

CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4402
(619) 767-2370



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[Click here to go to 1st addendum](#)

W 13f

2nd Addendum

May 10, 2016

To: Commissioners and Interested Persons

From: California Coastal Commission
San Diego Staff

Subject: Addendum to **Item W13f**, Coastal Commission Permit Application
#6-16-0340 (Moss), for the Commission Meeting of May 11, 2016

The purpose of this addendum is to add the applicant's letter of support for the staff recommendation.

1. The attached the Applicant's response letter dated May 9, 2016 shall be added as Exhibit #5 to the staff report.

PETERSON & PRICE

A PROFESSIONAL CORPORATION

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May 9, 2016

File No. 8118.001

Chairman Steven Kinsey and Members
of the California Coastal Commission
3501 Civic Center Drive, Suite 329
San Rafael, CA 94903-4193

**THIS WRITTEN MATERIAL IS SUBMITTED TO THE CALIFORNIA
COASTAL COMMISSION IN ACCORDANCE WITH THE EXPARTE
COMMUNICATION REQUIREMENTS OF PUBLIC RESOURCES
CODE SECTIONS 30319-30324. THIS MATERIAL IS A
MATTER OF PUBLIC RECORD.**

Re: Wednesday, May 11th, 2016
Agenda Item No. 12a – Extension of Time
Application No. A-6-CII-08-028-E6
Agenda Item No. 13f – Permit Application
Application No. 6-15-0142

Dear Chairman Kinsey and Members of the California Coastal Commission:

We represent Steve and Janet Moss with regard to the above referenced matters. We have reviewed the Staff Reports as well as the Addendum dated May 6, 2016. We understand that Staff believes that there is a change in circumstances and that they also wanted to look at the various issues concerning the home again. As such Staff has recommended denial of the extension request (Item 12a). Staff has also reviewed all the updated reports that were requested and has supplemented the special conditions. Staff is recommending approval of the new application as Agenda Item No. 13f.

Chairman Steve Kinsey and Members of the
California Coastal Commission
May 9, 2016
Page 2 of 2

Our clients will not oppose the denial of the extension, provided that the California Coastal Commission as Item 13f subsequently approves their requested home as recommended by Staff and as clarified in the Addendum dated May 6, 2016.

We appreciate Staff working with us concerning this matter. Thank you for your consideration.

Sincerely,

PETERSON & PRICE
A Professional Corporation



Matthew A. Peterson

cc: Deborah Lee
Sherylin Sarb
Gabriel Buhr
Toni Ross
Steve & Janet Moss

CALIFORNIA COASTAL COMMISSION

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**W 13f****Addendum**

May 6, 2016

To: Commissioners and Interested Persons

From: California Coastal Commission
 San Diego Staff

Subject: Addendum to **Item W 13f** Coastal Commission Permit Application
#6-16-0340 (Moss), for the Commission Meeting of May 11, 2016

The purpose of this addendum is to make corrections and clarifications to the findings and special conditions. As such, Staff recommends the following revisions to the above-referenced staff report, with deletions shown in ~~strike through~~ and additions underlined:

1. On Page 2 of the staff report, the second paragraph shall be revised as follows:

~~In addition, The geotechnical report submitted by the applicant makes the conclusion that the revetment is not necessary. If the revetment is not necessary to protect the house, it should be removed. However, no work is being proposed to the revetment associated with this CDP application, and therefore the revetment is not formally before the Commission at this time. Furthermore, the revetment in front of the house is part of a larger scale revetment that protects a number of homes located on the west side of Tierra Del Oro Street. Requiring removal of the revetment, without further geologic analysis and additional permit history review of the area, is not justifiable at this time.~~

2. On Page 2 of the staff report, the Resolution of Approval shall be revised as follows:

~~The Commission hereby approves coastal development permit 6-16-0340 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not 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. The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the certified LCP and the public access policies of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or~~

alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

3. On Page 6 of the staff report, Special Condition No. 1 shall be revised as follows:

1. **Revised Final Plans.** PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, final site and construction plans that have been stamped approved by the City of Carlsbad. Said plans shall be in substantial conformance with the revised plans submitted by the applicant, with revisions dated April 9, 2016 by Zavatto Design Group, and shall include the following:

a. The portions of the revetment and private access stairway added subsequent to the effective date of Proposition 20 (Coastal Initiative) shaded and clearly marked "THIS ELEMENT IS NOT PERMITTED BY THIS OR ANY OTHER COASTAL DEVELOPMENT PERMIT."

b. The applicant may include removal of the unpermitted portions of the revetment on the revised plans. If the applicant chooses to include removal of the unpermitted portions of the revetment and private stairway on the revised plans, a Revetment Removal Plan shall be submitted demonstrating the removal activity will be coordinated with the property owner to the south. The Revetment Removal Plan shall also include details pertaining to detailing the equipment, timing, state and estimated amount of, and hauling of rock to be removed. In addition the plan shall include the following:

[...]

(2). Safe Removal of all unpermitted revetment rock without impacting public access and recreation along the beach.

4. On Page 14 of the staff report, the third paragraph shall be revised as follows:

The current proposal includes the demolition of a single-level 2,100 sq. ft. home and the subsequent construction of a three-level 5,450 sq. ft. single-family residence including a 1,078 sq. ft. basement and a 440 sq. ft. garage and on a 13,576 sq. ft. lot. The project site is a coastal blufftop lot located on the west side of Tierra Del Oro, just north of Cannon Road in the City of Carlsbad (ref. Exhibit #1). The site slopes down from Tierra Del Oro, transitioning into a steep coastal bluff. The bottom of the bluff face is currently covered with a large riprap revetment that extends up to approximately +18-20 Mean Sea Level (MSL) (ref. Exhibits #2, 4). The rock revetment is present on all thirteen (13) bluff top lots on Tierra Del Oro Street. Generally speaking the revetment starts off smaller, and constructed from smaller sized rocks at the northern terminus of Tierra Del Oro Street, and becomes more engineered, larger, taller, and comprised of larger rocks heading south. The subject

site represents the midpoint of the revetment, and is the most northern of the larger/engineered section of the revetment. As previously discussed, portions of the riprap revetment on the subject site are permitted and portions are not. However, no work is being proposed to the rock revetment at this time. Thus, the unpermitted portions of the revetment are not before the Commission. There is an existing wooden stairway traversing down the bluff that, with the exception over the bottom section located on top of the revetment, is a confirmed pre-coastal act stairway. A detailed discussion of the unpermitted development on the site is included in **Section H. Unpermitted Development**, of this report.

4. Starting on Page 20 of the staff report, the second paragraph shall be revised as follows:

The Commission's geologist further concluded that there are a number of factors specific to this section of coastal bluff that makes it unique, including that there is a reef located directly west of this bluff has sheltered the beach from wave action, which has provided additional protection for this section of bluff protection. Additionally, the bluff has been protected by the existing rock revetment for an extended length of time and thus natural erosion hasn't occurred along this headland for more than 50 years. In reviewing aerial photos of this section of Carlsbad, it is apparent that this area of the coast is a salient (jutting out) relative to areas immediately to the north and south, and thus erosion rates may be less than those of the surrounding area. However, the combination of these factors makes determining an exact erosion rate for this area infeasible. ~~In addition, it is unclear at this time, that even if the revetment was determined not to be necessary for the proposed structure. Thus, based on all of these factors, staff concludes that more analysis would be required to accurately determine a safe setback location for the home, and whether the home could be subject to hazards within the expected life of the structure if not for the existing rock revetment. In addition, as noted, both the LCP and Coastal Act policies require that the home be sited safely without the revetment and when it is no longer necessary, the revetment in front of the subject site should be removed. However, in this case, and thus requiring a specific setback is problematic. In addition, the proposed development includes a zero front yard setback and a 1 foot rear-yard setback, thus relocation of the home is also not a viable option.~~

As stated above, the City's LCP requires, associated with any proposed development along the shoreline, the submittal of a geotechnical report that demonstrates bluff stability for 75 years, or the expected lifetime of the structure, whichever is greater. In this case, the applicant has submitted a geotechnical report which demonstrates bluff stability and asserts the home's safety for its expected life, without benefit of the existing shoreline protection. However, based on all of factors discussed above, staff concludes that while the applicant has provided the information consistent with the obligations of the City's LCP, a determination for a safe setback for the home is not feasible. In addition, given the site specific variables, staff cannot agree that there is certainty that the home will not ever be subject to geological hazards within the expected life of the structure if not for the existing rock revetment.

However, despite the geologic uncertainty identified above, as conditioned, the project will be consistent with the policies of City's LCP, as well as the applicable policies of the Coastal Act, that limit shoreline protection to the protection of existing structures in danger from erosion. Specifically, Therefore several special conditions have been added to ensure both that the new home will not result in the construction of additional shoreline protection, and that the existing revetment, which cannot be used to protect the new structure, will be addressed, albeit most likely at a future date. With regard to the retention of the revetment, the revetment is part of a larger and contiguous revetment that may provide protection to a number of existing homes located on the west side of Tierra Del Oro Street. Thus, removal of the entire revetment cannot occur until a more exhaustive review of the revetment spanning the entire Tierra Del Oro Street neighborhood can be completed, including permit history, and identification of the specific protection the revetment is currently providing. Finally, the applicant is not proposing any work to the revetment at this time, and; as such, the revetment is not a component of the subject coastal development permit. Thus, requiring removal of the revetment in its entirety along the Tierra Del Oro Street neighborhood is not feasible at this time. However, because the submitted geotechnical report indicates the revetment is not necessary to protect the proposed new development, and a significant portion of the revetment on the subject site is not permitted, **Special Condition No. 1** would allow the removal of the unpermitted portions of the revetment and stairway as conditioned, should the applicant wish to resolve the unpermitted development through this action. However, given that the portion of the revetment that could be removed pursuant to this permit physically abuts the revetment on the property to the south, and removal activity could cause rock to dislodge from the downcoast revetment and spill onto the beach,, it is important to ensure that removal of the unpermitted portion of the revetment on the site is coordinated with the property owner to the south. Therefore, Special Condition No. 1 requires that the Revetment Removal Plan demonstrate that the applicant has coordinated safe removal of the rock with the adjacent property owner to the south. In addition, because such work to remove a portion of the revetment, e.g. operation of machinery on the beach, could have impacts on public access and marine resources, **Special Condition No. 1** further requires a number of provisions that would limit the timing and location of work, and include construction related BMPs. Should the applicant choose to retain the unpermitted portion of the revetment as this time; the resolution of this matter is discussed in greater detail in **Section H, Unpermitted Development**, below.

6. On Page 22 of the staff report, the second paragraph shall be revised as follows:

In conclusion, the proposed home may become at risk of erosion within its expected lifetime. However, new structures are not permitted to rely on shoreline protection, and allowing the revetment to be permitted and retained for purposes of protecting the proposed structure would be inconsistent with the City's LCP and would result in impacts to coastal resources inconsistent with both the City's LCP and the public access and recreation policies of the Coastal Act. ~~However, given the uncertainty of the site, as well as the protection the revetment is providing to adjacent structures, removal of the revetment cannot be required at this time.~~ However, should the applicant choose to remove the unpermitted portions of the revetment on their

property, such removal is authorized by this CDP. If the applicant chooses to retain the rock at this time, a number of special conditions have been included that require the applicant and any future owner of the property to acknowledge and assume the risks present on the site and waive the right to any future shoreline protection or maintenance of the existing revetment to protect the existing structure. Thus, as conditioned, the Commission can be assured that the proposed development is not considered reliant upon existing shoreline protection. Thus, as conditioned the project is consistent with the applicable policies of the City's certified LCP.

7. On Page 22 of the staff report, the third paragraph shall be revised as follows:

The proposed project does not include any new development on the coastal bluff. As proposed, the westernmost portion of the first level includes a patio area that is located approximately one foot inland of the bluff edge and the grading associated with this patio is surficial and consists solely of removal of existing fill. Thus, the proposal also does not require any grading of the bluff, consistent with the City's LCP. There is, however, existing development on the bluff that will remain, consisting of a wooden private access stairway, a portion of which was originally constructed prior to the enactment of the Coastal Act (ref. Exhibit #3). No work is proposed to this stairway at this time. In addition, a portion of this private stairway is located on top of the existing rock revetment. This section of the stairway was reconstructed when rock was added to the revetment after the enactment of the Coastal Act and without benefit of a coastal development permit and thus, the portion of the stairway located on top of the rock revetment may have ~~has~~ lost its legal non-conforming status. As such, the portion of the private stairway located on top of the existing revetment is considered to be unpermitted and is discussed in greater detail below in the **Section H. Unpermitted Development** section of this staff report. Therefore, as the project does not proposed any work (development or grading) of the coastal bluff, it can be found consistent with the City's LCP as proposed.

8. On Page 26 of the staff report, the second paragraph shall be revised as follows:

As discussed above in detail, it also is important to site development appropriately to avoid the need for shoreline protection in the future. In addition, allowing the retention of existing shoreline protection to address such threats could conflict with City of Carlsbad LCP Policies as well as Coastal Act requirements regarding public access and recreation, shoreline sand supply, and protection of views to and along the shoreline. Shoreline structures can have a variety of negative impacts on coastal resources including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, including an ultimate result in the loss of beach. Policy 4-1 acknowledges that such devices impact shoreline sand supply and thus requires elimination and/or mitigation of such impacts. The City's Implementation Plan Section 21.204.040 further acknowledges that such shoreline protective devices may have impacts on public access and thus requires seawalls to be constructed essentially parallel to the base of the bluff and requires that such shoreline protection shall not obstruct or interfere with the passage of people along the beach at any time. At this time, no work to the existing revetment is

proposed. That said, a significant portion of the revetment is not permitted, and the applicant has submitted a geotechnical report that indicates the revetment is not necessary to protect the existing structure. As discussed in detail below under **Section H**, the Commission is not currently requiring that any portion of the revetment be removed. However, given that the revetment is not required to protect the subject development, the applicants should be permitted to remove the unpermitted portion of the revetment if they so desired to resolve the violation. However, work to remove the unpermitted rock at this location could inadvertently have the potential to cause rock from the adjacent downcoast revetment to spill onto the sandy beach, which would adversely impact public access and recreation because the rock would occupy public beach area otherwise available to the public. As such, **Special Condition No. 1** would allow the applicants to remove portions of the unpermitted revetment on their property with this action, if it can be demonstrated that the applicants have coordinated with the property owner to the south to safely remove the rocks in a way that prevent rocks from the downcoast revetment from spilling onto the public beach and impacting public access and recreation. Thus, there is the opportunity for a large section of beach, currently being occupied by the unpermitted portion of the applicant's rock revetment, to become open and available for public use.

9. On page 31 of the staff report, the fourth paragraph shall be revised as follows:

In addition to the unpermitted rock, aerials show that a private stairway was located on top of the revetment prior to the Coastal Act. However, given the amount of new rock added when the revetment was repaired, it is unlikely that the pre-coastal stairway on the revetment could have remained in place when the revetment was substantially enlarged, but was instead removed and rebuilt on the expanded revetment. When the stairway portion on top of the revetment was removed and reconstructed, it may have lost its legal non-conforming status. Thus, the private stairway located on top of the existing revetment is also unpermitted and is prohibited by the City of Carlsbad's LCP.

10. On Page 34 of the staff report, the second paragraph shall be revised as follows:

Section 21080.5(d)(2)(A) of CEQA prohibits the Commission from approving a proposed development 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 proposed project has been conditioned in order to be found consistent with the LCP and the public access and recreation policies of Chapter 3 policies of the Coastal Act. Special conditions have been included that require the applicant's acknowledgement that the home is sited in an unsafe location and may be subject to hazards associated with storm events, wave activity and flooding. In addition, the project has been conditioned to require the applicant to waive their rights to any future shoreline protection. Both conditions have been included to assure the changes to the bluff, through natural erosion, storm events, and potential sea level rise will be accommodated without the construction of a new shoreline protective device. Conditions have been included that will provide for a new

public access easement on the western boundary of the property, and will remove any development (revetment rock) which is located seaward of the MHTL; both conditions will provide additional and/or new public access. Additional conditions have been included that will prevent impacts to public access during construction, require landscaping to be native and non-invasive and chosen in the manner that will open public views from Tierra Del Oro Street through the sideyard setbacks on the property and to the ocean. Finally, special conditions have been included that will assure drainage will be filtered and not flow down the coastal bluff face.

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**W 13f**

| | |
|---------------|------------|
| Filed: | 5/11/2016 |
| 180th Day: | 11/11/2016 |
| Staff: | T. Ross-SD |
| Staff Report: | 4/28/16 |
| Hearing Date: | 5/11/16 |

STAFF REPORT: REGULAR CALENDAR

| | |
|------------------------------|--|
| Application No.: | 6-16-0340 |
| Applicant: | Steve and Janet Moss |
| Agent: | Matthew A. Peterson |
| Location: | 5015 Tierra Del Oro Street, Carlsbad San Diego County (APN 210-020-15) |
| Project Description: | Demolition of an existing 2,100 sq. ft. single family home and subsequent construction of a three-level 5,450 sq. ft. home including a 750 sq. ft. garage on a 13,576 sq. ft. bluff top lot. |
| Staff Recommendation: | Approval with Conditions |

SUMMARY OF STAFF RECOMMENDATION

The primary coastal resource issues raised with the construction of a new home on this site include potential hazards associated with natural coastal erosion and sea level rise, impacts to public access and recreation, a number of environmental impacts associated with the existing and partially unpermitted rock revetment, potential development of the bluff face, and provision of setbacks adequate to preserve existing public views.

With respect to shoreline development and associated hazards, the proposed development is located on a coastal bluff that is currently protected by a rock revetment. Policy 4-1 of the City's LCP mirrors Section 30235 of the Coastal Act, both of which permit the use of

shoreline protection when necessary to protect existing structures. In this case, the proposal includes construction of a new home, thus, location of the home should be sited without the necessity for the existing shoreline protection. The applicant has submitted a geotechnical report indicating that the existing revetment is not necessary to ensure the safety and stability of the proposed structure. The Commission's geologist is not in complete agreement with this assessment and believes the revetment may be necessary to protect the proposed home over the life of the structure. However, a number of factors have been identified specific to this section of coastal bluff that makes determining an exact erosion rate for this area difficult. Specifically, due to protection from a natural reef and the amount of time the bluff has been armored, the determination of the precise erosion rate for the area, and thus, identifying a more appropriate setback to ensure development will be safe for 75 years, is problematic.

In addition, if the revetment is not necessary to protect the house, it should be removed. However, no work is being proposed to the revetment associated with this CDP application, and therefore the revetment is not formally before the Commission at this time. Furthermore, the revetment in front of the house is part of a larger scale revetment that protects a number of homes located on the west side of Tierra Del Oro Street. Requiring removal of the revetment, without further geologic analysis and additional permit history review of the area, is not justifiable at this time.

Thus, staff is recommending that the home be permitted in the proposed location—inland of the edge of the coastal bluff and the stringline setback—as required by the LCP. However, because this is construction of a new home, such construction cannot rely upon the existing shoreline protection. Therefore, **Special Condition No. 2** requires the applicant to acknowledge the proposed home is subject to hazards associated with erosion and flooding and **Special Condition No. 3** waives the applicant's and any successor's right to future additional shoreline protection. Thus, the proposed new development will not result in new shoreline protection, nor require the continued existence of the existing shoreline protection. In order to assure no new development will be constructed in an unsafe location and no maintenance work done to the revetment without Commission review, **Special Condition No. 4** requires that all future development be reviewed by the Coastal Commission. **Special Condition No. 14** requires the applicant to survey the existing revetment to establish benchmarks to ensure no future expansion of the revetment. **Special Condition No. 5** requires the applicant record a deed restriction so that future property owners are made aware of these conditions.

While the Commission is not requiring the removal of the revetment at this time, as noted, the submitted geotechnical report indicates that the revetment is not necessary. In addition, the majority of the revetment is unpermitted. As such, should the applicant choose to remove the revetment and thus remove the unpermitted development, **Special Condition No. 1** would permit such removal efforts through this CDP review process. Should the applicant choose to remove the rock through the permit, **Special Condition No. 1** also includes a number of provisions to assure no impacts to public access or coastal resources are incurred associated with this effort. If the applicant chooses to retain the rock at this time, it will remain characterized as unpermitted development. As such, **Special Condition No. 1** further requires the applicant to submit revised plans that

show the portion of the revetment and stairway added without a permit to be shaded and clearly marked as not permitted by this or any other coastal development permit.

Plans submitted by the applicant show that a portion of the existing revetment may be located seaward of the Mean High Tide Line (MHTL). The encroachment of this rock into public beach area would be inconsistent with numerous policies of the City's LCP as well as the Coastal Act. As such, **Special Condition No. 15** requires the applicant obtain a written determination from State Lands Commission indicating the presence (if any) of state lands involved in the development. **Special Condition No. 6** further requires the applicant to conduct a survey of the Mean High Tide Line in consultation with the State Lands Commission. In addition, **Special Condition No. 7** requires the applicant to remove any revetment rock determined to be located seaward of the MHTL. Thus, through the conditions of approval, impacts to public access will be identified and removed, with the result being potential improvement from existing access and recreation opportunities.

Special Condition Nos. 11 & 12 require the submittal of revised landscape plans showing the use of native, drought tolerant and non-invasive plants and final drainage plans indicating all runoff to be filtered through vegetation or other filtering media respectively. **Special Condition Nos. 9 & 13** require water quality BMPs and appropriate disposal of any export material respectively. Finally, **Special Condition No. 8** requires the applicant to limit construction schedules and/or staging areas to times and locations that will not impact the public's access to the beach.

Commission staff, therefore, recommends **approval** of coastal development permit application 6-16-0340 as conditioned herein.

STANDARD OF REVIEW

While the project is being brought to the Commission as a Coastal Development Permit request, the proposed development was originally approved by the Commission as an appeal (ref. A-6-CII-08-028/Moss). The term of this permit was extended five times. A sixth request for extension is being reviewed by the Commission on the same agenda as the subject new permit (A-6-CII-08-038-6/Moss) with a staff recommendation of denial. If the Commission denies the extension request, the subject permit will then be reviewed by the Commission. Pursuant to Section 13169 of the Regulations, once an extension request is denied, and upon submittal of the any additional necessary information, the development shall be set for a full Commission hearing. The result is the subject proposal for development. As such, the standard of review remains the City of Carlsbad's certified Local Coastal Program and the public access and recreation policies of the Coastal Act.

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APPENDICES

[Appendix A – Substantive File Documents](#)

EXHIBITS

[Exhibit 1 – Project Location](#)

[Exhibit 2 – Aerial of Site](#)

[Exhibit 3 – Project Plans](#)

[Exhibit 4 – Aerial of surrounding development](#)

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit Application No. 6-16-0340 subject to the conditions set forth in the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval 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.

Resolution:

The Commission hereby approves coastal development permit 6-16-0340 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not 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 complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

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

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Revised Final Plans.** PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, final site and construction plans that have been stamped approved by the City of Carlsbad. Said plans shall be in substantial conformance with the revised plans submitted by the applicant, with revisions dated April 9, 2016 by Zavatto Design Group, and shall include the following:
 - a. The revetment and private access stairway added subsequent to the effective date of Proposition 20 (Coastal Initiative) shaded and clearly marked “THIS ELEMENT IS NOT PERMITTED BY THIS OR ANY OTHER COASTAL DEVELOPMENT PERMIT.”
 - b. The applicant may include removal of the unpermitted revetment on the revised plans. If the applicant chooses to include removal of the unpermitted revetment on the revised plans, A Revetment Removal Plan shall be submitted detailing the equipment, timing, state and estimated amount of, and hauling of rock to be removed. In addition the plan shall include the following:
 - (1). Identification of all unpermitted revetment rock.
 - (2). Removal of all unpermitted revetment rock.
 - (3). Disposal of all removed rock to an appropriate disposal site located outside the coastal zone.
 - (4). All work shall take place during daylight hours, and lighting of the beach area is prohibited.
 - (5). When transiting on the beach and performing construction, all construction vehicles shall remain as close to the bluff edge as possible and shall avoid contact with ocean waters.
 - (6). All construction materials and equipment placed on the beach during daylight construction hours shall be stored beyond the reach of tidal waters. All construction materials and equipment shall be removed in their entirety from these areas by sunset each day that work occurs, except for construction area boundary fencing where such fencing is necessary for public safety. Fencing shall be placed as close to the toe of the revetment or bluff as

possible, may not block lateral access along the beach, and shall only be employed to the minimum extent possible. Construction equipment stored at the designated storage and staging area shall be consolidated such that it takes up the minimum amount of space and does not impact public access to the beach.

- (7). Construction, including but not limited to construction activities, materials and equipment storage, is prohibited outside of the defined construction, staging, and storage areas.
- (8). No work on the beach on weekends, holidays or from the Friday [or Saturday] of Memorial Day weekend through Labor Day of any year unless the Executive Director authorizes such work. Construction work shall be conducted over a maximum of five days.
- (9). Equipment washing, servicing, and refueling shall not take place on the beach. Appropriate best management practices shall be used to ensure that no spills of petroleum products or other chemicals take place during these activities.
- (10). The construction site shall maintain good construction site housekeeping controls and procedures including measures to clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain, including covering exposed piles of soil and wastes; dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; and remove all construction debris from the beach.
- (11). The Permittees shall notify planning staff of the Coastal Commission's San Diego Coast District Office at least three working days in advance of commencement of construction, and immediately upon completion of construction.
- (12). The applicant shall remove the unpermitted revetment within one (1) year of submittal of the Revetment Removal Plan. The Executive Director may grant additional time for good cause.

The permittee shall undertake the development according to the approved plans. Any proposed changes to the approved plans, shall be reported to the Executive Director. No changes to the plans or the development authorized in those plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

2. Assumption of Risk, Waiver of Liability and Indemnity

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from waves, storm events, bluff retreat, and erosion; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents,

and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

3. No Future Bluff or Shoreline Protective Device(s) to Protect the Proposed Development.

- a) By acceptance of this permit, the applicant agrees, on behalf of itself and all other successors and assigns, that the existing rock revetment shoreline protective device on the subject site shall not be repaired, enhanced/augmented or reconstructed for purposes of protecting the development approved by this coastal development permit with the exception of maintenance necessary for the protection of existing and permitted structures located south of the development. No new shoreline or bluff protective device(s) shall ever be constructed to protect the development approved pursuant to Coastal Development Permit No. 6-16-0340 including, but not limited to, the residence, foundations, patios, balconies and any future improvements, in the event that the development is threatened with damage or destruction from erosion, landslides, waves, storm conditions, flooding, sea level rise or other natural coastal hazards in the future. By acceptance of this permit, the applicant hereby waives, on behalf of themselves and all successors and assigns, any rights to augment, maintain or construct such devices that may exist under Public Resources Code Section 30235 or the certified Local Coastal Program.
- b) On acceptance of this Permit, the applicant and the landowner further agree, on behalf of themselves and all successors and assigns, that the landowner(s) shall remove the development authorized by this Permit, including the residence, foundations, patios, balconies and any other future improvements if any government agency has ordered that the structures must not to be occupied due to any of the hazards identified above. In the event that portions of the development fall to the beach before they are removed, the landowner shall remove all recoverable debris associated with the development from the beach and ocean and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit, unless the Executive Director determines a permit is not legally required.

- 4. Future Development.** This permit is only for the development described in Coastal Development Permit No. 6-16-0340. Pursuant to Title 14 California Code of Regulations Section 13250(b)(6), the exemptions otherwise provided in Public Resources Code Section 30610(a) shall not apply. Accordingly, any future improvements to the proposed single family residence, including but not limited to repair and maintenance identified as requiring a permit in Public Resources Code section 30610(d) and Title 14 of the California Code of Regulations, section 13252(a)-(b), shall require an amendment to permit No. 6-16-0340 from the California Coastal Commission.

5. **Deed Restriction.** PRIOR TO THE ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval documentation demonstrating that the landowner has executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property subject to the terms and conditions that restrict the use and enjoyment of that property, and (2) imposing the special conditions of this permit as covenants, conditions, and restrictions on the use and enjoyment of the property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence or with respect to the subject property.

6. **Survey of Mean High Tide.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit a site specific determination of the current location of the Mean High Tide Line (MHTL). Said survey shall be conducted with the consultation and written approval of the State Lands Commission.

7. **Removal of Revetment Rock Seaward of the MHTL/As-Built Revetment Plans.** If, as a result of the survey required by Special Condition No. 6, it is determined that any portion of the existing rock revetment is located seaward of the MHTL or on state lands, the applicant shall submit a Revised Revetment Plan PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT that includes the following:
 - a. Identification of all revetment rock located seaward of the MHTL.
 - b. Removal of all revetment rock located seaward of the MHTL.
 - c. Disposal of all removed rock to an appropriate disposal site located outside the coastal zone.
 - d. Construction work or equipment operations shall not be conducted below the mean high tide line unless tidal waters have receded from the authorized work areas. Whenever possible, the excavator shall remain above the mean high tide line, and the mechanical extension arm shall be used to retrieve rocks that have slumped below the mean high tide line.
 - e. Grading of intertidal areas is prohibited. Existing rock that has migrated seaward of the revetment, that is naturally exposed, and that can be retrieved without substantial excavation of the surrounding sediments, shall be retrieved and re-stacked.
 - f. Within ninety (90) days following the submittal of the Revised Revetment Plan, the permittees shall submit for review and written approval of the Executive Director, as-built plans for the revetment as revised herein. The Executive Director may grant additional time for good cause. The as-built plans shall include a survey of the existing revetment, prepared by a licensed surveyor. The

plans shall identify permanent benchmarks from the property line or another fixed reference point from which the elevation and seaward limit of the revetment can be referenced for measurements in the future, and shall specifically indicate the following:

1. The location of the toe of the existing revetment.
2. The maximum elevation of the top of the revetment.

8. **Storage and Staging Areas/Access Corridors.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit to the Executive Director for review and written approval, final plans indicating the location of access corridors to the construction site and staging areas, including any storage or staging associated with any work to the revetment as required by Special Condition Nos. 7 and 8. The final plans shall indicate that:

- a. No overnight storage of equipment or materials shall occur on sandy beach or public parking spaces. During the construction stages of the project, the permittees shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the intertidal zone at any time. Construction equipment shall not be washed on the beach or within public parking lots.
- b. Worker access corridors shall be located in a manner that has the least impact on public access to and along the shoreline.
- c. No work authorized by this CDP shall occur on the beach on weekends, holidays or from the Friday [or Saturday] of Memorial Day weekend through Labor Day of any year.
- d. The applicants shall submit evidence that the approved plans and plan notes have been incorporated into construction bid documents. The applicants shall remove all construction materials/equipment from the staging site and restore the staging site to its prior-to-construction condition within 24 hours following completion of the development.

The permittees shall undertake the development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the final plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

9. **Water Quality--Best Management Practices.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit for review and written approval of the Executive Director, a Best Management Plan that effectively assures no construction debris will be allowed onto the sandy beach or allowed to enter into coastal waters associated with either construction of the home or any

work to the revetment as required by Special Condition Nos. 7 and 8. All construction debris shall be properly collected and disposed of off-site.

The applicants shall undertake the development in accordance with the approved plan. Any proposed changes to the approved Plan shall be reported to the Executive Director. No changes to the plan shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

10. **Other Special Conditions of local CDP No.05-46.** Except as provided by this coastal development permit, this permit has no effect on conditions imposed by the City of Carlsbad pursuant to an authority other than the Coastal Act.
11. **Final Landscape/Yard Area Plans.** PRIOR TO THE ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval final landscaping and fencing plans approved by the City of Carlsbad. The plans shall include the following:
 - a. A view corridor a minimum of 6 ft. wide shall be preserved in the north and south side yard areas. All proposed landscaping in these yard areas shall be maintained at a height of three feet or lower (including raised planters) to preserve views from the street toward the ocean. Any gates or fencing across the side yard setback areas shall be at least 75% see through/open.
 - b. All landscaping shall be drought tolerant and native or non-invasive plant species. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Exotic Pest Plant Council, or identified from time to time by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as “noxious weed” by the State of California or the U.S. Federal Government shall be utilized within the property.
 - c. No permanent irrigation system may be installed west of the established bluff edge location at +36 MSL.
 - d. All irrigation installed inland of the bluff edge and utilizing potable water must utilize only drip or micro spray systems for delivery.
 - e. A written commitment by the applicant that five years from the date of the issuance of coastal development permit No. 6-16-0340, the applicant will submit for the review and written approval of the Executive Director a landscaping monitoring report, prepared by a licensed Landscape Architect or qualified Resource Specialist, that certifies whether the on-site landscaping is in conformance with the landscape plan approved pursuant to this special condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the landscape monitoring report indicates the landscaping is not in conformance with or has failed to meet the performance standards specified in the landscaping plan approved pursuant to this permit, the applicant, or successor in interest, shall submit a revised or supplemental landscape plan for the review and written approval of the Executive Director. The revised landscaping plan must be prepared by a licensed Landscape Architect or Resource Specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

The applicant shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No changes to the plans shall occur without a Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

12. **Drainage Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit for the review and written approval of the Executive Director, a final drainage and runoff control plan, with supporting calculations, that has been approved by the City of Carlsbad. This plan shall include the following requirements:

- (a) The plans shall be prepared by a licensed engineer and shall incorporate structural and non-structural Best Management Practices (BMPs) designed to control the volume, velocity and pollutant load of stormwater leaving the developed site.
- (b) Drainage from all roofs, parking areas, driveways, and other impervious surfaces within the development shall be directed to a structural BMP, such as a biofiltration swale or media filter device(s).
- (c) Structural BMPs shall be effective at removing pollutants such as sediment, nutrients, bacteria, and chemicals from all rainfall events up to and including the 85th percentile, 1-hour storm event with a factor of safety of 2 or more.
- (d) Treated runoff, and stormwater runoff in excess of the treatment design flow, shall be conveyed off-site in a non-erosive manner, without allowing runoff to percolate into the bluff face.
- (e) The plan shall specify all maintenance and operating procedures necessary to keep the structural and non-structural BMPs effective for the life of the development.

The permittee shall undertake development in accordance with the drainage plans. The water quality protection system shall be included in the any proposed changes to the approved plans shall be reported to the Executive Director. No changes to the plans shall occur without a Coastal Commission approved amendment to this coastal

development permit unless the Executive Director determines that no amendment is legally required.

13. **Disposal of Export Material/Construction Debris.** PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall identify the location for the disposal of export material and construction debris. If the site is located within the coastal zone, a separate coastal development permit or permit amendment shall first be obtained from the California Coastal Commission or City of Carlsbad.
14. **Surveyed Revetment Plans.** If the applicant chooses not to remove the revetment as authorized by Special Condition No. 1, and no removal of rock is required as specified by Special Condition No. 8, then PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, a survey of the existing revetment, prepared by a licensed surveyor. The plans shall identify permanent benchmarks from the property line or another fixed reference point from which the elevation and seaward limit of the revetment can be referenced for measurements in the future, and shall specifically indicate the following:
 - a. The location of the toe of the existing revetment.
 - b. The maximum elevation of the top of the revetment.
15. **State Lands Commission Approval.** PRIOR TO THE ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, a written determination from the State Lands Commission that:
 - a. No state lands are involved in the development; or
 - b. State lands are involved in the development, and all permits required by the State Lands Commission have been obtained; or
 - c. State lands may be involved in the development, but pending a final determination of state lands involvement, an agreement has been made by the applicant with the State Lands Commission for the project to proceed without prejudice to the determination.

IV. FINDINGS AND DECLARATIONS

A. SITE HISTORY/PROJECT DESCRIPTION

Site History

Redevelopment of the subject site was originally approved by the City of Carlsbad in February, 2008. The project description at that time included the demolition of the existing 2,100 sq. ft. home and the subsequent construction of a three-level 6,755 sq. ft. single-family residence including a 2,366 sq. ft. basement. The project also included an infinity edge swimming pool, spa and patio proposed to be located cascading down the face of the coastal bluff. The project came to the Commission as an appeal in February, 2008 (ref. CDP No. A-6-CII-08-028). The Commission found Substantial Issue at its June, 2008 hearing and unanimously approved the project with 17 Special Conditions on de novo review in August, 2008. Chief among the conditions imposed was a special condition that required the applicant to submit revised final plans showing removal of all development, not considered ephemeral or capable of being removed, from any portion of the face of the bluff, specifically, the area located west of the +36' MSL bluff edge as determined by the Commission's staff geologist.

In addition, associated with the review of the appeal, the Commission determined that unpermitted development has occurred on the site. Specifically, sometime between May of 1979 and June of 1986; the riprap revetment was significantly enlarged without the benefit of a coastal development permit. In response, the applicant included the retention of the rock as a part of the project description. At that time, the geotechnical reports indicated that the revetment was necessary to protect both the existing and proposed structure, and the Commission approved the retention of the additional rock. Additional special conditions were included that addressed the management, monitoring and future improvements of the revetment and payment of a sand mitigation fee for the quantifiable impacts on shoreline sand supply. However, the majority of these conditions of approval were never met, and the permit was not issued. The applicant has submitted extension requests on an annual basis since that time. However, in 2015 and associated with the applicant's sixth extension request, the Executive Director made the determination that there were changed circumstances that may affect the proposed project's consistency with the certified LCP and the public access and recreational policies of the Coastal Act.

Specifically, the CDP authorized in 2008 failed to assure the safety of the proposed development, in that the geotechnical reports provided did not include any sea level rise analysis and failed to consider if the home could be sited such that the home would not require reliance on existing shoreline protection. The request for extension (A-6-CII-08-028-E6/Moss) is being reviewed by the Commission on the same agenda as the subject new permit, with a staff recommendation of denial for the extension. If the Commission denies the extension request, the subject permit will be then be reviewed by the Commission. Pursuant to Section 13169 of the Regulations, once an extension request is denied, and upon submittal of the any additional necessary information, the development shall be set for a full Commission hearing. The result is the following proposal for development.

Project Description

The current proposal includes the demolition of a single-level 2,100 sq. ft. home and the subsequent construction of a three-level 5,450 sq. ft. single-family residence including a 1,078 sq. ft. basement and a 440 sq. ft. garage and on a 13,576 sq. ft. lot. The project site

is a coastal blufftop lot located on the west side of Tierra Del Oro, just north of Cannon Road in the City of Carlsbad (ref. Exhibit #1). The site slopes down from Tierra Del Oro, transitioning into a steep coastal bluff. The bottom of the bluff face is currently covered with a large riprap revetment that extends up to approximately +18-20 Mean Sea Level (MSL) (ref. Exhibits #2, 4). As previously discussed, portions of the riprap revetment are permitted and portions are not. However, no work is being proposed to the rock revetment at this time. Thus, the unpermitted portions of the revetment are not before the Commission. There is an existing wooden stairway traversing down the bluff that, with the exception over the bottom section located on top of the revetment, is a confirmed pre-coastal act stairway. A detailed discussion of the unpermitted development on the site is included in **Section H. Unpermitted Development**, of this report.

The project includes a zero foot front yard setback, granted through a variance from front yard setback requirements and issued by the City of Carlsbad (20 feet required, 0-foot setback approved). The variance allows more of the flat upper portion of the site to be used for building given the location of the bluff edge and the shallow nature of the lot. The prevailing pattern of development along Tierra Del Oro uses this approach and the City and Commission have approved a zero foot front yard setback in a number of permit decisions on this street (A-6-CII-07-017/Riley; A-6-CII-08-028/Moss; A-6-CII-15-0039/Nolan).

The rear-yard or ocean setback for the development is located just inland of the established bluff edge (+36' MSL). As described above, the development proposed in 2008 included development that cascaded down the face of the coastal bluff. However, in its 2008 action, the Commission found that any development on the face of the bluff would be inconsistent with the City's LCP and required removal of any development proposed beyond the established bluff edge (+36' MSL). On April 09, 2016, the applicant submitted revised plans that removed all development located beyond the bluff edge. Thus, the current proposal does not include any new development beyond the bluff edge.

The project currently before the Commission differs in several ways from the project previously approved in 2008. The development currently being proposed does not include any development beyond the bluff edge, does not include approval and retention of the rock added to the revetment or construction of the private stairway located on top of the revetment both carried out without benefit of a coastal development permit. The current proposal also reduces the proposed basement size from 2,366 sq. ft. to 1,078 sq. ft., and modifies that the location of the garage area from the south to the north side of the lot to the home (ref. Exhibit #3). It should be noted that retention of the unpermitted rock was originally included in the applicant's proposal, but was removed from the proposal after discussions with staff. As described in detail in **Section H**, below, the rock on the subject site is part of a larger revetment fronting several adjacent properties, and cannot be accurately or adequately assessed on a piecemeal basis.

As previously stated, the standard of review is consistency with the certified City of Carlsbad Local Coastal Program, Mello II segment and, because the site is between the sea and the first public road, the public access and recreation policies of the Coastal Act.

B. SHORELINE DEVELOPMENT/HAZARDS/GEOLOGIC STABILITY

The certified Carlsbad Mello II LCP Segment contains policies that address when reliance on shoreline protective devices can be permitted. The City's certified Mello II Land Use Plan (LUP) includes the following policies that address shoreline development and protection. The subject site is also located within, and subject to, the Coastal Resource Protection Overlay Zone and the Coastal Shoreline Development Overlay Zone; both which provide land use regulations along the coastline area including the beaches, bluffs, and the land area immediately landward thereof. The applicable policies are listed below and include:

Policy 4-1, Subsection I. (Development Along Shoreline)

- a. For all new development along the shoreline, including additions to existing development, a site-specific geologic investigation and analysis similar to that required by the Coastal Commission's Geologic Stability and Blufftop Guidelines shall be required; for permitted development, this report must demonstrate bluff stability for 75 years, or the expected lifetime of the structure, whichever is greater...*

Policy 4-1, Subsection III (Shoreline Structures)

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. As a condition of coastal development permit approval, permitted shoreline structures may be required to replenish the beach with imported sand. Provisions for the maintenance of any permitted seawalls shall be included as a condition of project approval.

Projects which create dredge spoils shall be required to deposit such spoils on the beaches if the material is suitable for sand replenishment.

Section 21.204.040.B. (Conditional Beach Uses)

A. Uses substantially similar to the permitted uses listed above may be permitted on the beach subject to this chapter and Chapters 21.42 and 21.50

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

approval, permitted shoreline structures may be required to replenish the beach with imported sand.

Provisions for the maintenance of any permitted seawalls shall be included as a condition of project approval. As a further condition of approval, permitted shoreline structures shall be required to provide public access. Projects which create dredge spoils shall be required to deposit such spoils on the beaches if the material is suitable for sand replenishment. Seawalls shall be constructed essentially parallel to the base of the bluff and shall not obstruct or interfere with the passage of people along the beach at any time.

Section 21.204.110 (Geotechnical Reports)

A. Geotechnical reports shall be submitted to the city planner as part of an application for plan approval. Geotechnical reports shall be prepared and signed by a professional civil engineer with expertise in soils and foundation engineering, and a certified engineering geologist or a registered geologist with a background in engineering applications. The report document shall consist of a single report, or separate but coordinated reports. The document should be based on an onsite inspection in addition to a review of the general character of the area and it shall contain a certification that the development as proposed will have no adverse effect on the stability of the bluff and will not endanger life or property, and professional opinions stating the following:

- 1. The area covered in the report is sufficient to demonstrate the geotechnical hazards of the site consistent with the geologic, seismic, hydrologic and soil conditions at the site;*
- 2. The extent of potential damage that might be incurred by the development during all foreseeable normal and unusual conditions, including ground saturation and shaking caused by the maximum credible earthquake;*
- 3. The effect the project could have on the stability of the bluff.*

B. As a minimum the geotechnical report(s) shall consider, describe and analyze the following:

- 1. Cliff geometry and site topography, extending the surveying work beyond the site as needed to depict unusual geomorphic conditions that might affect the site.*

[...]

- 11. The potential for flooding due to sea surface super elevation (wind and wave surge, low barometric pressure and astronomical tide), wave run-up, tsunami and river flows. This potential should be related to one-hundred and five-hundred-year recurrence intervals.*

In addition, the City's LCP contains provision that limited development on ocean bluffs and include the following:

Mello II LUP Policy 4-1(d):

No development shall be permitted on sand or rock beach or on the face of any ocean bluff, with the exception of access ways to provide public beach access and of limited public recreational facilities.

Section 21.204.050 of the Coastal Shoreline Development Overlay Zone provides:

- a. *Grading and Excavation - Grading and excavation shall be the minimum necessary to complete the proposed development consistent with the provisions of this zone and the following requirements:*
 - 2) *No excavation, grading or deposit of natural materials shall be permitted on the beach or the face of the bluff except to the extent necessary to accomplish construction pursuant to this section.*

As proposed, the project will include demolition of an existing single-story single family home, with the subsequent construction of a larger three-level single family home including a basement, garage and patio area located on a coastal bluff that is subject to erosion. In addition, the lot is currently protected by a rock revetment, portions of which are unpermitted.

Coastal Hazards and Future Shoreline Protection

The Commission has historically evaluated the location of proposed development on a coastal bluff by a combination of 1) a standard minimum distance from the bluff edge and, 2) safe siting of the structure, as demonstrated through a site specific geotechnical reconnaissance. Safe siting of a home has been generally accepted by the Commission to mean that the home at its proposed location will maintain a minimum 1.5 factor of safety against landsliding for its expected life, coupled with expected bluff retreat over its economic life, often assumed to be 75 years. The City of Carlsbad's LCP does not include provisions for a standard minimum geologic setback. As such, the location of development on a coastal bluff in the City of Carlsbad is based on bluff stability and stringline.

In order to assure that a minimum factor of safety of 1.5 be maintained for the life of the development, the setback necessary to attain a 1.5 factor of safety (if any setback is necessary) *today* must be added to the expected bluff retreat over the life of the development. Quantitative slope stability analyses performed in the geotechnical reports submitted demonstrate, to the satisfaction of the Commission's staff geologist, that the bluff does indeed possess a greater than 1.5 factor of safety today. Accordingly, no setback is necessary to assure a 1.5 factor of safety for the development. The setback necessary to assure stability for the life of the development is accordingly equal to the expected bluff retreat over that time, plus a buffer (commonly taken to be 10 feet) to

account for uncertainty in the analyses and to allow some room for remediation measures as the foundations become threatened.

In addition, the City's LCP and the Coastal Act only permit shoreline protective devices when necessary to protect *existing* structures. The subject coastal development permit includes the demolition of the existing home and subsequent redevelopment of a new single family home and, thus, it is also necessary to assure that any new structures would be safe *without* benefit of shoreline protection, which includes the existing revetment.

A geotechnical report for the property submitted in 2008 indicated that the revetment was necessary to protect both the existing as well as the proposed structures. Specifically, the report included the following conclusion:

The existing rock rip rap is necessary to protect the existing home and the existing home is safe with this existing rock rip rap in place. The existing rip rap has provided effective protection for the last 25 years. Prior to the installment of this shoreline protection, we have calculated a bluff erosion rate of 0.33 feet/year in the past 99 years. Using a recession rate of 0.33 feet/year yields a projected, estimated unprotected bluff recession of 25 feet over a period of 75 years. It is our opinion, based on recent observation, that the existing rock rip rap is considered to be tight and secure and based on the anticipated bluff recession rate, should be kept in place to provide protection for the new home for the life of the structure. [emphasis added]

In addition to addressing historical bluff erosion rates to determine the stability of proposed structures, the Commission also requires that geotechnical reports address how changes to California's coast associated with climate change and sea-level rise may affect the proposed structures' long-term stability. An updated geotechnical report, which included review of wave runup and erosion concerns for the property, including the additional hazards associated with sea level rise, was one of the key changed circumstances and new pieces of information necessary to approve development at this location identified in the most recent extension request. In response to this, the applicant has submitted an updated geotechnical report that includes review of the hazards associated with climate change and sea level rise. The report included the following conclusions:

The existing revetment has provided effective protection for at least 35 years. Prior to the installation of this shoreline protection, we had calculated a bluff recession rate of 0.33 feet/year in the past 99 years. Using a recession rate of 0.33 feet/year yields projects, estimated unprotected bluff recession of 25 feet over a period of 75 years. As currently proposed, the main structure is approximately 50 feet landward of the revetment protected bedrock. Using the 0.33 ft/yr erosion rate, the structure will still be safe from shoreline erosion and sea level rise without the revetment in place. [emphasis included]

As such, the geotechnical report submitted in 2007 concluded that the proposed home would require the protection of the existing revetment. The updated report, however, which took into account additional hazards associated with sea level rise, concluded that

the proposed home would not require the protection of the existing revetment. The report went on to clarify how the conclusions could have hanged so drastically between 2008 and the present; and included the following:

...all of the analyses performed by our firm for the original investigation were based on the previous design, which included a swimming pool and other improvements on the lower portion of the site, between the revetment and the main residence. Statements made in our revised addendum report, dated July 9, 2008, regarding the stability of the existing revetment were made prior to the modifications to the proposed project, including the removal of the proposed pool and other improvements to the proposed project. On other words, the revetment would have served to protect the proposed pool but is not needed to protect the proposed house. Our stability analysis was performed without the revetment in place and we achieved a factor of safety 1.5 or greater.

Thus, the applicant's geotechnical report makes the conclusion that given the additional setback provided with the new design (removal of all development located on the bluff face), the revetment is no longer necessary to protect the proposed structure. The Commission's staff geologist has reviewed all submitted geotechnical reports associated with the subject development and identified concerns with the conflicting reports as well as the calculated erosion rate for the property. Specifically, while all of the geotechnical reports provided since 2008 identify an erosion rate of 0.33 ft/yr, a different report, completed by Benumof and Griggs (1999), a peer reviewed FEMA-funded study making use of the then state of the art photogrammetric techniques, identified an erosion rate varying between 1.41 and 1.83 feet/year. The Commission's geologist has reviewed the various geotechnical reports and while not able to identify a specific rate of erosion, based on these conflicting reports and knowledge of erosion rates in the area, cannot agree that the rate of retreat is as low as 0.33 ft/yr, but also does not believe erosion rates would be as high as 1.83 ft/yr.

The Commission's geologist further concluded that there are a number of factors specific to this section of coastal bluff that makes it unique, including that there is a reef located directly west of this bluff has sheltered the beach from wave action, which has provided additional protection for this section of bluff protection. Additionally, the bluff has been protected by the existing rock revetment for an extended length of time and thus natural erosion hasn't occurred along this headland for more than 50 years. In reviewing aerial photos of this section of Carlsbad, it is apparent that this area of the coast is a salient (jutting out) relative to areas immediately to the north and south, and thus erosion rates may be less than those of the surrounding area. However, the combination of these factors makes determining an exact erosion rate for this area infeasible. In addition, it is unclear at this time, that even if the revetment was determined not to be necessary for the proposed structure. Thus, based on all of these factors, staff concludes that more analysis would be required to accurately determine a safe setback location for the home, and whether the home could be subject to hazards within the expected life of the structure if not for the existing rock revetment. In addition, as noted, both the LCP and Coastal Act policies require that the home be sited safely without the revetment and when it is no longer necessary, the revetment in front of the subject site should be removed. However,

in this case, it is not feasible to identify a specific erosion rate for the area, and thus requiring a specific setback is problematic. In addition, the proposed development includes a zero front yard setback and a 1 foot rear-yard setback, thus relocation of the home is also not a viable option.

Therefore, several special conditions have been added to ensure both that the new home will not result in the construction of additional shoreline protection, and that the existing revetment, which cannot be used to protect the new structure, will be addressed, albeit most likely at a future date. With regard to the retention of the revetment, the revetment is part of a larger and contiguous revetment that may provide protection to a number of existing homes located on the west side of Tierra Del Oro Street. Thus, removal of the revetment cannot occur until a more exhaustive review of the revetment spanning the entire Tierra Del Oro Street neighborhood can be completed, including permit history, and identification of the specific protection the revetment is currently providing. Finally, the applicant is not proposing any work to the revetment at this time, and; as such, the revetment is not a component of the subject coastal development permit. Thus, requiring removal of the revetment is not feasible at this time. However, because the submitted geotechnical report indicates the revetment is not necessary, and a significant portion of the revetment is not permitted, **Special Condition No. 1** would allow the removal of the revetment as conditioned, should the applicant wish to resolve the unpermitted development through this action. In **addition**, because such work could have impacts on public access and marine resources, **Special Condition No. 1** further requires a number of provisions that would limit the timing and location of work, and include construction related BMPs. Should the applicant choose to retain the unpermitted portion of the revetment as this time; the resolution of this matter is discussed in greater detail in **Section H, Unpermitted Development**, below.

Nevertheless, the construction of a new home and accessory structures on a bluff fronting lot are not entitled to shoreline protection under Policy 4-1 of the City's LCP. Thus, should the revetment be removed through the action, through natural processes, or through a future planned retreat program, there is the potential that the home in its proposed location may be subject to a number of risks including bluff failure and erosion over time. Given that the applicants have chosen to construct the proposed development despite these risks, the applicants must assume the risks. Therefore, **Special Condition No. 2** requires the applicant to acknowledge that the site may be subject to hazards from waves, storm events, bluff retreat, and erosion; and to assume the risks from such hazards.

In addition, allowing the retention of existing shoreline protection to address such threats could conflict with City of Carlsbad LCP Policies as well as Coastal Act requirements regarding public access and recreation, shoreline sand supply, and protection of views to and along the shoreline. Shoreline structures can have a variety of negative impacts on coastal resources including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, including an ultimate result in the loss of beach. Policy 4-1 acknowledges that such devices impact shoreline sand supply and thus requires elimination and/or mitigation of such impacts. The City's Implementation Plan Section 21.204.040 further acknowledges that such

shoreline protective devices may have impacts on public access and thus requires seawalls to be constructed essentially parallel to the base of the bluff and requires that such shoreline protection shall not obstruct or interfere with the passage of people along the beach at any time.

As such, **Special Condition No. 3** requires the applicant to waive on behalf of themselves and all successors and assigns, any rights to new shoreline protection that may exist under Policy 4-1 to protect the proposed development. Because the revetment may not be allowed to protect the existing structure, **Special Condition No. 3** also requires that any maintenance proposed to the existing revetment be for the sole purpose of protecting the existing homes on adjacent properties and not for protection of the development approved through this CDP. **Special Condition No. 5** requires the applicants to record a deed restriction imposing the conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the property. **Special Condition No. 4** requires that all future development improvements on the subject site shall require an amendment to permit No. 6-16-0340 from the California Coastal Commission. Finally, to ensure no expansion of the revetment beyond that shown on the preliminary plans and approved herein, **Special Condition No. 14** requires that a survey be taken of the existing revetment, to determine the existing toe and elevation. The survey must document the toe of the revetment relative to a fixed reference point such as a surveyed property line or street monument. Thus, only as conditioned to ensure that the proposed new development will not result in new shoreline protection, or require the continued existence of the existing shoreline protection, can the proposed new residence be found consistent with the certified LCP.

In conclusion, the proposed home may become at risk of erosion within its expected lifetime. However, new structures are not permitted to rely on shoreline protection, and allowing the revetment to be retained for purposes of protecting the proposed structure would be inconsistent with the City's LCP and would result in impacts to coastal resources inconsistent with both the City's LCP and the public access and recreation policies of the Coastal Act. However, given the uncertainty of the site, as well as the protection the revetment is providing to adjacent structures, removal of the revetment cannot be *required* at this time. However, should the applicant choose to remove the revetment, such removal is authorized by this CDP. If the applicant chooses to retain the rock at this time, a number of special conditions have been included that require the applicant and any future owner of the property to acknowledge and assume the risks present on the site and waive the right to any future shoreline protection or maintenance of the existing revetment to protect the existing structure. Thus, as conditioned, the Commission can be assured that the proposed development is not considered reliant upon existing shoreline protection. Thus, as conditioned the project is consistent with the applicable policies of the City's certified LCP.

Development of a Coastal Bluff

The proposed project does not include any new development on the coastal bluff. As proposed, the westernmost portion of the first level includes a patio area that is located

approximately one foot inland of the bluff edge and the grading associated with this patio is surficial and consists solely of removal of existing fill. Thus, the proposal also does not require any grading of the bluff, consistent with the City's LCP. There is, however, existing development on the bluff that will remain, consisting of a wooden private access stairway, a portion of which was originally constructed prior to the enactment of the Coastal Act (ref. Exhibit #3). No work is proposed to this stairway at this time. In addition, a portion of this private stairway is located on top of the existing rock revetment. This section of the stairway was reconstructed when rock was added to the revetment after the enactment of the Coastal Act and without benefit of a coastal development permit and thus, the stairway has lost its legal non-conforming status. As such, the private stairway located on top of the existing revetment is considered to be unpermitted and is discussed in greater detail below in the **Section H. Unpermitted Development** section of this staff report. Therefore, as the project does not proposed any work (development or grading) of the coastal bluff, it can be found consistent with the City's LCP as proposed.

C. OCEAN "STRINGLINE" SETBACK

The proposed development is located in a region that utilizes stringline policies to regulate the seaward extent of development. The City of Carlsbad's Coastal Shoreline Development Zone has specific policies regarding stringline setbacks. The goal of limiting new development from extending beyond the stringline is to restrict encroachment onto the shoreline/coastal bluffs and to preserve public views along the shoreline.

Section 21.204.050B of the Coastal Shoreline Development Zone states:

New development fronting the ocean shall observe at a minimum, an ocean setback based on "stringline" method of measurement. No enclosed portions of a structure shall be permitted further seaward than allowed by a line drawn between the adjacent structure to the north and south, no decks or other appurtenances shall be permitted further seaward than those allowed by a line drawn between those on the adjacent structure to the north and south. A greater ocean setback may be required for geological reasons and if specified in the Local Coastal Program.

The Commission has historically interpreted the City's stringline provisions to mean that the line of development should be determined by drawing a line connecting to nearest corner of the existing structure to the north to the nearest corner of the existing structure to the south (Ref. CDP Nos. A-6-CII-08-028/Riley; A-6-CII-03-26/Kiko; 6-90-25/Kunkel; 6-90-299/Rowe; 6-92-107/Phillips and 6-95-144/Bownes).

However, in the case, the lot to the north is undeveloped and thus there is no structure to draw the setback from. As previously discussed, this project was first proposed in 2008. At that time, there was a Commission approved development for the lot to the north (ref. CDP No. A-6-CII-07-017/Riley). The applicant used the line of development established through the Commission's approval as the location to draw the stringline from on the

northern side. Thus, in 2008 the applicant drew the stringline, and thus proposed rearward setback, based upon a line from the existing structure to the south and connecting to the line of development approved (but not constructed) on the lot to the north. At that time, the Commission made the following findings for developing a stringline setback based off the location of a structure not built:

...in this case, the line of development allowed by drawing the stringline from the approved, but not built structure is very similar to the location of the stringline that would be drawn using the nearest existing structure. As such, the impacts to public views would be minimal, if any. Further, the proposed stringline is located inland of the existing home proposed for removal and as such, no new precedent will be established in this neighborhood; therefore, the approval of the stringline as proposed will not result in future seaward extension of development in this neighborhood...

Since that time, the permit approving the development to the north has expired. However, as reflected above, the Commission considered the location of the subject home to be supportable even if the home to the north was never constructed. As such, the Commission finds that the above findings are still be applicable. Specifically, the setback for the proposed structure, while drawn using a now expired CDP, is still consistent with or inland of the general pattern of development for the Tierra Del Oro neighborhood. Most of the homes in this area are located in close proximity to one another, and utilize the majority of developable area on each lot (ref. Exhibit #4). Thus, public view opportunity is limited to the established line of development. When standing on the beach looking towards this development (either from the north or south) views are already obstructed by previous development, as many of these homes and accessory structures are sited closer to the water's edge than the home proposed by this project (ref. Exhibit #4). In addition, the angle of the Tierra Del Oro Street impacts the property frontage and the rear of the property is restricted by the location of the bluff edge. As such, development on this site is highly constrained and these constraints must be considered when determining the appropriateness of the standard stringline interpretation. Finally, the stringline, as proposed, will result in the new home being located further inland than the existing home, and could therefore result in the creation of additional public views. As such, the location of the proposed home will not result in any impacts to public views and can be found consistent with the City's LCP as proposed.

This same methodology, connecting a line between adjacent developments, is also utilized by the City's LCP to determine the limit for development of patios, decks, pools, etc. The applicant also proposed a patio/deck stringline utilizing the now expired permit for the lot to the north. However, as proposed, all new patio and deck areas will be located inland of the patio/deck stringline. As discussed in greater detail above, permanent development requiring grading (including decking and patios) must also be located inland of the bluff edge. In this case, the bluff edge is located further inland than the setback established by the patio/deck stringline. Thus, the location of development is limited by the edge of the bluff and not by the stringline. In addition, the proposed patio area will not result in any impacts to public views. As such, the proposed patio and decking areas are consistent with the City's LCP. It should be noted that currently, the

site is developed with an existing and pre-Coastal wooden stairway that traverses down the face of the bluff and no work is being proposed to the stairway at this time. In conclusion, the proposed new deck and patio areas will not result in impacts to public views, and can be found consistent with the City's certified LCP as proposed.

D. PUBLIC ACCESS

Coastal Act Section 30604(c) requires that every coastal development permit issued for any development between the nearest public road and the sea "shall include a specific finding that the development is in conformity with the public access and public recreation policies of [Coastal Act] Chapter 3." The project site is located seaward of the first through public road and the sea. Coastal Act Sections 30210 through 30212, as well as Sections 30220, specifically protect public access and recreation, and state:

Section 30210

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

Section 30211

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

(1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

(2) Adequate access exists nearby, or,

(3) Agriculture would be adversely affected. ...

Additionally, the City of Carlsbad's LCP contains the "Coastal Shoreline Development Overlay Zone", an implementing measure of Carlsbad's certified Mello II LCP and contains an applicable policy, which states:

Policy 7-3

The city will cooperate with the state to ensure that lateral beach access is protected and enhanced to the maximum degree feasible, and will continue to formalize shoreline prescriptive rights....

The project is located on a bluff top site on Tierra Del Oro. The Tierra Del Oro neighborhood is an inlet coastal street that runs parallel with the ocean, and has one entrance and street parking that is open to the public. Currently there is no vertical access to the ocean along Tierra Del Oro. The Commission has previously reviewed public access opportunities within this development and concluded that while there is no access within Tierra Del Oro, access does exist directly north and about 1/3 of a mile south of Tierra Del Oro, allowing the public to access the beach in front of the subject site. The Commission finds that the same is true today, in that public access to the shoreline is currently available a short distance north of the subject site. Therefore, it is not necessary to require public vertical access on the subject site.

As discussed above in detail, it also is important to site development appropriately to avoid the need for shoreline protection in the future. In addition, allowing the retention of existing shoreline protection to address such threats could conflict with City of Carlsbad LCP Policies as well as Coastal Act requirements regarding public access and recreation, shoreline sand supply, and protection of views to and along the shoreline. Shoreline structures can have a variety of negative impacts on coastal resources including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, including an ultimate result in the loss of beach. Policy 4-1 acknowledges that such devices impact shoreline sand supply and thus requires elimination and/or mitigation of such impacts. The City's Implementation Plan Section 21.204.040 further acknowledges that such shoreline protective devices may have impacts on public access and thus requires seawalls to be constructed essentially parallel to the base of the bluff and requires that such shoreline protection shall not obstruct or interfere with the passage of people along the beach at any time. At this time, no work to the existing revetment is proposed. That said, a significant portion of the revetment is not permitted, and the applicant has submitted a geotechnical report that indicates the revetment is not necessary to protect the existing structure. As discussed in detail below under **Section H**, the Commission is not currently requiring that any portion of the revetment be removed. However, given that the revetment is not required to protect the subject development, the applicant should be permitted to remove the revetment if so desired. As such, **Special Condition No. 1** would allow the applicant to remove the revetment with this action. Thus, there is the opportunity for a large section of beach, currently being occupied by the rock revetment, to become open and available for public use.

In addition, the City's LCP requires that any development along the shorefront be required to dedicate 25 feet of dry sandy beach available at all times for lateral public access. Currently, there is no lateral access easement on the property. Unfortunately, during high tides waves crash against the revetment; and, as such, there is not an opportunity to provide any width of dry sandy beach that would be available at all times. Thus, assuring that the public can gain access on the site to the extent feasible becomes increasingly important. As conditioned by the City of Carlsbad, the project will include

dedication of a lateral public access easement with a minimum width of 25 feet for the portion of the beach located west of the existing rock revetment. Thus, while all 25 feet may not be useable at all times, access will be provided to the extent feasible. As such, the project will protect and provide for public access.

In recent years, the Coastal Commission has required applicants to submit a determination from the State Lands Commission as a component of a Coastal Development Permit application. This determination is then used to identify lands subject to the public trust, and help prevent, address, remove and/or mitigate for any potential intrusions into the identified public land(s). Commission staff requested this determination as a component to this follow up permit application. In response, the applicant has requested that in order to expedite the permit process, rather than provide this information prior to Commission action, review by the State Lands Commission be required prior to issuance of the coastal development permit.

In addition, the preliminary plans submitted by the applicant indicate that a portion of the revetment is located seaward of the Mean High Tide Line (MHTL). If the plans submitted are correct, then the rock located seaward of the MHTL could be on land owned by the State and subject to the Public Trust. Commission staff requested the applicant submit a recent MHTL determination as well as cross-sections of the revetment; in order to determine if there is rock located west of the MHTL; and if so, if this rock can be removed. However, in response to this request, the applicant further requested that the survey of the MHTL and the cross-sections of the revetment also be included as a requirement to be fulfilled prior to issuance of the coastal development permit. The applicant has indicated that these requests will greatly delay their ability to receive financing for construction of the home. The applicant has however, agreed to remove any rock located west of the MHTL.

While allowing the State Lands review and the MHTL survey after approval of the CDP is not the Commission's typical approach, there are a couple factors that make this request supportable in this case. First, all development proposed at this time is located well inland of the MHTL and thus it is only the existing revetment that has the potential to impact public access and recreation. Second, no work is being proposed to the revetment at this time. Thus, none of the development currently being proposed and authorized through this permit will have any direct impacts to public access. However, removing any portion of the revetment on public lands will have a positive impact on public access and recreation. The required current MHTL survey will provide the Commission with additional information to address the legality of the revetment as a whole, and should aid in addressing the revetment in a comprehensive manner. There are a number of past permits in which review by State Lands Commission has been required prior to issuance of the permit (CDP Nos. 6-13-0948/Bannasch; 6-13-025/Koman; 6-12-059/Seascape; 6-10-037/City of Solana Beach; 6-05-136/City of Solana Beach). As such, in this case, the Commission finds the request supportable given the nature of the permit and as a means to work cooperatively with the applicant and potentially remove an existing impediment to public access. As such, **Special Condition No. 15** requires the applicant to submit a formal determination by the State Lands Commission of public lands. In addition, **Special Condition No. 6** requires the applicant to submit, in

consultation with the State Lands Commission, a recent MHTL survey specific to the subject site, and; in response to this survey, **Special Condition No. 7** requires the applicant to remove any revetment rock located seaward of the MHTL or on state lands. Therefore, no impacts to public access will occur, and as conditioned, if rock is located seaward of the MHTL, the removal of this rock will improve public access opportunities at this location. Thus, only as conditioned herein can the proposal be found consistent with the City's LCP and the applicable policies of the Coastal Act.

Finally, the demolition of the existing home and the grading for the basement and reconstruction of the new home will require heavy equipment and staging areas, as well as adequate parking. The laborers required for the project may choose to park their cars within the available on-street parking. The combination of construction materials, equipment and parking requirements may result in decreased access opportunities for the public. As such, **Special Condition No. 8** requires the applicant to identify any locations which will be used as staging and storage areas for materials and equipment during the construction phase of this project and that construction be prohibited on the sandy beach on weekends and holidays during the summer months of Memorial Day weekend to Labor Day of any year.

F. PUBLIC VIEWS

The City of Carlsbad has policies pertaining to the protection of public views and state in part:

Policy 8-1

The Scenic Preservation Overlay Zone should be applied where necessary throughout the Carlsbad coastal zone to assure the maintenance of existing views and panoramas. Sites considered for development should undergo review to determine if the proposed development will obstruct views or otherwise damage the visual beauty of the area. The Planning Commission should enforce appropriate height limitations and see-through construction, as well as minimize alterations to topography.

Section 21.204.100 (B & C) of the Coastal Shoreline Development Overlay Zone states:

- B. Appearance – Buildings and structures will be so located on the site as to create a generally attractive appearance and be agreeably related to surrounding development and the natural environment.*
- C. Ocean Views – Buildings, structures, and landscaping will be so located as to preserve the degree feasible any ocean views as may be visible from the nearest public street.*

The project site is currently developed with a single-family home and public ocean views do not currently exist from Tierra Del Oro across the site and to the ocean. The proposal

includes construction of a three-level, 5,450 sq. ft. single-family residence. The surrounding community is comprised of structures of similar size and scale to the proposed structure. Public views are limited to views of the ocean through the sideyard setback areas of the lot. The applicant has yet to submit a finalized landscape plan. As such, fencing and/or landscaping could be constructed in a manner that may block views from Tierra Del Oro Street to the ocean. The City of Carlsbad does contain provisions for such see-through gates within sideyards. However, the City's provisions would allow for fencing that is only 50% open to light, and does not limit the height of vegetation. As such, the combination of the fencing and landscaping could effectively eliminate public views, inconsistent with the intent of the City's LCP. As such, the Commission has typically required that new residences on Tierra Del Oro include fencing that is 75% open to light, and limit landscaping height (including planters) to 3 feet in height (ref. A-A-CII-07-017/Riley; A-6-CII-08-028/Moss; A-6-15-0039/Nolan). As such, **Special Condition No. 11** requires that any gating of the side yard setback areas of the lot be 75% open so as to allow public views through to the ocean. In addition, **Special Condition No. 11** limits the height of landscaping within the northern sideyard areas to no taller than three feet or lower (including raised planters). This condition will maintain the view corridors remaining in the side yard setback. Therefore, as conditioned, the project can be found consistent with the Coastal Act provisions protecting public coastal views.

G. WATER QUALITY/DRAINAGE/MARINE RESOURCES

The proposed development is located along the Carlsbad shoreline. The City of Carlsbad's LCP contains applicable policies which state, in part:

Policy 4-3

Detached residential homes shall be required to use efficient irrigation systems and landscape designs or other methods to minimize or eliminate dry weather flow, if they are within 200 feet of an ESA[Environmentally Sensitive Area], coastal bluffs or rocky intertidal areas.

Policy 4-6

Apply sediment control practices as a perimeter protection to prevent off-site drainage. Preventing sediment from leaving the site should be accomplished by such methods as diversion ditches, sediment traps, vegetative filters and sediment basins. Preventing erosion is of course the most efficient way to control sediment runoff.

Section 21.204.050 of the Coastal Shoreline Development Overlay zone provides:

1) ...Building sites shall be graded to direct surface water away from the top of the bluff, or, alternatively, drainage shall be handled in a manner satisfactory to the City which will prevent damage to the bluff by surface and percolating water...

Section 21.205.060 of the Coastal Resource Overlay zone provides:

All development must include mitigation measures for the control of urban runoff flow rates and velocities, urban pollutants, erosion and sedimentation in accordance with the requirements of the city's Grading Ordinance, Stormwater Ordinance, SUSMP, JURMP, master drainage plan, the San Diego County Hydrology Manual and amendments to them and the additional requirements enumerated by this section.

The certified Carlsbad LCP Mello II segment contains in its Zoning Plan, Coastal Development Regulations that include a Coastal Resource Protection Overlay Zone and the Coastal Shoreline Development Overlay Zone, which have been cited in this report. The purpose of these overlays, among other purposes, is to provide regulations for development and land uses along the coastline in order to maintain the shoreline as a unique recreational and scenic resource, affording public safety and access, and to avoid the adverse geologic and economic effects of bluff erosion, including siting drainage towards the street rather than the bluff and using appropriate landscape designs to further reduce erosion caused by dry weather flow. The proposed project did not include a detailed drainage plan indicating where the drainage associated with this development would be directed. As such, it is not clear to the Commission that the applicant's drainage would be consistent with the above mentioned policies. As such, **Special Condition No. 12** requires the applicant to submit drainage plans, indicating that all drainage be directed towards the street, thus limited impacts to water quality consistent with the City's applicable policies.

Further, the applicant not submitted a landscape plan associated with the proposal. As such, **Special Condition No. 11** requires the applicant to submit a revised landscape plan using only native, non-invasive and drought tolerant plants. As such, the vegetation would not only filter any runoff prior to reaching coastal waters, but native, drought tolerant plants will require less water and thus will result in fewer impacts to bluff stability. **Special Condition No. 13** requires the applicant to identify the location for the disposal of export material and construction debris and that if the site is located within the coastal zone, a separate coastal development permit or permit amendment shall first be obtained from the California Coastal Commission or its successors in interest; thus reducing any impacts to water-quality through sediment deposit. Finally, as a component of the subject proposal, the applicant may remove a portion(s) of the rock revetment. This work may require the use of heavy machinery on the beach. To prevent to water quality or marine resources through leakage of machinery or associated construction byproduct, **Special Condition No. 10** mandates that no construction debris will be allowed onto the beach or into the ocean.

H. UNPERMITTED DEVELOPMENT

Development has occurred on the subject site without benefit of a coastal development permit. As previously discussed, the original revetment was constructed prior to the Coastal Act. However, aerial photography shows that sometime between May of 1979 and June of 1986 new rock was placed on the beach at the site in order to increase the

size and footprint of the revetment on the beach and to prolong its life; all of which was done without benefit of the necessary Coastal Development permit.

The applicant's geotechnical specialist confirmed the placement of new rock and expansion of the revetment noted above. Commission staff asked the applicant to submit a geotechnical analysis estimating the amount of rock added to the revetment on the subject site between 1979-1986. The geotechnical report authored by Geotechnical Exploration Inc., and dated July 9, 2008 included the follow description of the revetment:

The old revetment, installed prior to the establishment of the Coastal Act, represents an area approximately 35 feet wide by 4 feet deep, totaling 140 square feet. The new revetment installed in the 1980s represents two areas; one approximately 55 feet wide by 16 feet deep and the other 20 feet wide by 4 feet deep, totaling 960 square feet.

Thus, the unpermitted portion of the revetment is approximately 7 times the size of the pre-Coastal Act portion.

In 1978, the seven property owners beginning directly south of the subject site and ending at the southern terminus of the Tierra Del Oro development sought a permit from the Commission for repair and augmentation of the existing revetment in response to damaging storm waves (ref. CDP# F7529). The Commission granted approval for five of the seven lots to make improvements to the revetment, with conditions to require, among other things, a public access easement in front of the revetment. The subject site was not included within this application, and therefore, the placement of rock on this site was not authorized by CDP# F7529, or any other CDP.

In addition to the unpermitted rock, aerials show that a private stairway was located on top of the revetment prior to the Coastal Act. However, given the amount of new rock added when the revetment was repaired, it is unlikely that the pre-coastal stairway on the revetment could have remained in place when the revetment was substantially enlarged, but was instead removed and rebuilt on the expanded revetment. When the stairway portion on top of the revetment was removed and reconstructed, it lost its legal non-conforming status. Thus, the private stairway located on top of the existing revetment is also unpermitted and is prohibited by the City of Carlsbad's LCP.

A third development activity was identified during Commission's review of permit extension A-6-CII-08-028-E6. Specifically, enforcement staff noted that the construction of a wooden skateboard ramp had taken place on the face of the coastal bluff without benefit of the necessary coastal development permit. Development on the bluff, with exception of public access stairways, is prohibited by the City of Carlsbad's LCP. Additionally, this type of development requires a flat surface, and could include below-grade reinforcements, and thus may involve grading of the bluff, which is also prohibited by the City's LCP. In addition, grading and below-grade reinforcements can jeopardize the stability of the bluff. However, in response to the Commission's concerns, the applicant removed the skateboard ramp and submitted a geotechnical report. The report indicates that no grading of the bluff was undertaken associated with construction of the ramp. Commission staff has reviewed the submitted material and agrees that no

substantial grading occurred on the bluff. As such, the concerns regarding the construction of the wooden skateboard ramp have been adequately addressed through removal of the unpermitted development.

Therefore, the unpermitted development on site includes the placement of substantial amounts of rock on the beach, and construction of a private access stairway located on top of the revetment.

The applicant is not proposing to incorporate a request for after-the-fact authorization of placement of the rock or stairway into the current proposal, thus, **Special Condition No. 1** requires submittal of revised project plans including a comment that “THE STAIRWAY AND ROCK ADDED SUBSEQUENT TO THE EFFECTIVE DATE OF PROPOSITION 20 (COASTAL INITIATIVE) IS NOT PERMITTED BY THIS OR ANY OTHER COASTAL DEVELOPMENT PERMIT.” Commission enforcement staff will consider options to address this unpermitted development. In the interim, the applicant may submit revised plans pursuant to **Special Condition No. 1** to remove the unpermitted rock and stairway, and such removal would be authorized by this CDP.

Options for enforcement include, but are not limited to, pursuing monetary penalties under Coastal Act Section 30821. In cases involving violation(s) of public access provisions of the Coastal Act, such as, as is the case here, where the placement of an unpermitted rock revetment both impedes the public’s ability to access the public beach and interferes with shoreline erosion that is beneficial for public access, Section 30821 authorizes the Commission to impose administrative civil penalties in an amount of up to \$11,250 per day for each violation.

Placement of the unpermitted rock revetment affects public access at the site; indeed the Commission found in its 2008 action that the revetment would impact public access. Moreover, in reviewing the subject site, San Diego District staff has identified potential unpermitted additions to revetments on a number of adjacent properties. In addition to being a distinct project, the unpermitted rock on the subject site is also properly characterized as part of a large-scale, multi-property shoreline protective device, significant components of which are unpermitted. Given the connectivity and interdependence of the shoreline protection, the rock on the site should also be analyzed as part of a larger shoreline protective device. As the Commission and local jurisdictions attempt to prepare for the anticipated effects of climate change and sea level rise specifically, it has been recognized that in addition to looking at shoreline protective devices on a lot-by-lot basis, the Commission and local jurisdiction’s must also address cumulative impacts of shoreline protective devices in order to help develop meaningful options to prevent, limit, and mitigate impacts to public beaches associated with shoreline protective devices and sea level rise.

In addition to the application of Section 30821 to the existing unpermitted development, Section 30821 will also apply to non-compliance with certain conditions of the CDP. For instance, special conditions require the applicant to perform a survey of the Mean High Tide Line, and remove any rock (unpermitted or pre-coastal) that is below the MHTL. As described in Section D above, the proposed project will not have any new adverse

impacts on public access and recreation on the beach, and, as conditioned, may open additional area currently impacted. If the applicant fails to comply with the condition of the permit requiring removal of rock from public beach, the applicant or and any subsequent property owner will be subject to additional liability for administrative civil penalties pursuant to Section 30821.

H. LOCAL COASTAL PLANNING

Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding can be made.

The certified Carlsbad LCP Mello II segment contains in its Implementation Program, a Coastal Development (C-D) Overlay Zone, which has been discussed in this report. The purpose of the C-D zone is, among other purposes, to provide regulations for development and land uses along the coastline in order to maintain the shoreline as a unique recreational and scenic resource, affording public safety and access, and to avoid the adverse geologic and economic effects of bluff erosion.

The project includes construction of a new home on a lot that is currently protected by a rock revetment. Both the Coastal Act and the City's LCP include a provision that shoreline protective devices are only permitted when proposed to protect *existing structures*. As such, the construction of the new home cannot rely on the existing shoreline protection. Therefore, a condition has been incorporated herein requiring the applicant to acknowledge that the home is sited in a location that may be subject to hazards from waves, storm eaves, bluff retreat, and erosion. An additional condition has been included providing that no shoreline protective device(s) shall ever be constructed to protect the development approved pursuant to coastal development permit No.6-16-0340 including, but not limited to, the primary residential structure, and any future improvements, in the event the development is threatened with damage or destruction from sea level rise, flooding, erosion, storm conditions, or other natural hazards in the future consistent with Policy 4-1 of the City's certified LCP. Furthermore, **Special Condition No. 10** requires the applicant to adhere to all conditions placed on the proposed development associated with the City's approval. However, with regard to the existing revetment, no work is being proposed to the revetment at this time. The revetment is part of a larger-scale device that protects multiple homes, thus, it is not clear until additional research and analysis is completed, whether removal of any portion of the revetment is feasible. Therefore, no removal of rock is being required at this time except that **Special Condition No. 7** requires removal of any rock currently located seaward of the Mean High Tide Line, as determined by a current survey. Therefore, the Commission finds that approval of the proposed development, as conditioned, will not prejudice the ability of the City to continue implementation of its certified LCP.

I. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits, or permit amendments, to be supported by a finding showing the permit or amendment, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). The City found the project categorically exempt from the requirement to prepare environmental documents, according to CEQA guidelines that exempt certain development. (See Cal. Code of Regs., tit. 14, §§ 15301(l) [demolition of single family residence], 15303(a) [construction of a single family residence], and 15305(a) [variances that do not create a new parcel].)

Section 21080.5(d)(2)(A) of CEQA prohibits the Commission from approving a proposed development 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 proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Special conditions have been included that require the applicant's acknowledgement that the home is sited in an unsafe location and may be subject to hazards associated with storm events, wave activity and flooding. In addition, the project has been conditioned to require the applicant to waive their rights to any future shoreline protection. Both conditions have been included to assure the changes to the bluff, through natural erosion, storm events, and potential sea level rise will be accommodated without the construction of a new shoreline protective device. Conditions have been included that will provide for a new public access easement on the western boundary of the property, and will remove any development (revetment rock) which is located seaward of the MHTL; both conditions will provide additional and/or new public access. Additional conditions have been included that will prevent impacts to public access during construction, require landscaping to be native and non-invasive and chosen in the manner that will open public views from Tierra Del Oro Street through the sideyard setbacks on the property and to the ocean. Finally, special conditions have been included that will assure drainage will be filtered and not flow down the coastal bluff face.

As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

SUBSTANTIVE FILE DOCUMENTS:

- Certified City of Carlsbad Local Coastal Program;
- City of Carlsbad Staff Report for CDP #05-46 dated January February 6, 2008;
- City of Carlsbad Resolution No. 6371;
- Previous Commission reviewed projects A-6-CII-07-017/Riley, A-6-CII-08-028/Moss; Extension Requests A-6-CII-08-028 E1-6; Dispute Resolution 6-09-016;
- GEI Report of Preliminary Geotechnical Investigation; dated April 20, 2007
- GEI Addendum to Report of Geotechnical Investigation; dated April 22, 2008
- GEI Revised Addendum to Report of Geotechnical Investigation; dated July 9, 2008
- GEI Old Revetment vs. New Revetment; dated July 9, 2008
- Geosoils Sand Volume Calculations; dated July 18, 2008
- Geosoils Peer Review; dated August 4, 2008
- GEI Updated Site Observation and Bluff Conditions; Dated January 5, 2016
- GEI Response to California Coastal Commission Staff Report; dated February 4, 2016;
- GEI Response to California Coastal Commission Staff Report; dated April 6, 2016



Poseidon Desal Plant

Agua Hedionda Lagoon

Project Site →

| |
|--|
|  California Coastal Commission |
| EXHIBIT NO. 1 |
| APPLICATION NO. 6-16-0340 |
| Project Location |



| |
|---|
|  |
| EXHIBIT NO. 2 |
| APPLICATION NO. |
| 6-16-0340 |
| Aerial of Site |
| California Coastal Commission |



NOTE:

| | | |
|---------------------|--------|-------|
| ORIGINAL SURVEY | 3-1-04 | 37.33 |
| SUPPLEMENTAL SURVEY | 8-9-05 | 32.80 |

ABBREVIATIONS

| | |
|------|------------------|
| BT | PROPERTIES |
| CONC | CONCRETE |
| COR | CORNER |
| EC | EDGE OF CONCRETE |
| EP | EDGE OF PAVEMENT |
| FL | FLOW LINE |
| FS | FINISHED SURFACE |
| GB | GRADE BREAK |
| GD | GROUND |
| GF | GRADE FINISH |
| GM | GAS METER |
| IP | IRON PIPE |
| TC | TOP OF CURB |
| WM | WATER METER |

LEGEND

| | |
|--|--------------------------------|
| | EXISTING INDEX CONTOURS |
| | EXISTING INTERMEDIATE CONTOURS |
| | EXISTING SPOT ELEVATIONS |
| | TREE/ BRUSH LINE |
| | PROPERTY LIMITS |

RCE
REYNOLDS CIVIL ENGINEERING
 4055 OCEANSIDE BLVD.
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 TELEPHONE (760) 941-6641 FAX (760) 758-1487

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 ZAVDESIGN@EARTHLINK.NET

REVISIONS
 PER CCC MEETING
 04-09-2015

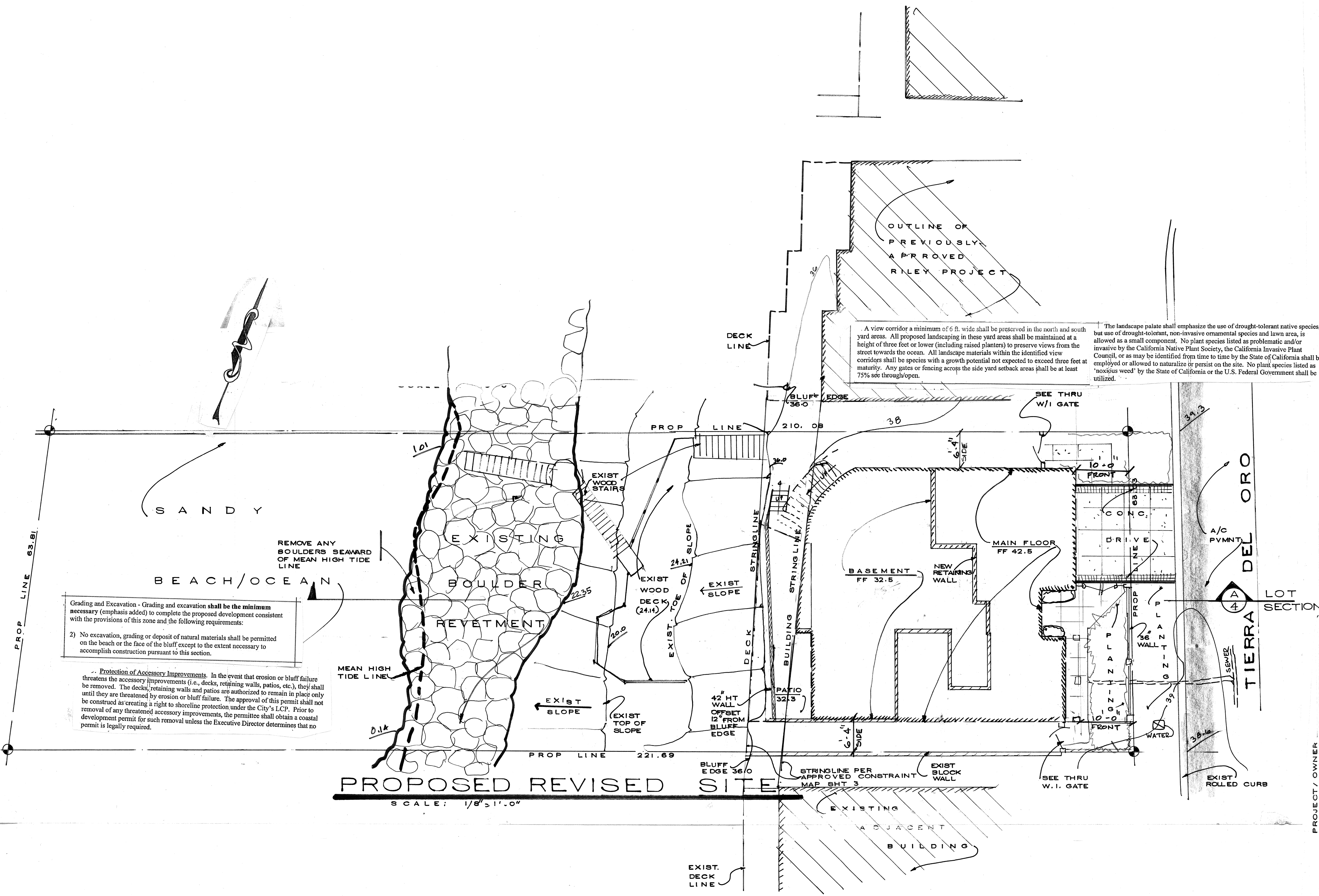
PROJECT OWNER
MOSS RESIDENCE
JANET & STEVE MOSS
 5015 TIERRA DEL ORO
 CARLSBAD CA 92008
 LOT 15 TRACT TIERRA DEL ORO
 APN 210-020-15

SURVEY OF EXISTING

SCALE: 1" = 10'-0"

JAN 2016

2



Grading and Excavation - Grading and excavation shall be the minimum necessary (emphasis added) to complete the proposed development consistent with the provisions of this zone and the following requirements:

2) No excavation, grading or deposit of natural materials shall be permitted on the beach or the face of the bluff except to the extent necessary to accomplish construction pursuant to this section.

Protection of Accessory Improvements. In the event that erosion or bluff failure threatens the accessory improvements (i.e., decks, retaining walls, patios, etc.), they shall be removed. The decks, retaining walls and patios are authorized to remain in place only until they are threatened by erosion or bluff failure. The approval of this permit shall not be construed as creating a right to shoreline protection under the City's LCP. Prior to removal of any threatened accessory improvements, the permittee shall obtain a coastal development permit for such removal unless the Executive Director determines that no permit is legally required.

A view corridor a minimum of 6 ft. wide shall be preserved in the north and south yard areas. All proposed landscaping in these yard areas shall be maintained at a height of three feet or lower (including raised planters) to preserve views from the street towards the ocean. All landscape materials within the identified view corridors shall be species with a growth potential not expected to exceed three feet at maturity. Any gates or fencing across the side yard setback areas shall be at least 75% see through/open.

The landscape palate shall emphasize the use of drought-tolerant native species, but use of drought-tolerant, non-invasive ornamental species and lawn area, is allowed as a small component. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or as may be identified from time to time by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized.

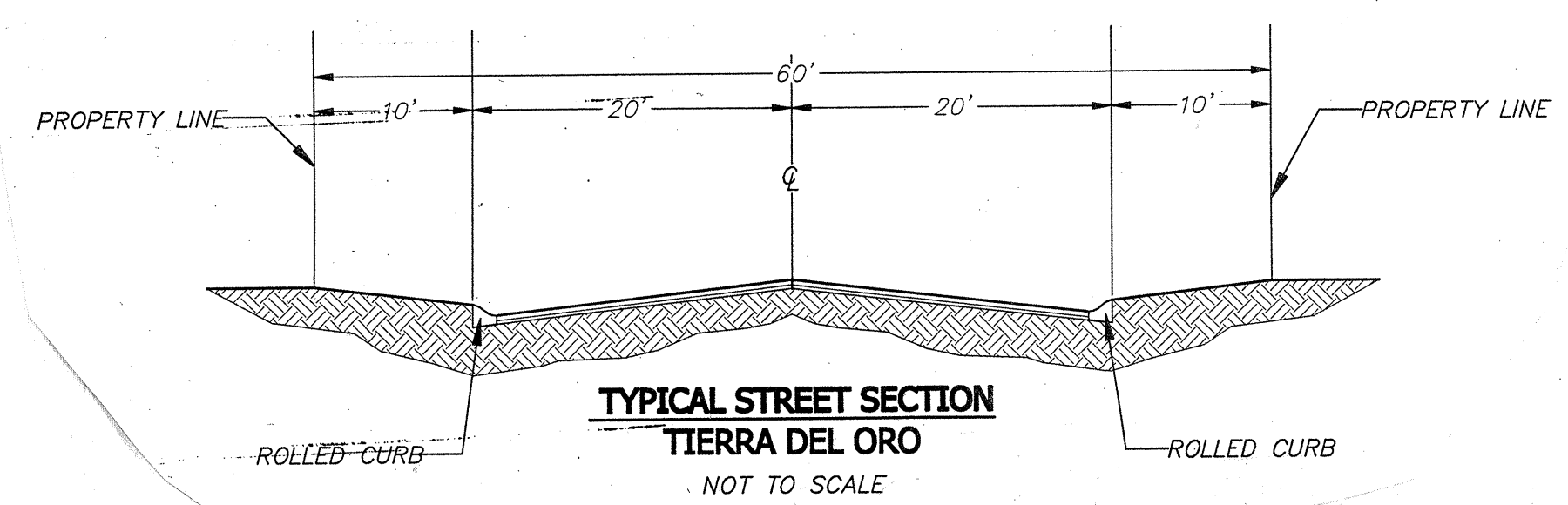
PROPOSED REVISED SITE
SCALE: 1/8" = 1'-0"

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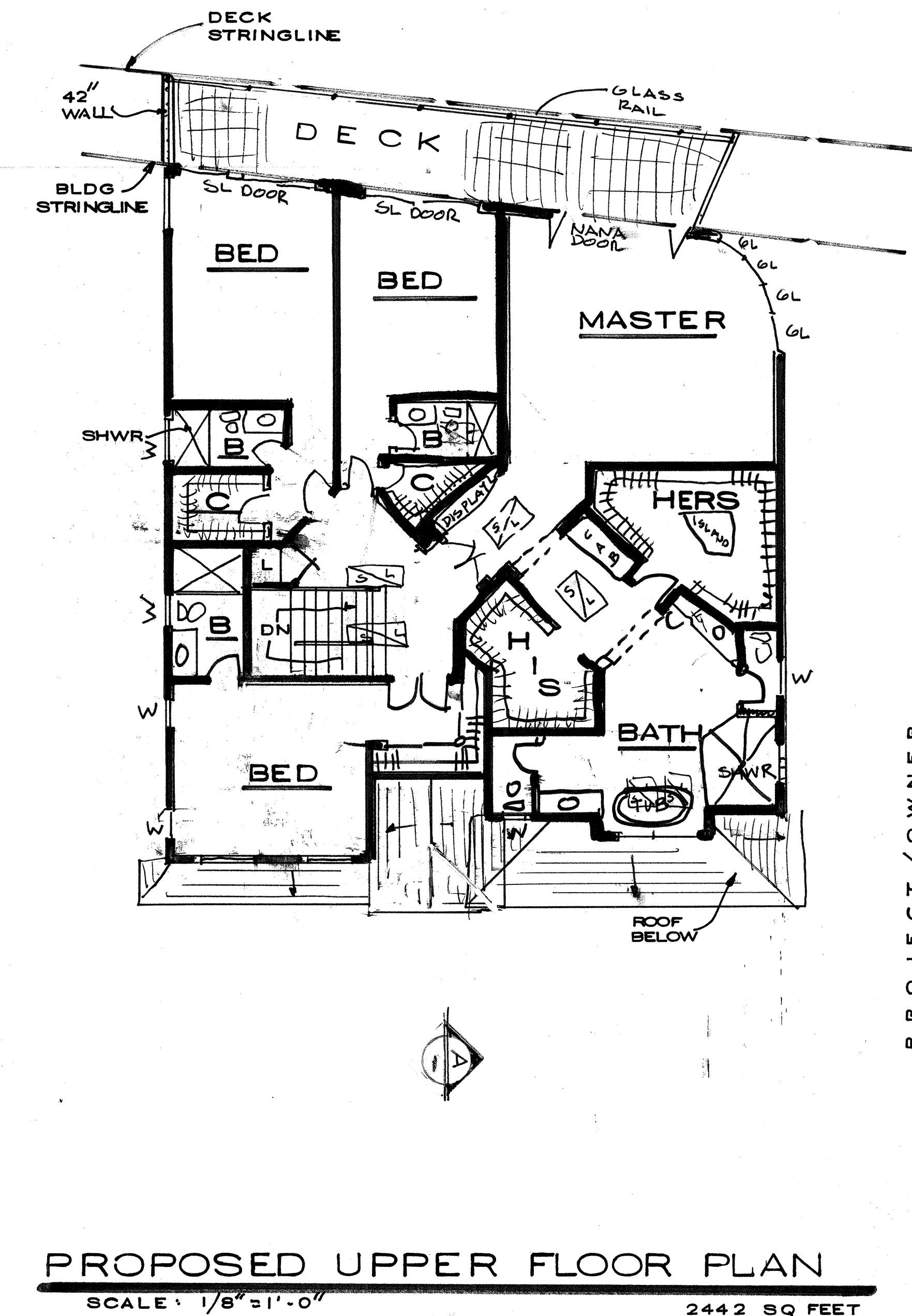
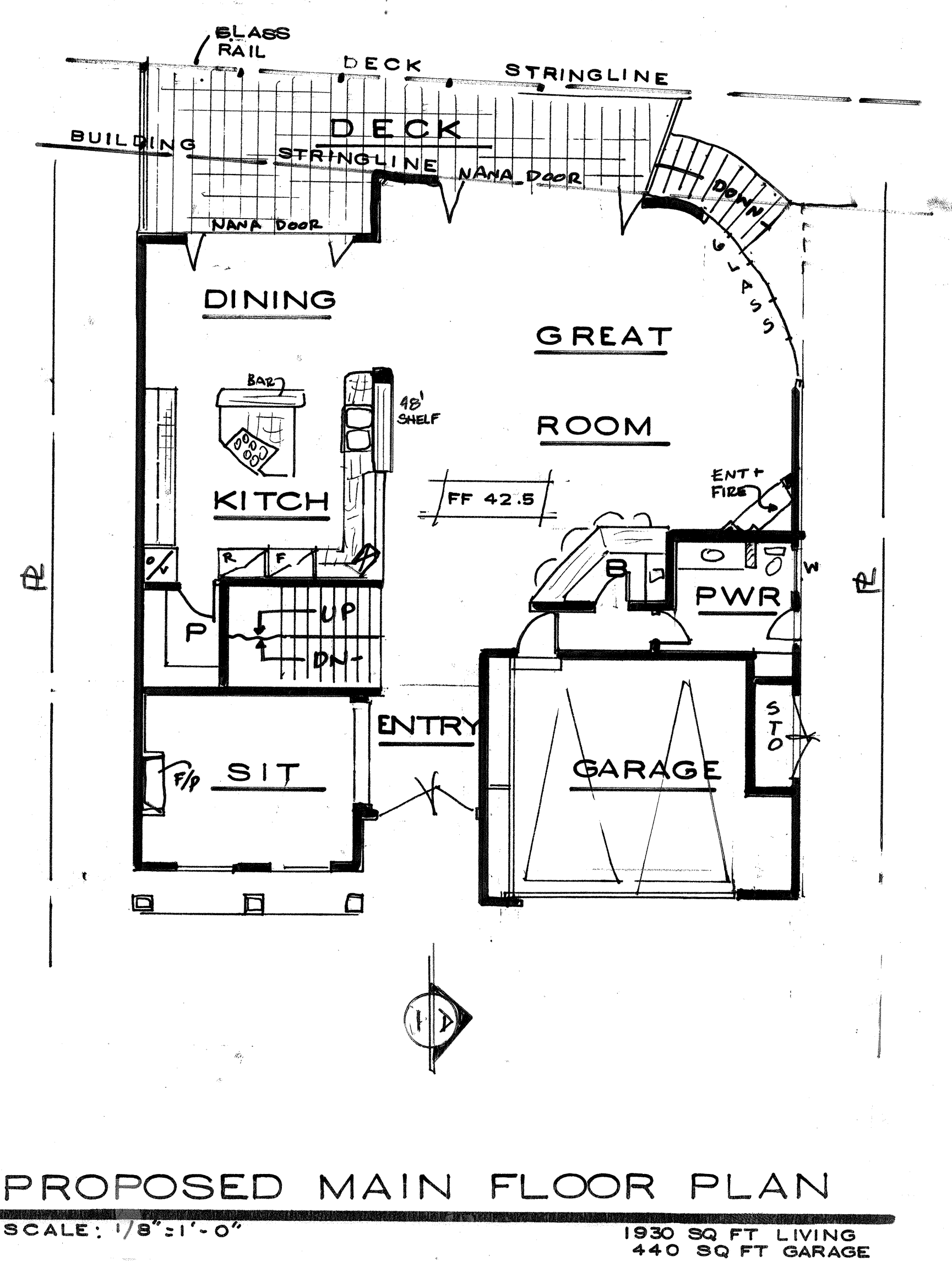
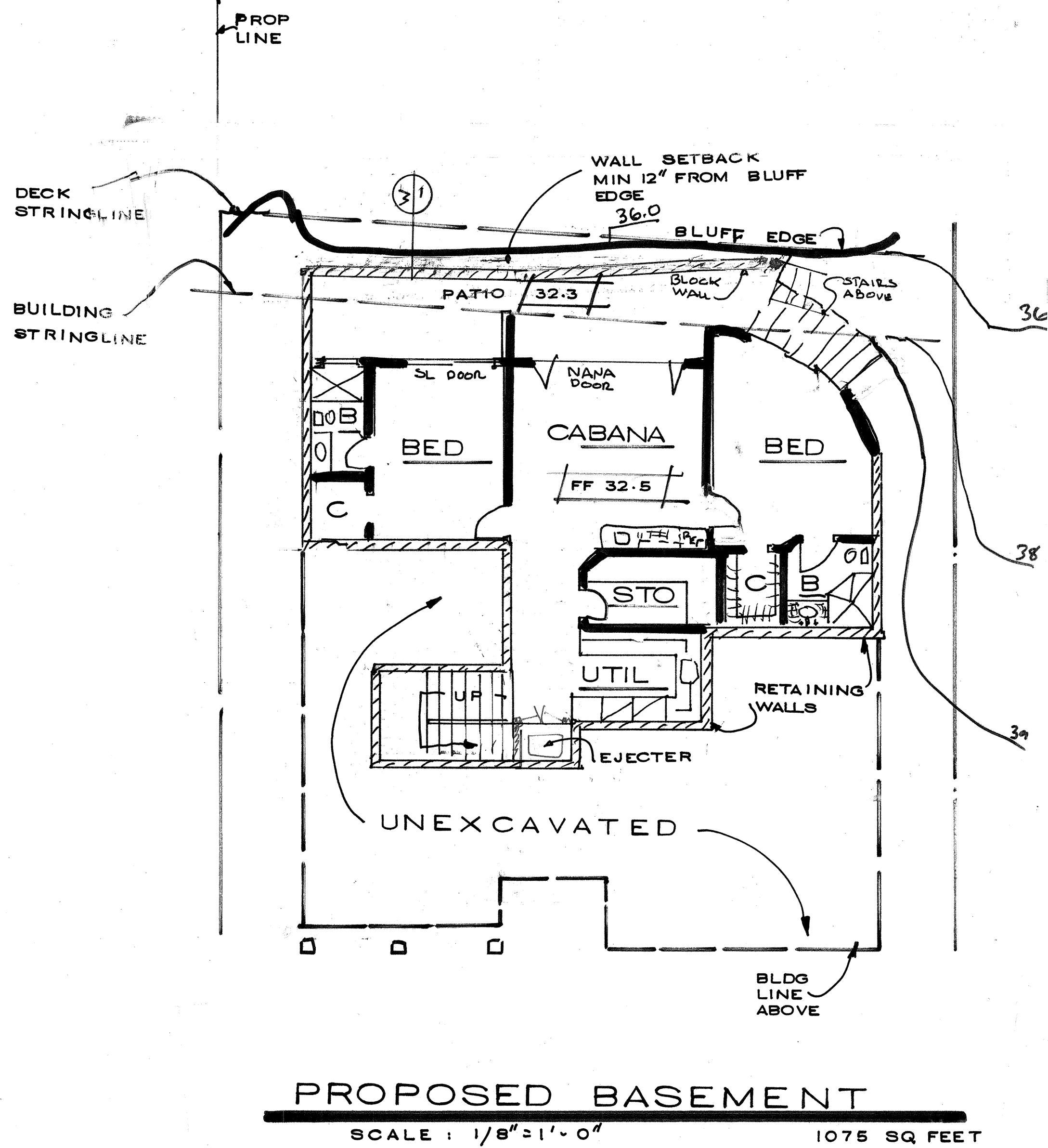
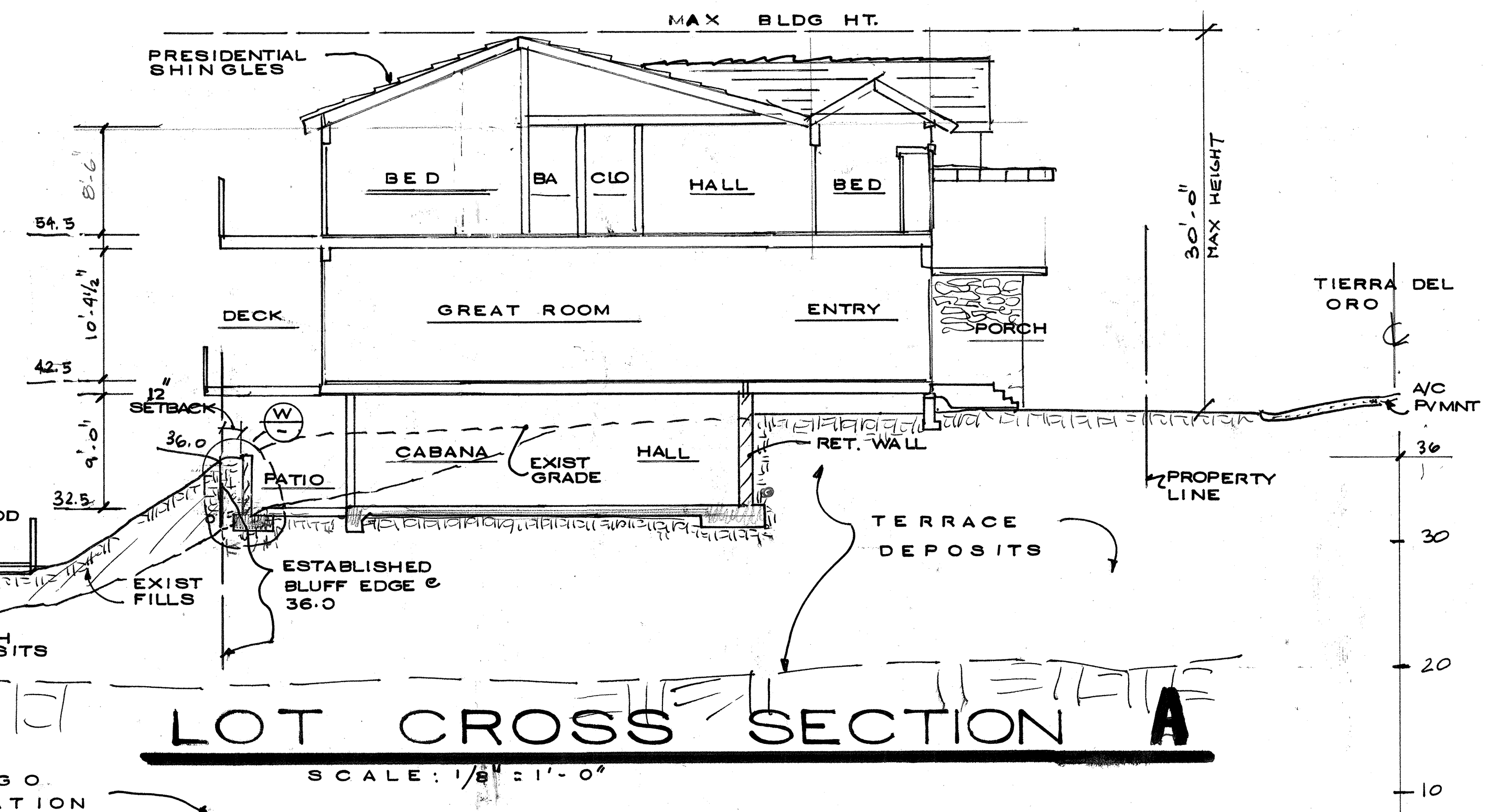
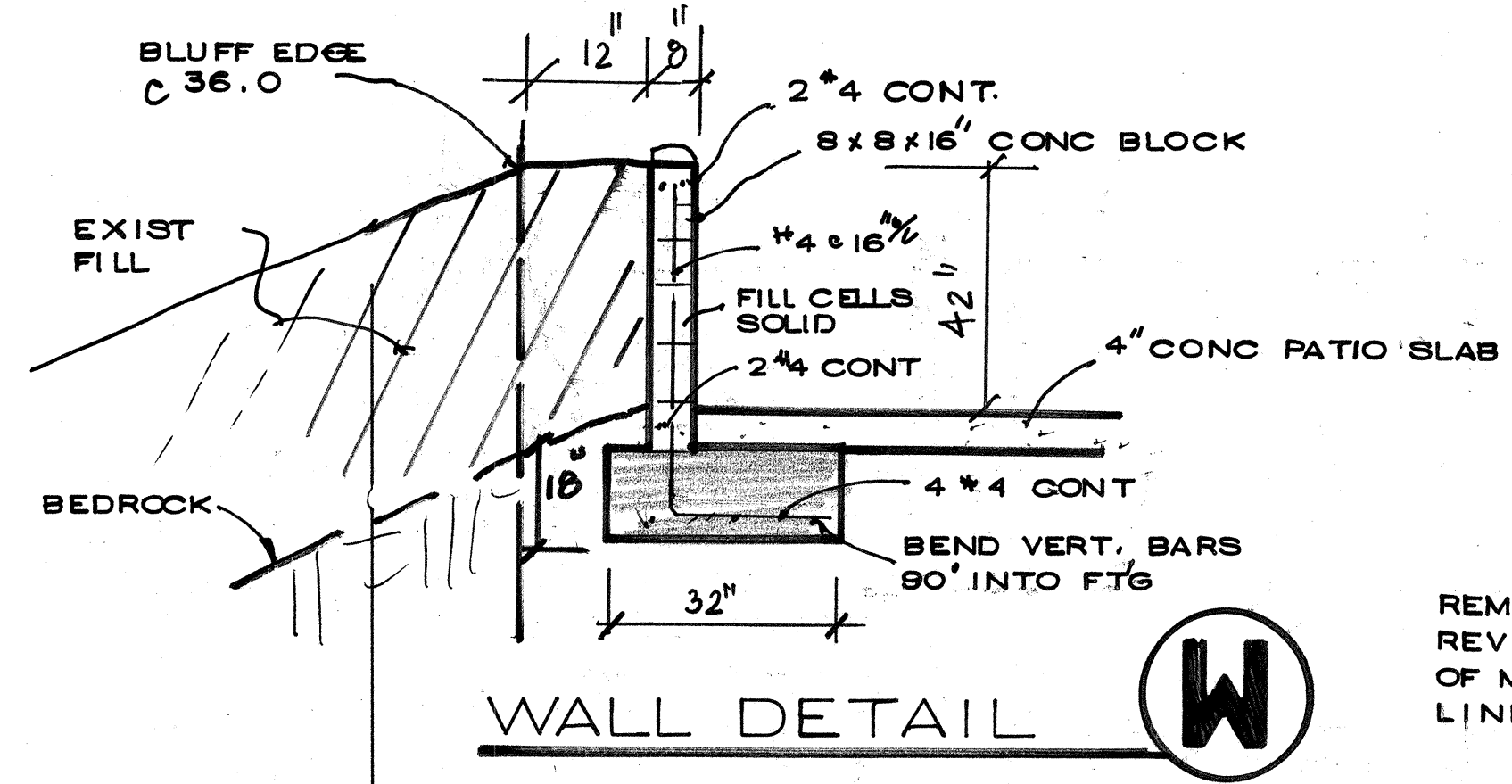
REVISIONS PER MEETING 04.08.2016

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CARLSBAD CA 92008
LOT 15 TRACT TIERRA DEL ORO
APN 210-020-15

JAN 2016
3



Bluff line or edge shall be defined as the upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge. [emphasis added]

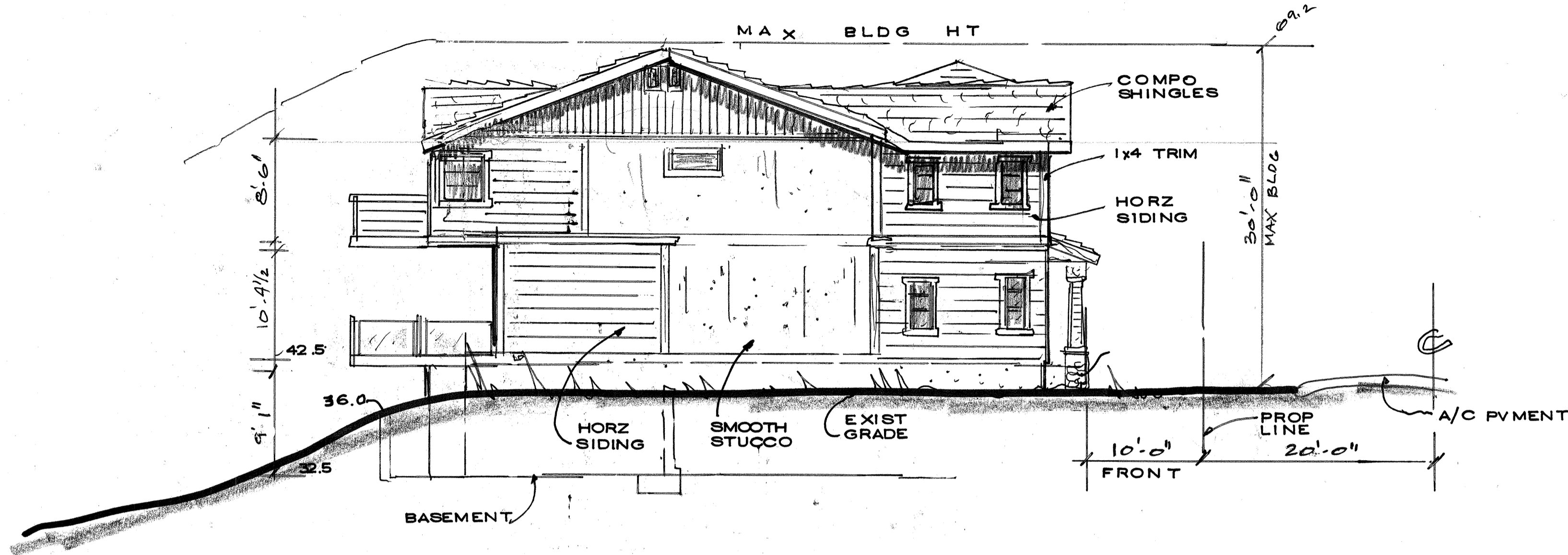


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STAMP
REVISIONS
PER CCC MEETING
04.09.2016

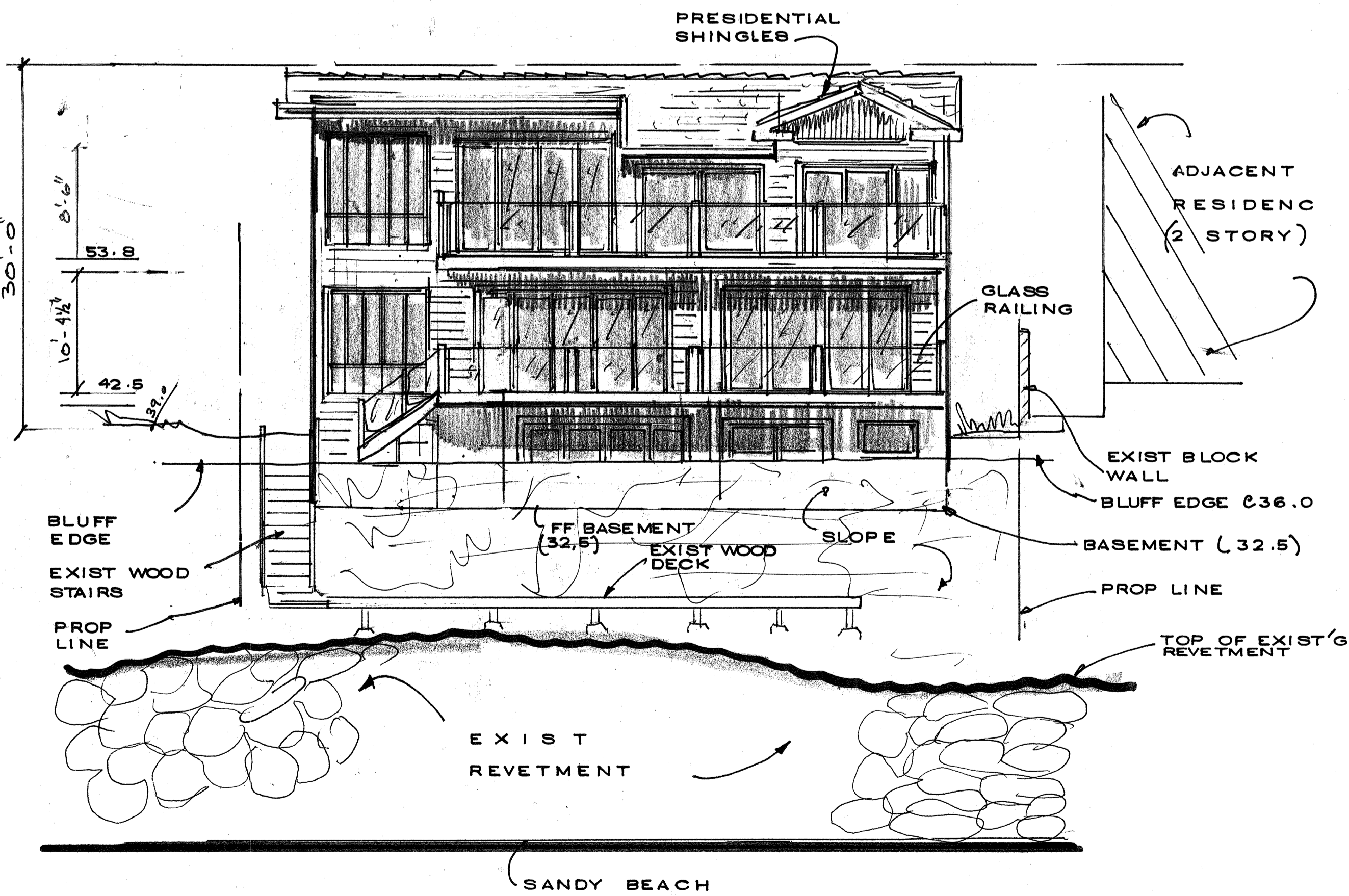
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APN 210.020.15

JAN 2016
4



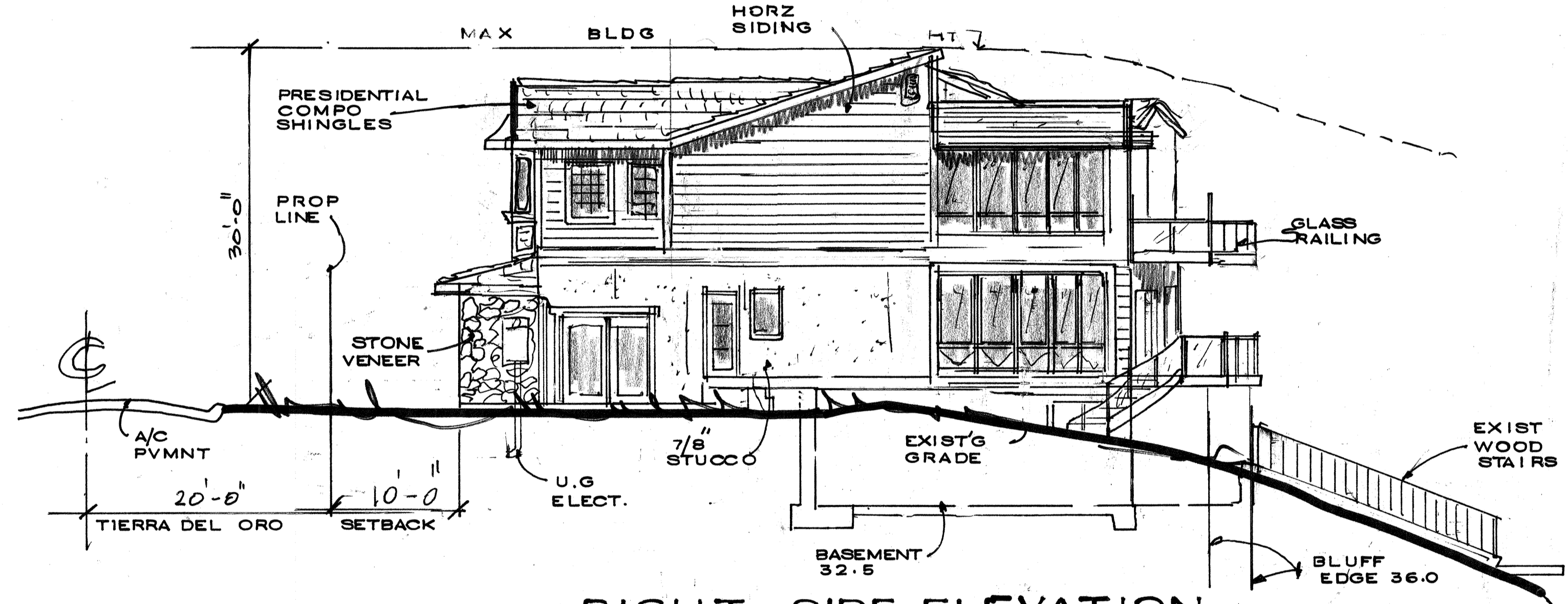
LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"



REAR ELEVATION

SCALE: 1/8" = 1'-0"



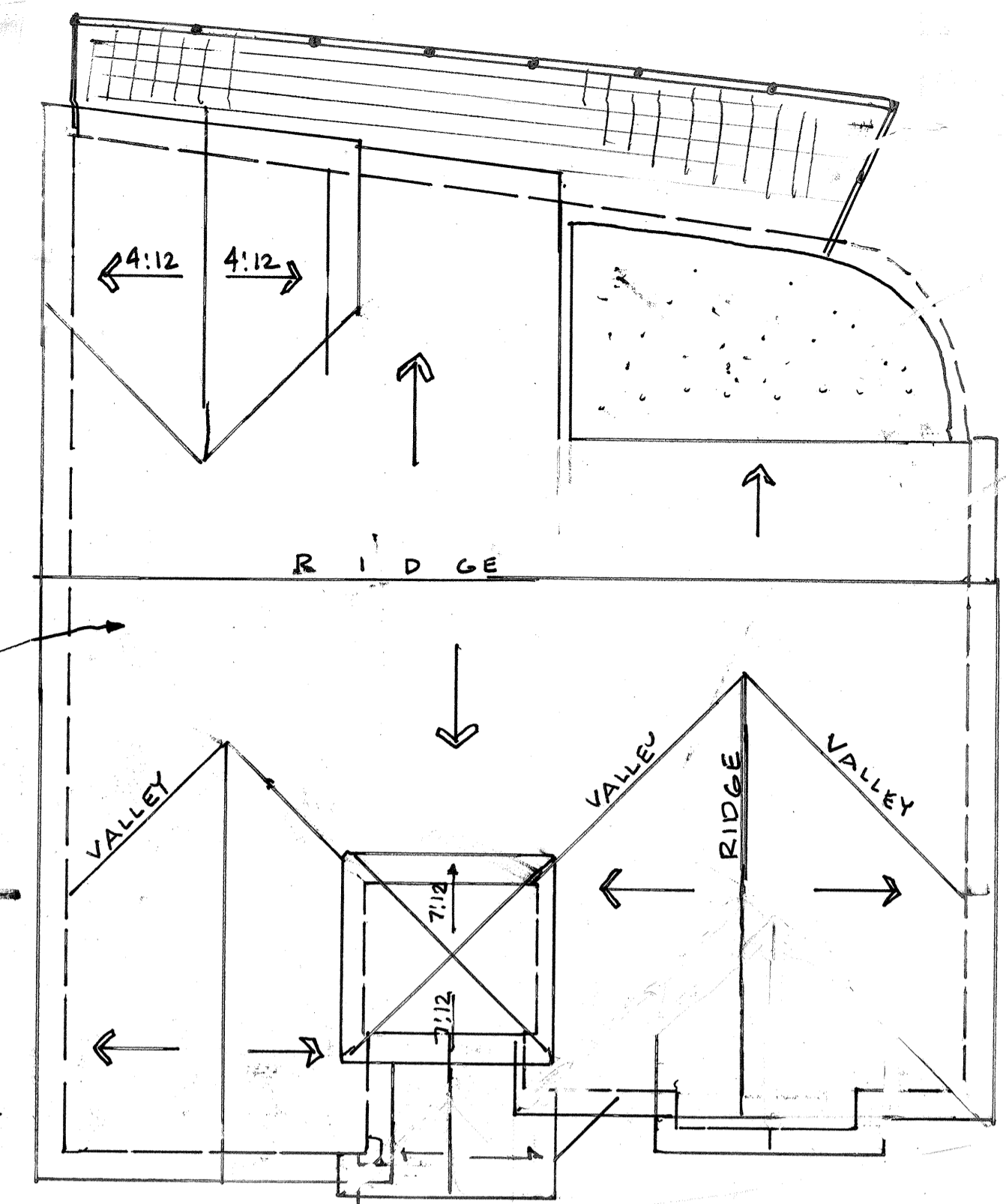
RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

SCALE: 1/8" = 1'-0"



ROOF PLAN

SCALE: 1/8" = 1'-0"

PROJECT DESIGN

REVISIONS
PER CCC MTG 04.08.16

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LOT 15 TRACT TIERRA DEL ORO
APN 210.020.15

JAN 2016

5



EXHIBIT NO. 4

APPLICATION NO.

6-16-0340

Aerial of Surrounding
Development



California Coastal Commission