front of the inlet to the storm water pipe. On page 2 of the supplemental report it states that:

The catch basin is causing infiltrating runoff to saturate the earth materials that form the upper bluff; that saturation is adverse to bluff stability and is one cause of accelerating erosion in this area of the bluff.

The identified area of exposed marine terrace deposits appears to be the same as that initially identified in the August 2015 HKA geotechnical report, which at the time was attributed to ocean spray. In any case, that report does not suggest that either the driveway or gate is currently threatened. Upper bluff saturation, bluff instability, and accelerated bluff erosion can all be addressed by eliminating surficial water flows over and into the bluff (i.e., by repairing the failing storm pipe and lining the catch basin). In fact, the 2016 HKA report recommends replacing the rusted-out corrugated pipe with a high density plastic pipe that is immune to corrosion. Additionally, eliminating irrigation and revegetating the upper bluff area with drought and salt-tolerant plant species will further stabilize the upper bluff marine terrace deposits and provide additional bluff protection from sea spray. Nevertheless, the Applicant's engineers continue to recommend an upper bluff seawall, which has not been substantiated as an appropriate or allowable response to address any potential issues caused by a damaged storm drain, particularly in light of the less-environmentally damaging feasible alternatives identified above.

Thus, other than the failing storm drain system, which can be addressed by repairs to the storm system rather than by substantial and more-environmentally damaging armoring of the coastal bluff, there is no evidence that there is a threat to an existing structure (i.e. the driveway, entry gate and associated pillar) from erosion. Given the absence of evidence of ongoing shoreline erosion, the first test of LCP conformance has not been met. Accordingly, an existing structure in danger from erosion has <u>not</u> been established in such a way as to allow for a shoreline protective device at this location, and thus the proposed project is inconsistent with LCP requirements in this regard and on this basis alone must be denied.

Least Environmentally Damaging Feasible Alternative

Because the proposed upper bluff retaining wall fails the first LCP test due to no existing structure in danger from erosion, consideration of subsequent LCP requirements, including evaluation of a range of less-environmentally damaging alternatives (e.g., relocation of the structure to avoid identified hazard threats) as well as mitigation for resultant impacts caused by the selected shoreline protective device, is moot. However, it should be noted that the initial geotechnical reports prepared for the project only evaluated the proposed upper bluff retaining

wall and did not include possible alternatives to said wall. Subsequent to the Commission's action on Substantial Issue, the Applicant provided an alternatives analysis of several armoring proposals and minimal/incomplete analysis of two "soft" alternatives including the "no project" alternative and the relocation of portions of the driveway and driveway entry gate (see Appendix A: Substantive File Documents, Item 4). However, that report continues to recommend the proposed seawall as the preferred project.

Notably, the alternatives analysis did not include an analysis of repairing the damaged storm drain that is referenced in the 2016 HKA bluff erosion report. As discussed above, any issues caused by the storm drain should be addressed by repairs to the storm drain, and not by proposing an upper bluff retaining wall. At a minimum, the Applicant has not satisfied LCP standards by demonstrating that the proposed project is the least-environmentally damaging feasible alternative, given that repair of the storm drain constitutes a less-environmentally damaging feasible alternative to address impacts caused by the damaged storm drain.

Accordingly, the Applicant continues to propose the most environmentally damaging alternative, i.e. the proposed bluff armoring device, and rejects/omits an alternative that would directly address and abate any future potential bluff erosion issues (i.e. repairs to the damaged storm drain). Thus, the second test of the LCPs bluff armoring requirements has not been met.

Mitigation

The LCP requires full avoidance or mitigation of all resultant coastal resource impacts, including impacts to shoreline sand supply caused by the shoreline protective device. Initially the Applicant did not include any evaluation of project-related impacts, nor proposed mitigation for those impacts. The 2016 supplemental sand supply analysis does, however, identify and quantify an impact to the local sand supply budget associated with the upper bluff retaining wall (see Appendix A: Substantive File Documents, Item 5). This supplemental report includes a reasonable analysis of sand supply impacts and quantifies a very small loss to the annual sand supply budget of 3.75 cubic yards, which is on par with expectations given the estimated maximum annual erosion rate of the lower bedrock and the upper bluff marine terrace deposits, respectively 0.01 and 0.15 feet. This sand supply loss calculation could be used to determine appropriate mitigation. However, as shown above, there is no empirical evidence of a structure in danger from erosion and thus the discussion on sand supply impacts and required mitigation is moot.

Finally, shoreline protective devices may only be permitted if the structure is designed to respect natural landforms and minimize visual impacts. The large 63-foot-long and eight-foot-tall upper bluff retaining wall does not respect the natural landform in part because it will eliminate the natural undulating bluff features and replace it with a monolithic structure with faux facing. However, as described above, because the device cannot meet the LCP's first test and must be denied on that basis alone, further in-depth consideration of project inadequacies related to project alternatives and proposed mitigation is not necessary.

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Deficiencies noted by Commission staff in February 17, 2015 correspondence to the City and the Applicant (see **Exhibit 4**).

Shoreline Armoring Conclusion

In short, the proposed project is inconsistent with LCP shoreline protective device policies and standards, primarily because the gate, pillar, and driveway are not imminently threatened and thus a shoreline protective device is not warranted. Furthermore, even if danger were established, the evaluation of alternatives dismissed relocation of the gate, pillar, and driveway, as well as storm drain repair alternatives, which appear to be both less environmentally damaging and feasible at this location. And even though the project quantifies the impacts to sand supply as required by the LCP, the first test of LCP conformance was not met, and thus the discussion regarding sand supply impacts and required mitigation is moot. For all of these reasons, the proposed project fails to ensure LCP conformance with LUP Policies P5-5 and P5-6, as well as IP Sections 17.20.190(C) and (F), and therefore must be denied.

2. Visual and Scenic Resource Protection

Applicable Policies

Carmel's shoreline is generally regarded as a highly scenic location, with white sand, a dune back-beach, and a backdrop of Monterey pine and cypress trees. The LCP contains a number of policies designed to protect these significant scenic and visual resources:

LUP Policy O4-6. Limit development along the Carmel shoreline to facilities that support passive and active recreational activities, beach access, bluff protection and protection of infrastructure. Bluff protection and protection of infrastructure shall be permitted only when existing facilities are in danger from erosion. Ensure that any new structure or development is visually compatible with the nature beach environs, is consistent with the established design of existing facilities, minimizes coverage, and does not impeded access. Avoid to the maximum extent feasible the seaward encroachment of new structures.

LUP Policy 01-6. Recognize the natural resources and scenic quality of Carmel as a coastal community and allow uses in the community that are consistent with local needs, the Carmel Local Coastal Plan, and the California Coastal Act.

LUP Policy G5-3. Protect, conserve and enhance the unique natural beauty and irreplaceable natural resources of Carmel and its Sphere of Influence, including its biological resources, water resources, and scenic routes and corridors.

LUP Policy 05-8. Protect, conserve and enhance designated open space, the urban Monterey pine forest, beach and shoreline, the sensitive habitats and the hillside areas, and acquire additional open space as deemed appropriate.

LUP Policy P5-48. New development shall protect areas of unique scenic quality (e.g., Scenic Road, Junipero Avenue, Torres & 3^{rd} , etc.). Development in these areas shall be sited to protect public views to and along the coast, minimize impacts via landform alteration, and be visually compatible with the character of surrounding areas.

Thus, the LCP has multiple provisions that require new development to be sited and designed to ensure protection of significant visual resources, including views within public viewsheds. Such policies specifically protect areas having regional public importance due to their natural beauty

by ensuring that new development is appropriately designed and constructed to minimize adverse impacts upon identified visual resources. Views from beaches and the shoreline are protected visual resources under the LCP.

Analysis

As currently proposed, the project would result in a 63-foot-long and eight-foot-tall faux rock wall atop the existing rocky bedrock outcrop at the south end of Carmel Beach. The residence is one of very few residences located on the seaward side of Scenic Road and is prominent in views from Scenic Road, Carmel Beach, and the Scenic Road recreational path, which are all extremely popular recreational use areas, and thus the site is located within a significant public viewshed. See **Exhibit 2** for photographs of the project site.

As proposed, the project will establish a new and prominently visible unnatural concrete wall within the viewsheds of the above-described vistas, resulting in a significant adverse coastal resource impact (see **Exhibit 5** for a visual simulation of the proposed upper bluff wall). The project will also result in significant landform alteration given that the natural bluff would be covered by an eight-foot-tall and 63-foot-long artificial structure with faux concrete facing. Although the Applicant's proposal reduces the visual impacts of the wall by using an artificial rock fascia design that would be colored and texturized to mimic adjacent bluff color and texture, the wall would nevertheless introduce an unnatural element into this natural setting, eliminating the natural bluff and its landscape in favor of a concrete wall located just above the beach. If the project were otherwise approvable, it could be conditioned to include performance standards to help offset visual impacts (e.g., faux bluff surface treatment, cascading and integral landscaping, etc.). However, in this case it is unnecessary to consider conditioning of the permit because the project must be denied based on the proposed project's inconsistencies with the LCP's shoreline protective device policies and standards.

Visual and Scenic Resource Protection Conclusion

The proposed upper bluff retaining wall is inconsistent with the Carmel-by-the-Sea LCP visual resource policies because it would: introduce an artificial structure into an important scenic area, diminishing the scenic values of this area; result in significant landform alternation; and not be visually compatible with the natural setting. Thus, the proposed project must be denied.

3. California Environmental Quality Act (CEQA)

The City of Carmel-by-the-Sea, acting as lead agency, adopted an Initial Study/Mitigated Negative Declaration ("IS/MND") for this project. The document analyzed the impacts of a 63-foot-long upper bluff retaining wall/shoreline protective device along the northern property boundary. The IS/MND concluded, using the same technical reports as described in Appendix A: Substantive File Documents, Items 1 and 2, that bluff erosion was leading to an imminent threat to the driveway and entry gate, and further identified eight potentially significant effects on the environment resulting from the construction of the upper bluff wall. Key significant impacts and mitigation measures were identified for aesthetic, cultural, and geological resources. However, the City's review did not include an evaluation of alternatives nor a finding that the project represents the least environmentally damaging feasible alternative.

A-3-CML-16-0057 (Henderson Retaining Wall)

Section 13096(a) of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. This report has discussed the relevant coastal resource issues with the proposal. All above findings are incorporated herein in their entirety by reference. As detailed in the findings above, the proposed project would have significant adverse effects on the environment as that term is defined in the CEQA context.

Pursuant to CEQA Guidelines (14 CCR) Section 15042 "a public agency may disapprove a project if necessary in order to avoid one or more significant effects on the environment that would occur if the project were approved as proposed." Furthermore, Section 21080(b)(5) of CEQA, as implemented by Section 15270(a) of the CEQA Guidelines, provides that CEQA does not apply to projects which a public agency rejects or disapproves. The Commission finds that denial, for the reasons stated in these findings, is necessary to avoid the significant effects on coastal resources that would occur if the project was approved as proposed. Accordingly, the Commission's denial of the project represents an action to which CEQA, and all requirements contained therein that might otherwise apply to regulatory actions by the Commission, does not apply (see 14 CCR Section 13096(a)).

APPENDIX A: SUBSTANTIVE FILE DOCUMENTS

- 1) Bluff Stabilization Blufftop Retaining Wall, 26336 Scenic Road Oceanfront Home, Carmel, Monterey County, California. Haro, Kasunich and Associates, Inc. Geotechnical & Coastal Engineers. Project No. M10666, September 30, 2014.
- Evaluation of Coastal Bluff Instability; Geologic and Geotechnical Evaluation of Bluff Top Protection. Haro, Kasunich and Associates, Inc. Geotechnical & Coastal Engineers. Project No. M10666, August 12, 2015.
- 3) Bluff Erosion Rate. Haro, Kasunich and Associates, Inc. Geotechnical & Coastal Engineers. Project No. M10666, August 17, 2016.
- 4) Bluff Erosion Protection Alternatives. Haro, Kasunich and Associates, Inc. Geotechnical & Coastal Engineers. Project No. M10666, June 27, 2016.
- 5) Sand Supply Analysis. Haro, Kasunich and Associates, Inc. Geotechnical & Coastal Engineers. Project No. M10666, June 27, 2016.
- 6) Draft Initial Study / Mitigated Negative Declaration, Henderson Residence Bluff-Top Retaining Wall, Design Study DS 15-158. City of Carmel-by-the-Sea, March 2016.
- 7) Archaeological Review 63-Foot Long Blufftop Retaining Wall Upside of the Henderson Property (APN 009-423-001). Basin Research Associates. October 21, 2015.
- 8) Henderson Residence Up-Coast Blufftop Retaining Wall Plan (26336 Scenic Road). Regan Biological and Horticultural Consulting, LLC. August 27, 2015.
- 9) Letter to Ms. Gail Hatter-Crawford, Phase II Historic Report. Kent L. Seavey, December 15, 2015
- 10) Proposed Site Improvements to Repair Existing Erosion Based Damage and Undermined Gate Pilasters 26336 Scenic Drive, Carmel, CA (APN 414-021-011). Taluban Engineering, Inc. July 28, 2016.
- 11) Henderson Residence, 26336 Scenic Road, Carmel, CA. Blufftop Retaining Wall to Mitigate Soil Erosion. Monterey Bay Engineers, Inc. August 17, 2016.
- 12) City of Carmel-by-the-Sea Local Coastal Program. May 2004.

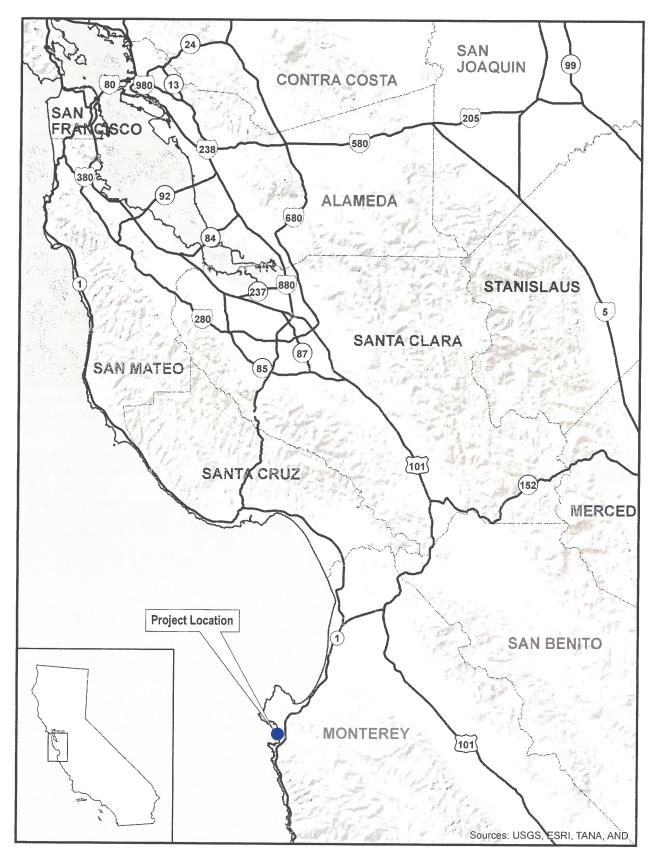


Figure 1: General Project Location

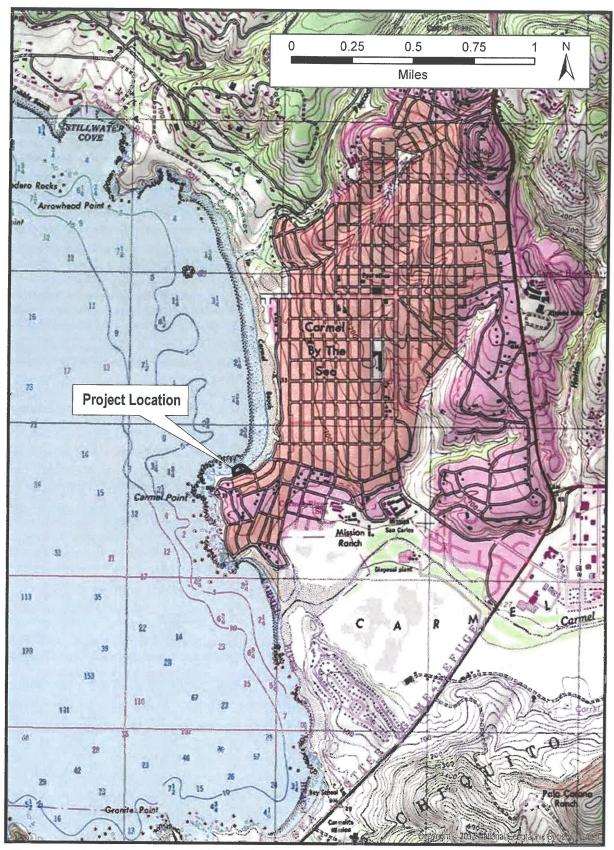


Figure 2: Project Location (USGS Monterey, Calif 1983)







Figure 4: View southeast along proposed alignment of 63 foot long bluff-top retaining wall



Figure 5: View southwest towards proposed 63 foot long bluff-top retaining wall

AS SHOWN

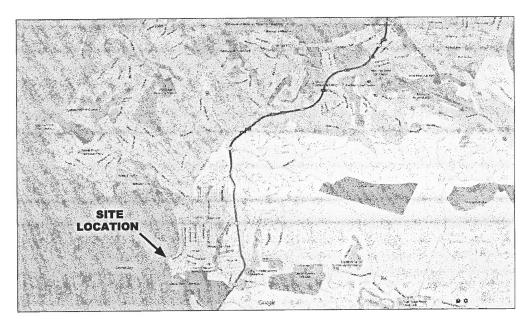
ASSESSOR'S MAP TAX CODE AREA 45 SAN ANTONIO & SOUTH 43 OCEAN PACIFIC,

MONTEREY COUNTY A.P.N. 009-423-001

CARMEL-BY-THE-SEA

ADD. NO.7 BLK5. B11, B16 & B18

LOCATION



VICINITY MAP

CONCEPTUAL BLUFFTOP RETAINING WALL PLANS UPCOAST SIDE OF THE HENDERSON PROPERTY SCENIC ROAD, CARMEL, CA **MONTEREY COUNTY APN 009-423-001**

PROJECT DATA

A.P.N.: 009-423-001

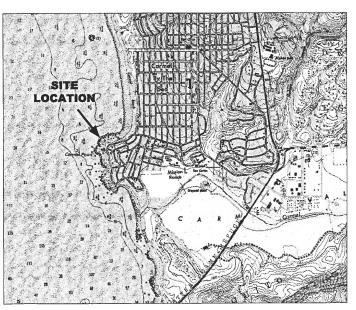
OWNER: WELLINGTON S. HENDERSON JR. 1325 HOWARD AVENUE, #940 BURLINGAME, CA

SHEET INDEX

SHEET 1 - TITLE SHEET

SHEET 2 - CONCEPTUAL BLUFFTOP RETAINING WALL PLAN

SHEET 3 - CONCEPTUAL BLUFFTOP RETAINING WALL CROSS SECTIONS



TOPOGRAPHIC MAP

PLAN PREPARERS:

John Kasunich, G.E. 455 Mark Foxx, C.E.G. 1493 HARO, KASUNICH & ASSOCIATES, INC. 116 East Lake Watsonville CA 95076 (831)722-4175 (831)722-3202 FAX

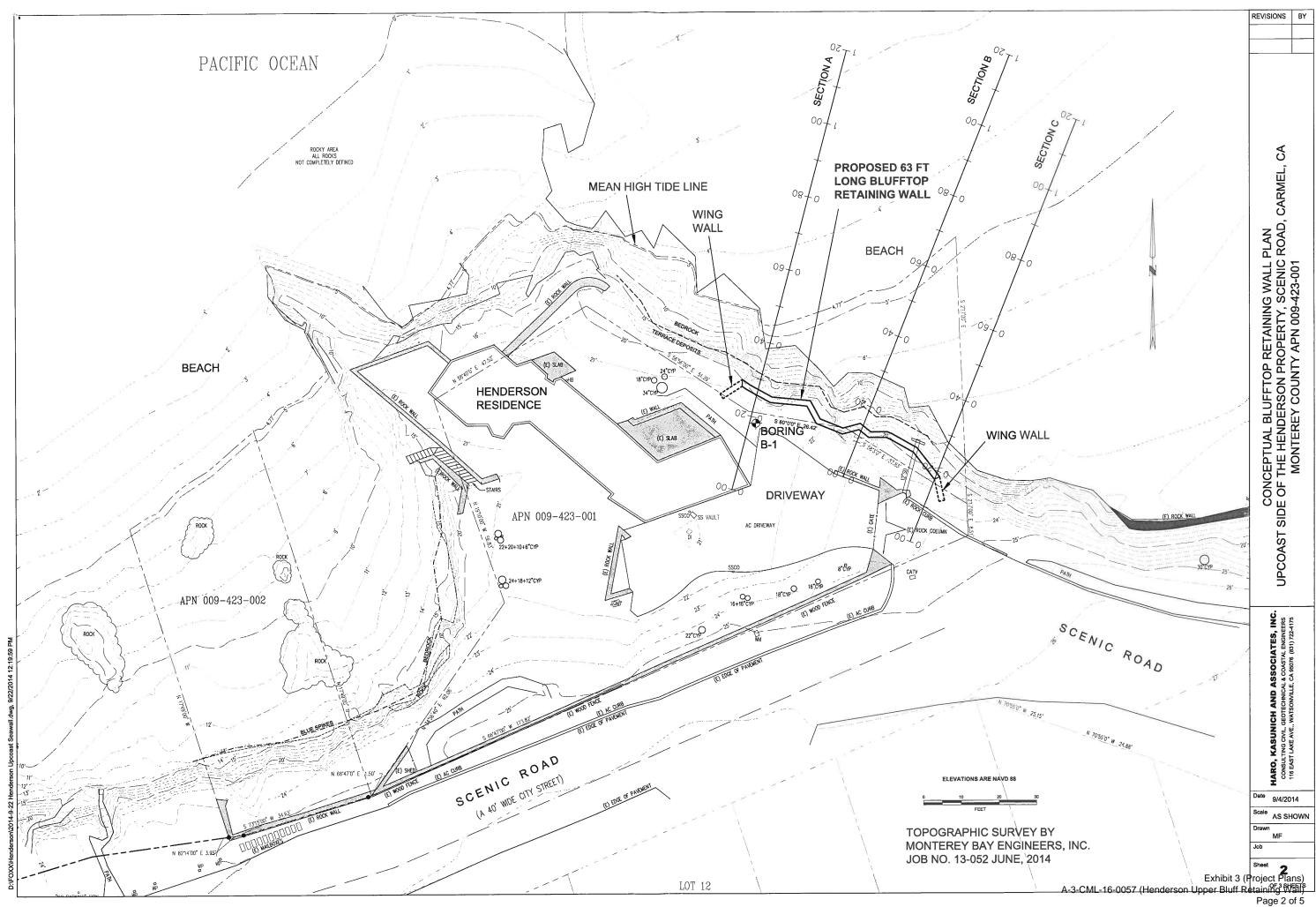
SURVEYOR: MONTEREY BAY ENGINEERS, INC. 607 Charles Ave Suite B Seaside, California 93955 (831) 899-7899 (831)899-7879 FAX



M1066

Exhibit 3 (Project Plans) 4-3-CML-16-0057 (Henderson Upper Bluff Retaining

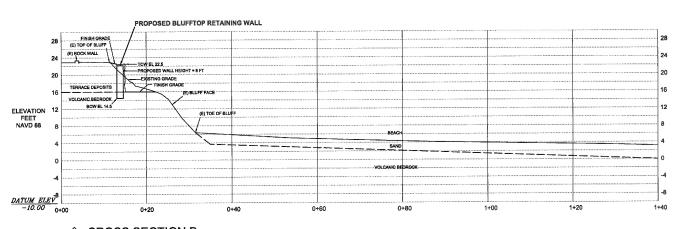
Page 1 of 5



PROPOSED BLUFFTOP RETAINING WALL ELEVATION FEET NAVD 88 DATUM ELEV⁸

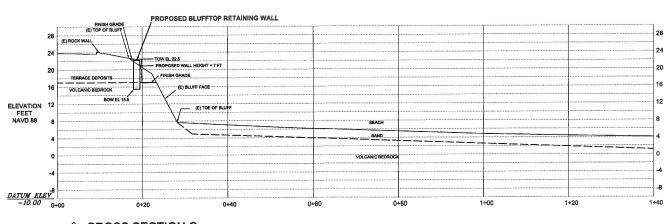
CROSS SECTION A

SCALE: HORIZONTAL: 1" = 10', VERTICAL: 1" = 10'



CROSS SECTION B

SCALE: HORIZONTAL: 1" = 10', VERTICAL: 1" = 10'



CROSS SECTION C

SCALE: HORIZONTAL: 1" = 10', VERTICAL: 1" = 10'

Date 9/4/2014 Scale AS SHOWN

HARO, KASUNICH AND ASSOCIATES, INC. CONSULTING CIVIL, GEOTECHNICAL & COASTAL ENGINEERS 116 EAST LAKE AVE., WATSONVILE, CA 95076 (931) 722-4775

REVISIONS BY

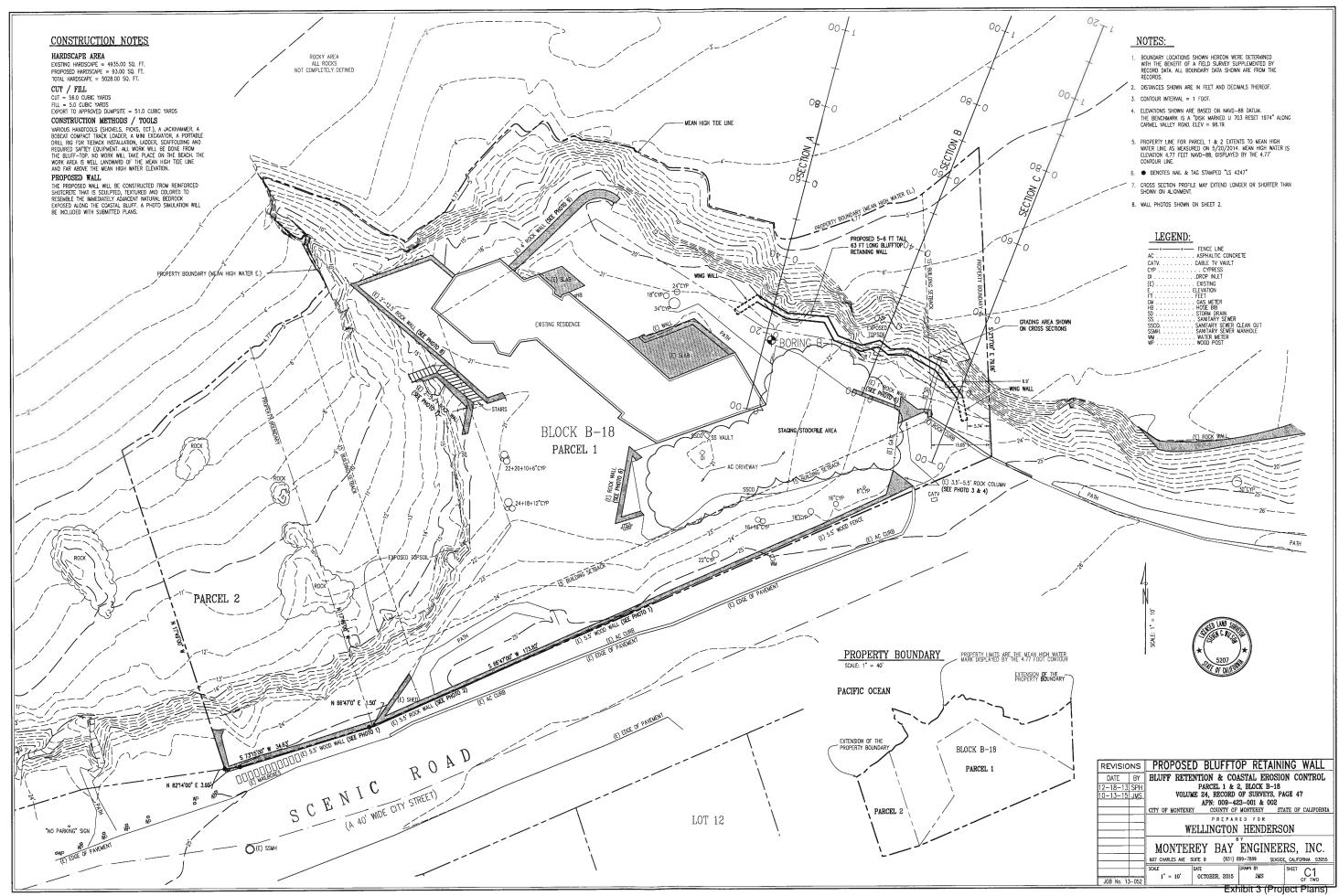
S

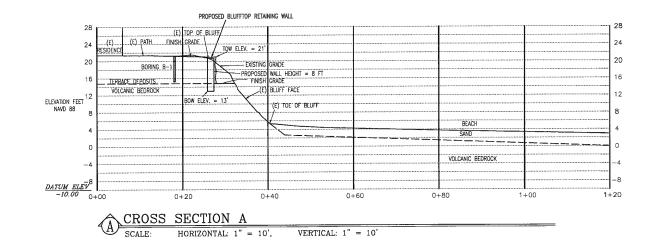
CONCEPTUAL BLUFFTOP RETAINING WALL CROSS SECTIONS UPCOAST SIDE OF THE HENDERSON PROPERTY, SCENIC ROAD, CARMEL, MONTEREY COUNTY APN 009-423-001

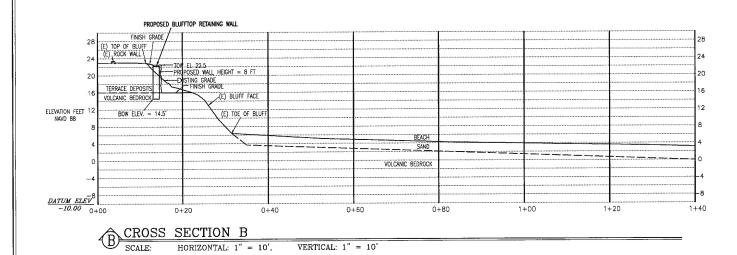
MF

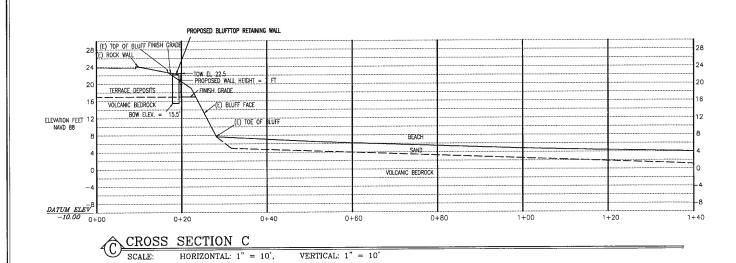
Exhibit 3 (Project Plans)

A-3-CML-16-0057 (Henderson Upper Bluff Retaining Wall)









WALL PHOTOS



PHOTO 1



PHOTO 2



PHOTO 3



PHOTO 4



<u>PHOTO 5</u>



PHOTO 6



PHOTO 7



<u>PHOTO 8</u>



PHOTO 9



REVISIONS	PROPOSED BLUFFTOP RETAINING WALL
DATE BY	BLUFF RETENTION & COASTAL EROSION CONTROL
12-18-13 SPH	PARCEL 1 & 2, BLOCK B-18 VOLUME 24, RECORD OF SURVEYS, PAGE 47
10-13-15 JMS	APN: 009-423-001 & 002
	CITY OF MONTEREY COUNTY OF MONTEREY STATE OF CALIFORNIA
	PREPARED FOR
	WELLINGTON HENDERSON
	MONTEREY BAY ENGINEERS, INC.
	607 CHARLES AVE SUITE B (831) 899-7899 SEASIDE, CALIFORNIA 93955
JOB No. 13-052	SCALE 1" = 10' DATE OCTOBER, 2015 DAWN BY JMS SHEET C2 OF TWO

Exhibit 3 (Project Plans)

Watson, Michael@Coastal

From: Watson, Michael@Coastal

Sent: Tuesday, February 17, 2015 11:41 AM **To:** 'Andrew Runnoe'; Chuck Henderson

Cc: Marc Wiener (mwiener@ci.carmel.ca.us); Watson, Michael@Coastal

Subject: RE: Henderson Project

Gentlemen,

I apologize for the delay. I located the materials prepared by HKA Associates for the proposed upper bluff armoring project. From the plans it appears the proposed wall is located within the City of Carmel's permit jurisdiction and the CCC's appeal jurisdiction. As a result, the standard of review is the Carmel Local Coastal Program including the Land Use Plan and Implementation Plan (LUP and IP). One of the key policies relevant to this project is LUP policy P5-6 which states in part:

Construct new shoreline armoring in areas previously unprotected only when required to protect existing structures in danger of erosion and when designed to eliminate of mitigate adverse impacts on local shoreline sand supply.

Section 17.20.19.F of the IP further requires a complete assessment of a reasonable range of alternatives to armoring and states in relevant part:

Applicant's shall submit a complete evaluation of a reasonable range of potential alternatives including 1) project alt's that avoid the need for armoring including but not limited to relocation of development; 2) various armoring alt's; 3) "soft" options; and 4) the "no project" alternative. ...

Section 17.20.19.F further requires section of the environmentally least damaging feasible alternative:

The evaluation shall identify the environmentally least damaging feasible alternative that provides effective protection of existing development and minimizes impacts on public access, recreation, scenic resources, and sand supply.

Based on a quick review of the materials, the HKA geotechnical investigation does not appear to establish the threat from erosion. Although they indicate infrequent overtopping may occur with extreme events, the report states the residence is founded on weathered bedrock that is resistant to erosion and a layer of much less resistant terrace deposits. The report does not state the nature of the threat (e.g., the terrace deposits are eroding beneath the foundation of the house and is causing it to collapse). The report further does not include average annual shoreline erosion rates which are needed to establish the degree of threat. And the report does not establish what precisely is threatened (e.g., house, garage, driveway, etc). Finally, we did not see an analysis of the potential impacts to local sand supply or an assessment of a reasonable range of alternatives to the proposed upper bluff armoring.

What this amounts to is that there isn't adequate technical support at this time for the upper bluff armoring consistent with the LCP. Perhaps with additional detail and more rigorous analysis of the shoreline processes in the vicinity of the residence, the necessary criteria will be met to establish a threat. A similarly detailed analysis of sand supply and feasible alternative would also be critical in choosing the appropriate response and ensuring all impacts are fully mitigated. Let me know if you have any further questions.

Mike

From: Andrew Runnoe [mailto:arunnoe@sbcglobal.net]

Sent: Tuesday, February 17, 2015 9:44 AM

To: Watson, Michael@Coastal; Chuck Henderson

Subject: Re: Henderson Project

The address is 26336 Scenic Dr. Carmel. The project is a Bluff Stabilization and Blufftop Retaining Wall. The owners name is Wellington Henderson Jr. The packet was prepared by Haro, Kasunich and Associates. I personally hand delivered the packet almost two months ago, with a cover letter explaining the project. I have attempted contacting you before this with no response. Please let me know if you have the information or not so I can schedule a meeting with you (if need be), or if you believe it already conforms to Carmels Coastal Plan so I can commence with the permitting process with them. I will be waiting for your response. Thank you. Andy Runnoe

Andy Runnoe Runnoe Construction 689 Francis Ave Seaside, CA 93955 CA License #450809 (831)917-5237, (831)394-1800

From: "Watson, Michael@Coastal" < Michael.Watson@coastal.ca.gov >

To: Andrew Runnoe <arunnoe@sbcglobal.net> **Sent:** Tuesday, February 17, 2015 9:30 AM

Subject: RE: Henderson Project

Andrew,

Can you remind me what the project involves (description) and the project address. Mike

From: Andrew Runnoe [mailto:arunnoe@sbcglobal.net]

Sent: Thursday, February 12, 2015 3:12 PM

To: Watson, Michael@Coastal **Subject:** Henderson Project

Mr. Watson, approx. two months ago I contacted you concerning a project we are proposing in Carmel. At the time your earliest available appointment was in Feb. of this year but you informed me that if I dropped a project packet off at your office, you would take a quick look at it when you had the chance. That was over 50 days ago and I still have not heard from you. Have you had a chance to look at the project? did your office staff even get it to you and if so, what has happened to it. Please let me know ASAP as my client wants to move this along. Your attention would be greatly appreciated. Andy Runnoe.

Andy Runnoe Runnoe Construction 689 Francis Ave Seaside, CA 93955 CA License #450809 (831)917-5237, (831)394-1800



Bluff Area – Rendering of proposed wall with stone to match natural rock formations

♣ Anthony A. Ciani, Architect 220 Walnut Street, Pacific Grove, California 93950

ITEM: W16D DATE: 8/10/2016

July 31, 2016

CALIFORNIA COASTAL COMMISSION CENTRAL COAST DISTRICT OFFICE 725 FRONT STREET, SUITE 300 SANTA CRUZ, CA 95060

RE: Appeal Number: A-3-CML-16-0057 Applicant: Wellington S. Henderson, Jr.

Dear Commissioners:

The staff recommendation provides an excellent evaluation and analysis of the conditions and issues regarding the proposed seawall project. The principle structure is not in danger from erosion due to threats from the sea, therefore, it is not a candidate for a sea wall, and the CDP approved by the City of Carmel raises a substantial issue of statewide concern. The Coastal Commission has established a precedent of not approving sea walls or other armoring devices to protect accessory structures; and approval of this permit could erode that policy.

CEQA and the Coastal Act require projects that may result in significant adverse impacts to the environment consider "all reasonable alternatives' that could reduce the impacts to the maximum extent feasible. The proposed project and administrative review did not provide that analysis. Certainly, the analysis should determine whether or not the primary erosion of these granite formations is a result of the the forces of the ocean, not surface or subterranean runoff from above. The study should consider a smaller specific repair and restoration of the subject "hole"; or, how to work with the problem and natural conditions to avoid the need for a sea wall. Moreover, the existing building is an iconic masterpiece architect Frank Lloyd Wright, who designed structures in response to the natural setting. Construction of the proposed sea wall would substantially degrade the <u>authentic</u> aesthetic quality of natural setting that Wright built in.

I urge you to adopt the staff recommendation that the project presents a substantial issue and require a de novo hearing. I also request that the applicant and staff provide you with alternative solutions less damaging to the environment, including the "no project" option.

Respectfully,

Anthony A. Ciani Historic Preservation Architect Nancy Joyce Runyon 1195 Hoffman Avenue Monterey, CA 93940

August 25, 2016

California Coastal Commission Central Coast District Office 725 Front Street Suite 300 Santa Cruz CA 95060

Attn: Mike Watson, Coastal Planner Michael.Watson@coastal.ca.gov

Re: Coastal Development Permit Appeal # A-3-CML-16-0057 (Henderson) SUPPORT of the Bluff Top Retaining Wall project

Dear Chair Kinsey and Commissioners:

I am writing to express my strong support for the Henderson Bluff Top Retaining Wall Project which will come before you at the upcoming Coastal Commission hearing in September in Newport Beach.

This Frank Lloyd Wright masterpiece has been admirably cared for and shared with the public by the original family members. I was impressed by this landmark home, seeing it in the movies long before I had a chance to visit. It cannot be allowed to be destroyed by not taking an appropriate action.

The retaining wall proposed by Mr. Henderson has been approved by the City of Carmel after a rigorous process. Similar projects have been constructed in the area. The project is appropriate in both scale and size and is fully consistent with the City of Carmel's Local Costal Plan and the Coastal Act. This project will be an attractive solution to what could become an ugly major danger to this soon to be National Register of Historic Places property and spread along the public right of way in one of the most scenic areas of our coast.

Please approve the Henderson's Bluff Top Retaining Wall Project at your September hearing.

Sincerely,

Nancy Joyce Runyon

Sent by email and U. S. mail to:
Michael Watson (<u>Michael.Watson@coastal.ca.gov</u>)
Susan Craig, District Manager (<u>Susan.Craig@coastal.ca.gov</u>)
Dan Carl, Deputy Director (Dan.Carl@coastal.ca.gov)