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APPEAL STAFF REPORT: SUBSTANTIAL ISSUE DETERMINATION & DE NOVO HEARING

Appeal No.: A-3-SLO-11-061

Applicant: Rob and Judi McCarthy

Appellants: Commissioners Brian Brennan and Mark Stone

Local Government: San Luis Obispo County

Location: North (uphill) side of Cave Landing Road on Ontario Ridge, between Avila Beach and Pismo Beach in unincorporated San Luis Obispo County (APNs 076-231-063 and 065).

Project Description: Construction of a 5,500 square-foot single family residence and a 1,000 square-foot secondary residence above a 1,000 square-foot garage/workshop and related improvements including an access road/driveway (including paving and retaining walls); site preparation and grading for building pads, roads and septic systems; a 10,000 gallon water tank and landscaping; and the extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site.

Staff Recommendation: Substantial Issue Exists; Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

San Luis Obispo County approved a coastal development permit (CDP) for construction of a 5,500 square-foot single family dwelling (SFD), a 1,000 square-foot secondary unit, and related

development on an approximately 37-acre site located on the inland side of Cave Landing Road on the sloping hillside of Ontario Ridge above the Pirates Cove public coastal accessway located between Avila Beach and Pismo Beach along San Luis Obispo County's central coast. The County's CDP decision was appealed to the Commission, with the appeal raising questions of Local Coastal Program (LCP) consistency with respect to urban-rural boundaries and public services, geologic hazards, and the protection of public views, archeological resources, and environmentally sensitive habitat areas (ESHAs).

Staff recommends that the Commission find that the appeal raises a substantial issue and that the Commission take jurisdiction over the CDP application. Staff further recommends that the Commission approved a CDP for a reduced scale residential project at the site.

LCP Public Works Policy 1 does not allow the extension of public services to serve development that is located outside of the LCP's Urban Services Line (USL), including as a means of not inducing inappropriate growth in rural areas. Instead, the LCP requires development outside the USL to be served by adequate private onsite water and wastewater disposal systems. The project site is located outside of the USL, and the County-approved project includes an extension of public water lines to serve the site, inconsistent with the LCP.

The LCP strongly protects public viewsheds, and provides a range of policies to ensure that development is sited to protect scenic views, to minimize visibility in public view corridors, to be located in the least visible portion of the site, to minimize structural height and mass by using low-profile design, and overall to be subordinate to and blend with the rural character of the area. The project site is located in a rural area outside the USL within an LCP-designated special scenic area (the Ontario Ridge Sensitive Resource Area (SRA)) on an undeveloped hillside knoll that extends above Cave Landing Road and the public parking lot and trailhead above Pirates Cove. This site is prominent in these near views, and also forms an important scenic backdrop for views from Avila Beach. The County-approved project allows for a very large single-family dwelling and related development (including a second unit) in multiple stories with both a series of retaining walls and multi-level patio/deck areas extending down the slope as well as a paved driveway winding up the slope to the site from Cave Landing Road. The residential complex wraps around the knoll and extends significantly out from it, including through a sweeping roof feature and other features that are designed to stick out as opposed to blend in. The approved project does not conform to the LCP's visual policies at the most basic level because its scale and style are not subordinate to and not consistent with the rural undeveloped hillside character of the area, and it will significantly degrade the public viewshed, including particularly with respect to views associated with the popular Pirate's Cove accessway area.

The LCP requires that archaeological resources be protected and preserved, with the highest priority given to avoiding disturbance of the resources. The project site is located within an LCP-designated Archaeologically Sensitive Area (ASA), and includes a significant archaeological site in the area of the proposed project. The County-approved project includes the aforementioned series of retaining walls and multi-level patio/deck areas directly on top of the archaeological site, inconsistent with the LCP.

The project is inconsistent with the LCP on these three points, and thus the appeal raises a substantial issue of LCP conformance for which staff recommends the Commission take CDP

jurisdiction over the project. In a de novo review on the merits of the application, staff has worked with the Applicants in an attempt to address the identified LCP inconsistencies. Based on the availability of an on-site well to serve the development and the elimination of the series of retaining walls and multi-level patio/deck areas, the USL/water issue and the archaeological issues can be resolved in a way that allows for an LCP consistent project on these points that is acceptable to the Applicants.

The public viewshed issues, however, are not so readily addressed. The LCP objective for this site would be that any approved development be entirely hidden from public views. As indicated, the site is a very prominent knoll in the public viewshed on which development cannot be hidden or significantly screened, and thus if any development is to be allowed here, the main mechanism to address LCP visual compatibility requirements is to try to better conform the development to the hillside area, including through reducing its massing and exposure extending out from the slope, and revising its design so it evokes a more pastoral/rural character consistent with its sensitive setting. In staff's view, this prominent knoll is not the location for statement type of residence, as is proposed, but rather to be consistent with the LCP and the Coastal Act's access and recreation policies the project needs to be significantly reduced and redesigned. Staff recommends conditions that limit the area within which the residential development can take place to an existing approximately 3,000 square foot degraded hillside scarp area, requires that the development not silhouette in public views from the Pirates Cove accessway area, requires that it be stepped up the slope within the scarp (i.e., single story, or single story in front, higher in back), limits its height to 21.5 at the back of the scarp area (for a second story), and requires landscaping (and potentially berming) to provide visual screening and mottling. Within this framework, the Applicants are afforded a residential use and development, and the public viewshed is protected as much as possible.

Thus, staff recommends that the Commission approve a conditioned CDP for the proposed project. The motion is found on page 5 below.

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APPENDICES

Appendix A – Substantive File Documents

EXHIBITS

- Exhibit 1. Regional Location Maps
- Exhibit 2. Project Plans
- Exhibit 3. County CDP Action
- Exhibit 4. Appeal of County CDP Action
- Exhibit 5. Applicable and Cited SLO County LCP Policies
- Exhibit 6. Current Parcel Configuration
- Exhibit 7. LCP USL Map
- Exhibit 8. Project Site Photos
- Exhibit 9. Applicant's Photo Simulations
- Exhibit 10. Archeological Sensitive Area Map
- Exhibit 11. Cave Landing Bike Path and Parking Improvements Map
- Exhibit 12. Correspondence

I. MOTIONS AND RESOLUTIONS

A. SUBSTANTIAL ISSUE DETERMINATION

Staff recommends that the Commission determine that a **substantial issue** exists with respect to the grounds on which the appeal was filed. A finding of substantial issue would bring the project under the jurisdiction of the Commission for hearing and action.

Motion:

I move that the Commission determine that Appeal Number A-3-SLO-11-061 raises no substantial issue with respect to the grounds on which the appeal has been filed under Section 30603 of the Coastal Act, and I recommend a no vote.

Staff recommends a **NO** vote. Failure of this motion will result in a de novo hearing on the application, and adoption of the following resolution and findings. Passage of this motion will result in a finding of No Substantial Issue and the local action will become final and effective. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby finds that Appeal Number A-3-SLO-11-061 presents a substantial issue with respect to the grounds on which the appeal has been filed under Section 30603 of the Coastal Act regarding consistency with the certified Local Coastal Program and/or the public access and recreation policies of the Coastal Act.

B. CDP DETERMINATION

Staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed development.

Motion:

I move that the Commission approve Coastal Development Permit Number A-3-SLO-11-061 pursuant to the staff recommendation, and I recommend a yes vote.

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned 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 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 San Luis Obispo County Local Coastal Program policies and Coastal Act access and recreation policies. 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 Permittees 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 or 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 Permittees 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 Project Plans.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit two full size sets of Revised Project Plans to the Executive Director for review and approval. The Revised Plans shall be substantially in conformance with the proposed project plans (see Exhibit 2) except that they shall be revised and supplemented to comply with the following requirements:
 - a. **Building Envelope.** Above ground and visible residential development (excluding the driveway and excluding minimal well infrastructure, see below) shall be confined within a building footprint that is no larger than the existing degraded scarp area on the site and entirely outside of the archaeologically sensitive area of the site (see Exhibit 10). Below ground residential development shall be allowed within the allowed building footprint area on the site, shall avoid the archaeologically sensitive area of the site, and shall be submitted with evidence that it will not result in geologic instability of the slope. All above ground and visible residential development shall be sited and designed so as to not silhouette against the sky in public views from the Pirates Cove accessway area (including from the parking lot and all public trails), to conform as much as possible to the slope profile and/or berm (see below) profile (e.g., through terracing and stepping features, etc.), and to step back consistent with the surrounding slope within the building

footprint/scarp area (i.e., single-story elements nearest Cave Landing Road with higher elements (no higher than 21.5 feet) furthest from Cave Landing Road and tucked into the inland side of the scarp feature).

- b. Driveway Footprint.** The driveway (providing access from Cave Landing Road to the building footprint area) shall be sited and designed so that it is located entirely on the Permittees' property (and not on County property) and to limit its visibility in the public view as much as possible, including through limiting its width and length as much as possible, and coloring its surface to match the surrounding bluffs as much as possible.
- c. Water Extension Omitted.** The extension of water utilities from Avila Beach Drive up Cave Landing Road and to the building footprint shall be removed from the project.
- d. Utilities Underground.** All utilities (including but not limited to well and wastewater system components, gas lines, electrical lines, telephone/data lines, etc.) shall be located underground and, with the exception of the well and wastewater system and related connection lines, shall be limited to the driveway footprint area. All well and wastewater system components shall be submitted with evidence that they will not result in geologic instability of the slope. Any required access to the well (e.g., for maintenance and repair) shall be from the Sycamore Mineral Springs side of Ontario Ridge.
- e. Project Design.** The design and appearance of all above ground and visible residential development shall be modified to reflect a rural agricultural theme (i.e., simple and utilitarian lines and materials, including use of board and bats, corrugated metal, muted earth tone colors, etc.). All windows shall be non-glare glass, and all other surfaces shall be similarly treated to avoid reflecting light. The plans shall clearly identify all measures that will be applied to ensure such design aesthetic is achieved, and, at a minimum, shall clearly identify all structural elements, materials, and finishes (including through site plans and elevations, materials palettes and representative photos, product brochures, etc.).
- f. Berming.** Berming shall be allowed to help screen residential development from public views, provided such berming itself is designed to conform and integrate as seamlessly as possible to the slope profile, and to not itself lead to view impacts (e.g., silhouetting in public views).
- g. Disturbed Areas Restored.** All disturbed areas on the project site outside of the building and driveway footprint area, including all existing disturbed areas (e.g., existing jeep trails, etc.), all areas where development is underground (e.g., well and wastewater system components, etc.), and all areas disturbed by construction shall be restored to a natural state as much as possible, including through recontouring and landscaping.
- h. Landscaping.** Final Plans shall include landscape and irrigation parameters that shall identify all plant materials (size, species, quantity), all irrigation systems, and all proposed maintenance measures for the entire property, including measures for maintaining areas outside of the building and driveway footprint area (e.g., for fire safety, etc.). All plant materials shall be native and non-invasive species selected to be

complimentary with the mix of native habitats in the project vicinity, prevent the spread of exotic invasive plant species, and avoid contamination of the local native plant community gene pool. Landscaping (at maturity) shall also be capable of partial/mottled screening and softening the appearance of development as seen from the Pirates Cove accessway area (including from the parking lot and all public trails) and Avila Beach. All landscaped areas on the project site shall be maintained in a litter-free, weed-free, and healthy growing condition. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or as may be so identified from time to time by the State of California, and no plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be planted or allowed to naturalize or persist on the site.

- i. **Lighting.** There shall be no exterior night lighting, other than the minimum lighting necessary for pedestrian and vehicular safety purposes. All lighting shall be downward directed and designed so that it limits the amount of light or glares visible from the Pirates Cove accessway area (including from the parking lot and all public trails) and Avila Beach as much as possible, including through directed all interior lighting away from windows as much as possible.

The Permittees shall undertake development in accordance with the approved Revised Project Plans.

2. **Construction Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittees shall submit two full size sets of a Construction Plan to the Executive Director for review and approval. The Construction Plan shall, at a minimum, include the following:
 - a. **Construction Areas.** The Construction Plan shall identify the specific location of all construction areas, all staging areas, and all construction access corridors in site plan view. All such areas within which construction activities and/or staging are to take place shall be minimized to the maximum extent feasible in order to have the least impact on public access and public views.
 - b. **Construction Methods and Timing.** The Construction Plan shall specify the construction methods to be used to limit construction activities associated with Cave Landing Road and to limit the duration of construction as much as possible. Construction shall be limited to non-holiday weekdays during daylight hours.
 - c. **Erosion Control Procedures.** The Construction Plan shall clearly identify all best management practices to be implemented during construction and their location. Such plans shall contain provisions for specifically identifying and protecting all natural drainage swales (with sand bag barriers, filter fabric fences, straw bale filters, etc.) to prevent construction-related runoff and sediment from entering into these natural drainage areas which ultimately deposit runoff into the Pacific Ocean. Silt fences, straw wattles, or equivalent measures be installed at the perimeter of all construction areas. At a minimum, such plans shall also include provisions for stockpiling and covering of graded materials, temporary stormwater detention facilities, revegetation as necessary, restricting

grading and earthmoving during the rainy weather. The Construction Plan shall indicate that: (a) dry cleanup methods are preferred whenever possible and that if water cleanup is necessary, all runoff shall be collected to settle out sediments prior to discharge from the site; all de-watering operations shall include filtration mechanisms; (b) off-site equipment wash areas are preferred whenever possible; if equipment must be washed on-site, the use of soaps, solvents, degreasers, or steam cleaning equipment shall not be allowed; in any event, such wash water shall not be allowed to enter any natural drainage; (c) concrete rinsates shall be collected and they shall not be allowed to enter any natural drainage areas; (d) good construction housekeeping shall be required (e.g., clean up all leaks, drips, and other spills immediately; refuel vehicles and heavy equipment off-site and/or in one designated location; keep materials covered and out of the rain (including covering exposed piles of soil and wastes); all wastes shall be disposed of properly, trash receptacles shall be placed on site for that purpose, and open trash receptacles shall be covered during wet weather); and (e) all erosion and sediment controls shall be in place prior to the commencement of grading and/or construction as well as at the end of each day.

- d. Construction Site Documents.** The Construction Plan shall provide that copies of the signed coastal development permit and the approved Construction Plan be maintained in a conspicuous location at the construction job site at all times, and that such copies are available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the coastal development permit and the approved Construction Plan, and the public review requirements applicable to them, prior to commencement of construction.
- e. Construction Coordinator.** The Construction Plan shall provide that a construction coordinator be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and that their contact information (i.e., address, phone numbers, etc.) including, at a minimum, a telephone number that will be made available 24 hours a day for the duration of construction, is conspicuously posted at the job site where such contact information is readily visible from public viewing areas, along with indication that the construction coordinator should be contacted in the case of questions regarding the construction (in case of both regular inquiries and emergencies). The construction coordinator shall record the name, phone number, and nature of all complaints received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry.
- f. Notification.** The Permittees shall notify planning staff of the Coastal Commission's Central Coast District Office at least 3 working days in advance of commencement of construction, and immediately upon completion of construction.

The Permittees shall undertake construction in accordance with the approved Construction Plan.

- 3. Open Space Restriction.** Development, as defined in Section 30106 of the Coastal Act and Section 23.11.030 of the LCP, shall be prohibited outside of the approved residential and

driveway footprints, except for underground utility infrastructure that may be necessary in the future and landscape maintenance activities, both subject to Executive Director review and approval. Prior to issuance by the Executive Director of the Notice of Intent to Issue a Coastal Development Permit, the Permittees shall submit to the Executive Director for review and approval, and upon such approval, for attachment as an exhibit to the NOI, a legal description and graphic depiction, prepared by a licensed surveyor, of the area of the property to be restricted to open space uses.

- 4. Domestic Well Use.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittees shall submit to the Executive Director for review and approval evidence that the County has amended CDP DRC2006-00075 to allow use of the on-site test well for domestic use.
- 5. Deed Restriction.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittees shall submit to the Executive Director for review and 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 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 on or with respect to the subject property.

IV. FINDINGS AND DECLARATIONS

A. PROJECT LOCATION

The proposed project is located in the Pirates Cove area of Avila Beach in unincorporated San Luis Obispo County on the north, or uphill, side of Cave Landing Road (APNs 076-231-063 and 065).¹ The project site is part of a larger generally undeveloped knoll on Ontario Ridge that is located east and above the town of Avila Beach, just northeast of the Avila tank farm site² and above the Pirates Cove public coastal accessway (i.e., parking lot, trails, and related improvements) that is between Avila Beach and Pismo Beach along San Luis Obispo County's

¹ Based on the documents in the record, Commission staff cannot definitely determine whether the Applicants' property consists not only of APN 076-231-063 but also of APN 076-231-065, but a review of applicable parcel maps suggests that the project spans both assessor parcels.

² The site of the former Unocal Oil tank farm that was remediated and is subject to ongoing planning efforts related to its potential reuse.

central coast. The site is located within a larger area of rural and sloping former grazing lands separating higher density development found to the east in the City of Pismo Beach and to the west in Avila Beach. The site is currently undeveloped, except for an existing informal jeep trail and a previously graded pad left over from remnant agricultural activities (see below). The site is designated by the LCP in the Residential Rural land use category outside of the USL in an area subject to the LCP's San Luis Bay Coastal Area Plan. See Exhibit 1 for location maps, and Exhibit 8 for site photos.

B. PROJECT BACKGROUND

The project site was once part of a larger land holding that was originally made up of some 230 acres and periodically used for cattle and horse grazing in the rural and generally undeveloped area between Avila Beach and Pismo Beach. The 100 acres nearest Pismo Beach was annexed into the City in the late 1980s, and subsequently subdivided into 23 lots in the early 1990s. These lots have since been almost entirely developed with large lot single-family dwelling (SFD) development. The remaining 130 acres in the unincorporated County were made up of 5 lots owned by San Miguelito Partners (SMP), a California limited partnership (see Exhibit 6 for lot configuration). SMP granted a public access easement over Parcel 5, containing the Pirate's Cove parking lot and some bluff top trails, to the County in the late 1990s. In 2008, SMP sold Parcel 3, located between the subject site and Pismo Beach and containing the public recreational trail connecting the Pirate's Cove parking lot to Pismo Beach public trails, to the County. Thus, of the five former SMP properties at Pirates Cove, Parcels 3 and 5 are committed to public recreational uses and development and County ownership/easement, and all other development rights have been extinguished there. The remaining three parcels (Parcels 1, 2, and 4) are currently owned by SMP. The subject property is generally known as Parcel 2. Parcel 1 is located upcoast (west) of Parcel 2 and above Cave Landing Road, and Parcel 4 is located downslope (southwest) of Parcel 2 and Cave Landing Road. See Exhibit 1 and Exhibit 6.

SMP has been pursuing residential development of their lots at Pirates Cove for at least the past decade, including pursuing amendment to the LCP to move the USL to include these lots (since dropped), and including plans and supporting documentation for single family development on each. The Applicants in this case, Rob and Judi McCarthy, have an option to purchase Parcel 2 and are apparently pursuing development separate from SMP's plans.

As part of past agricultural activities, a dirt trail was graded from Cave Landing Road part of the way up the hillside on Parcel 2 (to approximately +338' above mean sea level (msl)). According to the Applicants, former agricultural operators also graded a pad out of the hillside to serve both as a staging area for deliveries and pick-ups for the agricultural operations, as well as for a level site for two water tanks. Today, the graded trail provides secondary vehicle access to an array of telecommunications facilities that exist north and east of the site along the Ontario Ridge ridgeline, as well as providing informal public access for those wishing to access the ridgeline from Cave Landing Road. The graded pad area is a well-defined whitish scarp on the hillside at the knoll above the Pirates Cove accessway, occupying an area of roughly 3,000 square feet (see photos in Exhibit 8). The Applicants indicate that no agricultural activities have occurred on Parcel 2 in approximately 15 years, but the graded trail and the degraded scarp area remain.

Uphill of the scarp area is an existing test well located near the ridgeline and accessed from the Sycamore Mineral Springs side of Ontario Ridge that was constructed by SMP in 2010.³

C. SAN LUIS OBISPO COUNTY APPROVAL

In 2010, the Applicants requested a determination by the County Planning Director as to whether the property could be served by an extension of public water utilities from County Service Area 12. Because the LCP does not allow the extension of public services to serve development that is located outside of the LCP's USL, and instead requires development outside the USL to be served by adequate private onsite water and wastewater disposal systems, the Planning Director determined that the property would need to be within the USL to receive such water. In other words, before the site could be served in this way, the LCP would need to be amended to change the USL boundary to include this site. The Applicants appealed the Planning Directors' decision to the Planning Commission, which partially upheld the Applicants appeal and determined that the property, while outside the USL, is within the sphere of service of CSA 12 and could receive water service without amending the General Plan and LCP maps to include property within the USL area. The Planning Commission also determined that CDPs were necessary for the water line infrastructure.⁴

On July 28, 2011, the Planning Commission approved CDP DRC2009-00095 (see Exhibit 3). Notice of the County's action on the CDP was received in the Coastal Commission's Central Coast District Office on August 16, 2011. The Coastal Commission's ten-working day appeal period for this action began on August 17, 2011 and concluded at 5 p.m. on August 30, 2011. One valid appeal (see Exhibit 4 and also below) was received during the appeal period.

D. PROJECT DESCRIPTION

The County-approved project allows for an SFD complex in multiple stories with both a series of retaining walls and multi-level patio/deck areas extending down the slope as well as a paved driveway winding up the slope to the site from Cave Landing Road. The main residential structures consist of a 5,500 square-foot SFD and a 1,000 square-foot secondary unit above a detached 1,000 square-foot garage/workshop. These structures would be located mostly on, and within, the currently degraded area of the hillside, but would extend outside of it. The two story secondary residence and garage/workshop would lie behind, or uphill, of the main house, separated by a courtyard area. The retaining walls and multi-level patio/deck areas would extend about 60 feet down the slope. The driveway would extend from Cave Landing Road to the residential structures. The project also includes a 10,000 gallon water tank for fire suppression and landscaping around the residence. Site preparation for building pads, roads and septic systems includes approximately 9,368 cubic yards of grading (both cut and fill) and a total of approximately 35,575 square feet of disturbance on the 37.06 acre parcel. Finally, the project also includes an extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the driveway and residential structures to allow for water service to the site from CSA

³ County CDP DRC2006-00075. The CDP indicates that the well was approved on APN 076-231-060, the adjacent property, but the Applicants indicate that the well is on Parcel 2. As of the date of this report, the well location has not been finally determined with respect to property lines.

⁴ The Applicants are currently also pursuing a vested right claim related to their desire use CSA 12 water for the proposed residential development, and that claim is also before the Commission at its August 8, 2012 meeting (3-12-013-VRC).

12. The County-approved project contains 128 conditions to address air quality, biological resources, cultural resources, geology and soils, transportation and circulation, and public utilities. See Exhibit 2 for project plans, Exhibit 8 for site area photos, and Exhibit 9 for photo simulations of the project.

E. APPEAL PROCEDURES

Coastal Act Section 30603 provides for the appeal to the Coastal Commission of certain CDP decisions in jurisdictions with certified LCPs. The following categories of local CDP decisions are appealable: (a) approval of CDPs for development that is located (1) between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or of the mean high tide line of the sea where there is no beach, whichever is the greater distance, (2) on tidelands, submerged lands, public trust lands, within 100 feet of any wetland, estuary, or stream, or within 300 feet of the top of the seaward face of any coastal bluff, and (3) in a sensitive coastal resource area; or (b) for counties, approval of CDPs for development that is not designated as the principal permitted use under the LCP. In addition, any local action (approval or denial) on a CDP for a major public works project (including a publicly financed recreational facility and/or a special district development) or an energy facility is appealable to the Commission. This project is appealable because it involves development that is located between the sea and the first public road paralleling the sea.

The grounds for appeal under Section 30603 are limited to allegations that the development does not conform to the certified LCP or to the public access policies of the Coastal Act. Section 30625(b) of the Coastal Act requires the Commission to conduct a de novo CDP hearing on an appealed project unless a majority of the Commission finds that “no substantial issue” is raised by such allegations. Under Section 30604(b), if the Commission conducts a de novo hearing and ultimately approves a CDP for a project, the Commission must find that the proposed development is in conformity with the certified LCP. If a CDP is approved for a project that is located between the nearest public road and the sea or the shoreline of any body of water located within the coastal zone, Section 30604(c) also requires an additional specific finding that the development is in conformity with the public access and recreation policies of Chapter 3 of the Coastal Act. This project is located between the nearest public road and the sea, and thus this additional finding would need to be made if the Commission approves the project following a de novo hearing.

The only persons qualified to testify before the Commission on the substantial issue question are the Applicants (or their representatives), persons who made their views known before the local government (or their representatives), and the local government. Testimony from other persons regarding substantial issue must be submitted in writing. Any person may testify during the de novo CDP determination stage of an appeal.

F. SUMMARY OF APPEAL CONTENTIONS

The Appellants contend that the County-approved project raises LCP conformance issues and questions with respect to urban-rural boundaries and provision of public services, geologic hazards, and the protection of public views, archeological resources, and environmentally sensitive habitat areas (ESHAs). These contentions raise LCP consistency questions about the County’s approval of a water extension outside the USL; the degradation of the public viewshed

associated with the large residential development approved; the construction of residential development on top of significant archaeological resources; the potential for geologic instability; and the potential for inappropriate ESHA impacts. See Exhibit 4 for the full appeal text.

G. SUBSTANTIAL ISSUE DETERMINATION

Substantial Issue Background

The term substantial issue is not defined in the Coastal Act. The Commission's regulations simply indicate that the Commission will hear an appeal unless it “finds that the appeal raises no significant question” (California Code of Regulations, Title 14, Section 13115(b)). In previous decisions on appeals, the Commission has been guided by the following factors in making such determinations:

1. The degree of factual and legal support for the local government’s decision that the development is consistent or inconsistent with the certified LCP and with the public access policies of the Coastal Act;
2. The extent and scope of the development as approved or denied by the local government;
3. The significance of the coastal resources affected by the decision;
4. The precedential value of the local government’s decision for future interpretation of its LCP; and
5. Whether the appeal raises only local issues, or those of regional or statewide significance.

Even where the Commission chooses not to hear an appeal, Appellants nevertheless may obtain judicial review of the local government's coastal permit decision by filing a petition for a writ of mandate pursuant to Code of Civil Procedure, Section 1094.5

In this case, for the reasons discussed further below, the Commission determines that the development as approved by the County presents a substantial issue.

Substantial Issue Analysis

Public Service Extension

The LCP, like the Coastal Act is generally premised on directing development to existing developed areas capable of sustaining such development, including in terms of adequate public services, and away from rural areas. The LCP helps implement these locational criteria through delineation of urban-rural boundaries, including identification of the LCP’s Urban Services Line (USL) within which these services are to be contained and they are allowed to be extended to areas outside the USL. In this case, the County-approved project is located outside of the LCP’s USL (see Exhibit 7).

LCP Public Works Policy 1 allows development outside of the LCP’s USL only if it can be served by adequate private on-site water and waste disposal systems (and if it consists of an environmentally preferable alternative). This policy also prohibits extension of services outside

the USL to serve such development (see applicable policies in Exhibit 5). Further, it requires new development to demonstrate that adequate public or private service capacities are available to serve the proposed development and that lack of proper arrangements for guaranteeing service is grounds for denial of the project or reduction of the density that could otherwise be approved consistent with available resources.

The County-approved project allows for the extension of services outside the USL to serve the proposed development, inconsistent with the LCP provision cited above. Thus, the County's approval raises a substantial LCP conformance issue with respect to public service extension.

Visual and Scenic Resources

The LCP includes strong protections for visual and scenic resources along the coast and specifies that new development shall be sited to minimize its visibility from public view corridors. LCP Visual and Scenic Resources Policy 1 requires that unique and attractive features of the landscape, including, but not limited to unusual landforms, scenic vistas and sensitive habitats are to be preserved and protected. LCP Visual and Scenic Resources Policy 2 requires permitted development to be sited so as to protect views to and along the ocean and scenic coastal areas and to minimize visual intrusion. LCP Visual and Scenic Resources Policy 4 requires new development in rural areas to be designed (height, bulk, style) to be subordinate to, and blend with, the rural character of the area. Other policies only reinforce these public viewshed requirements, including those specific to Ontario Ridge (including in addition to those referenced, LCP Visual and Scenic Resources Policy 5, and LCP Coastal Zone Land Use Ordinance (CZLUO) Section 23.04.210(c)).

The County-approved project would result in the construction of a sprawling residential development, including a 5,500 square-foot main residence and a detached 2,000 square-foot secondary residence and garage/workshop, in a highly scenic and sensitive rural area of the coast. In this case, the project is located in the Ontario Ridge Sensitive Resource Area (SRA), which is designated due to the importance of the Ontario Ridge viewshed and that thus gives the area special and increased scenic and visual protections under the LCP.⁵ The development is also directly north, and uphill from, the Pirates Cove public accessway, including its parking lot and trail system. The parking lot provides access to a popular public beach, as well as a general public access area and scenic overlook.⁶ A trail connects from the parking lot area to public trails in the City of Pismo Beach, linking the end of Cave Landing Road (on the Avila Beach side) with the public trails already existing in the Sunset Palisades area of Pismo Beach.⁷ This trail is part of the California Coastal Trail, and provides an important link in the trail because without it, coastal access users would be forced to embark on a circuitous approximately 4-mile trip inland to get from Cave Landing Road to the west end of Pismo Beach.

In short, the project site is located in a rural area outside the USL within an LCP-designated

⁵ Ontario Ridge itself is called out as forming an important scenic backdrop for the coastal area of Avila Beach and Pismo Beach, and it is part of a significant nearby public viewshed because it is prominent in and directly adjacent to the very popular Pirates Cove public accessway (i.e., parking lot, trails, overlooks, etc.).

⁶ The County is currently also pursuing parking lot improvements to this area, including a restroom facility, that should enhance its overall appeal and utility.

⁷ The County is also pursuing trail improvements as part of the overall accessway improvement plans that should likewise increase the utility and function of the trail connection.

special scenic area (the Ontario Ridge Sensitive Resource Area (SRA)) on an undeveloped hillside knoll that extends above Cave Landing Road and the public parking lot and trailhead above Pirates Cove. This site is prominent in these near views, and also forms an important scenic backdrop for views from Avila Beach. The County-approved project allows for a very large SFD complex in multiple stories with both a series of retaining walls and multi-level patio/deck areas extending down the slope as well as a paved driveway winding up the slope to the site from Cave Landing Road. The residential complex wraps around the knoll and extends significantly out from it, including through a sweeping roof feature and other features that are designed to stick out as opposed to blend in. The approved project does not conform to the LCP's visual policies at the most basic level because its scale and style are not subordinate to or consistent with the rural undeveloped hillside character of the area, and it will significantly degrade the public viewshed, including particularly with respect to views associated with the popular Pirate's Cove accessway area.

Thus, the County's approval raises a substantial LCP conformance issue with respect to public viewshed protection.

Archeology

The subject property, as well as the surrounding properties, is within the territory historically occupied by the Obispeno Chumash.⁸ The Applicants' cultural resources investigation from 2003 identified significant archeological resources near the project site. Shell remains found and soil characteristics in this area indicated a midden, marking the location of intensive prehistoric activity. The site includes an LCP-designated Archeologically Sensitive Area (ASA) (see Exhibit 10).⁹

The County-approved project allows development within the ASA. Specifically, the approved project allows for a series of patio areas and retaining walls to support those patio areas, to be built adjacent to and just downhill of the main house structure, over the area where the ASA is located. The LCP requires that archeological resources be protected and preserved, with the highest priority given to avoiding disturbance of the cultural resources (Archeology Policies 1, 4, 5 and CZLUO Section 23.07.104). The County-approval allows the Applicants to cap the proposed patio/deck/retaining wall area with fill and to install the retaining walls and patio directly on top of the fill. However, it appears that there are design changes that could be pursued that would allow the ASA to be completely avoided, which is the highest priority under CZLUO Section 23.07.104).¹⁰ Thus, the County approval raises a substantial LCP conformance issue with respect to archaeological resource protection.

Hazards

The LCP requires that all new development proposed within areas subject to natural hazards be sited and designed to minimize risks to human life and property (Hazard Policy 1). Hazard Policy 2 requires that all new development shall ensure structural stability while not creating or

⁸ The Obispeno Chumash are the northernmost of the dialect area of the Chumash speaking peoples of California. The Chumash community has been directly involved with many projects in the Avila Beach area. The Chumash regard themselves as caretakers of Mother Earth and the Avila Beach area is at the spiritual center of their territory.

⁹ In this case, the ASA is located just south or downhill of the main residential structure in an oval shape approximately 7,250 square feet in size (approximately 20 meters by 40 meters).

¹⁰ Lowest priority mitigation measures may include the use of fill to cap the sensitive resources.

contributing to erosion or geologic instability (see also CZLUO Section 23.070.086). The project site is located within an LCP designated Geologic Study Area (GSA) that requires special consideration for new development under the LCP. Section 23.070.086 requires that all uses within a GSA be established and maintained in accordance with specific grading, locational, and erosion/geologic stability requirements. The subject property is located upon a relatively steep slope and in an area known for overall geologic instability (including due to faults, landslides, unconsolidated soils and slopes, erosion, etc.).¹¹ The County-approved project allows for significant cut and fill (approximately 9,368 cubic yards), substantial retaining walls, and heavily engineered drainage and erosion control devices on multiple areas of the site.

However, engineering geology investigations have been completed and reviewed by both the County Geologist and the Commission's staff's geologist, Dr. Mark Johnsson (who also performed a site visit in December 2011), and both concur that the project site is located an appropriate distance from any active faults, and does not appear to raise geologic instability concerns if appropriately constructed. The County-approved project also includes 99 specific mitigation measures to ensure geologic stability, including through specific requirements for fill placed on slopes steeper than 10% and 20%, through the use of nonexpansive fill materials, through the construction of back drains and drainage inlets, through the requirement that all retaining walls be founded in bedrock, through the construction of collection or diversion swales to collect runoff, and finally through a required drainage plan and erosion control plan to be reviewed and approved by the County Public Works Department. Thus, the County's approval adequately addresses geologic concerns and appropriately conditions the project to ensure geologic stability. Thus, the County's approval does not raise a substantial LCP conformance issue with respect to geologic hazards.

ESHA

As described above, the County-approved project is located on the slopes of the Ontario Ridge, well known to include a rich mosaic of oak woodlands, wetlands seeps, and drainages that intermix with chaparral and grassland habitats. Within this overall range is LCP-designated mapped and potentially un-mapped ESHA. ESHA Policies 1, 2 and 3 specifically provide protections for sensitive habitats in this and other locations within San Luis Obispo County. In its review and approval, the County found that the project would not impact sensitive vegetation or species, streams, or lakes, as none exist on or near the site. The Commission's ecologist, Dr. Jonna Engel, has reviewed the relevant biological reports for the site and the project and conducted a site visit (in December 2011), and has concluded that the project is not sited in or inappropriately near ESHA. Thus, the County's approval does not raise a substantial LCP conformance issue with respect to ESHA protection.

Substantial Issue Conclusion

The County-approved project raises substantial LCP conformance issues in terms of the extension of public services outside the USL and the protection of public viewsheds and archaeological resources. Therefore, the Commission finds that **a substantial issue** exists with respect to the County-approved project's conformance with the certified San Luis Obispo County LCP and takes jurisdiction over the CDP application for the proposed project

¹¹ Several landslides and slumping events have occurred just adjacent to the project site and just uphill from the west end of Pirates Cove beach.

H. COASTAL DEVELOPMENT PERMIT DETERMINATION

Standard of Review

The standard of review for this CDP determination is the San Luis Obispo County certified LCP and, because it is located between the first public road and the sea, the access and recreation policies of the Coastal Act. All Substantial Issue Determination findings above are incorporated herein by reference.

I. PUBLIC SERVICE EXTENSION

1. Applicable Policies

Public Works Policy 1 - Availability of Service Capacity. *New development (including divisions of land) shall demonstrate that adequate public or private service capacities are available to serve the proposed development. Priority shall be given to infilling within existing subdivided areas. Prior to permitting all new development, a finding shall be made that there are sufficient services to serve proposed development given the already outstanding commitment to existing lots within the urban service line for which service will be needed consistent with the Resource Management System where applicable. Permitted development outside the USL shall be allowed only if:*

(a) it can be serviced by adequate private on-site water and waste disposal systems; and

(b) the proposed development reflects that it is an environmentally preferable alternative.

The applicant shall assume responsibility in accordance with county ordinances or the rules and regulations of the applicable service district or other providers of services for costs of service extensions or improvements that are required as a result of the project. Lack of proper arrangements for guaranteeing service is grounds for denial of the project or reduction of the density that could otherwise be approved consistent with available resources.

Public Works Policy 2 - New or Expanded Public Works Facilities. *New or expanded public works facilities shall be designed to accommodate but not exceed the needs generated by projected development within the designated urban reserve lines. Other special contractual agreements to serve public facilities and public recreation areas beyond the urban reserve line may be found appropriate.*

Public Works Policy 3 - Special Districts. *The formation or expansions of special districts shall not be permitted where they would encourage new development that is inconsistent with the LCP. In participation of LAFCo actions, the country should encourage sphere-of-influence and annexation policies which reflect the LCP.*

Public Works Policy 4 - Urban Service Line Amendments. *Amendments to an urban service line must be found consistent with the Coastal Act and the LCP. Approval of LCP amendments by the Coastal Commission or its successor in interest is required.*

2. Analysis

Project is Located Outside of USL

The proposed project is located east of downtown Avila Beach and west of Pismo Beach on the slopes of Ontario Ridge in a historically rural agrarian setting. The larger area around and surrounding the subject property is known as Pirates Cove, which is one of 19 San Luis Bay planning areas under the LCP. This area of approximately 221 acres consists of property encompassing the southerly slopes of Ontario Ridge and the bluffs and beaches surrounding Pirates Cove beach. This larger area is bordered on the west by former Union Oil Company tank farm and on the east by the Sunset Palisades residential area of Pismo Beach. The project site is located outside the LCP's USL line (see Exhibit 7).

The Applicants proposal to extend public water lines to serve the proposed development is inconsistent with the LCP because Public Works Policy 1 only allows development outside the LCP's USL if it can be served by adequate private on-site water and waste disposal systems, and if it consist of an environmentally preferable alternative. This policy also prohibits extension of services outside the USL to serve such development. Further, this policy requires new development to demonstrate that adequate public or private service capacities are available to serve the proposed development. It also requires that prior to permitting all new development, a finding shall be made that there are sufficient services to serve the proposed development given the already outstanding commitment to existing lots within the USL for which service will be needed. Finally, Public Works Policy 1 states that lack of proper arrangements for guaranteeing service is grounds for denial of the project or reduction of the density that could otherwise be approved.

Applicant's Contentions

The Applicants assert that they are entitled to water service to the subject property for a variety of reasons.¹² One of these is that because they are within CSA 12's sphere of service (LAFCO's old Service Area) and because the sphere of service "corresponds to the LUE definitions of the Urban Service line" then they should be allowed CSA 12 water service. Regardless of the area of the sphere of service/Service Area or the Sphere of Influence, however, Public Works Policy 1 is clear that development is only allowed outside the LCP's USL if it can be served by adequate private on-site water and waste disposal systems (and if it consists of an environmentally preferable alternative). Extension of services outside the USL to serve such development is prohibited. There is no evidence to suggest that the project site is located inside of the USL, and thus the proposed project is fatally flawed in this respect.¹³

The Applicants are pursuing public or community water on many fronts. For one, the Applicants are pursuing a claim of vested rights to domestic water service from CSA 12 based upon a 1966 contract between CSA 12 and the San Luis Obispo Flood Control and Water Conservation

¹² The Applicants are currently also pursuing a vested right claim related to their desire use CSA-12 water for the proposed residential development, and that claim is also before the Commission at its August 8, 2012 meeting (3-12-013-VRC).

¹³ The landowners recognized this requirement as early as 2001. Soon after the 100 acres they owned were annexed to the City of Pismo Beach, SMP applied to San Luis Obispo County for an LCP amendment to "Extend the Avila Beach Community Services District Urban Services Line to include five existing parcels west of the City of Pismo Beach and east of the former Unocal Tank Farm in order for the District to extend water service and possibly sewer service." In other words, they applied to extend the USL to include their properties, as required by the LCP, to allow water service to be extended to them. Ultimately, following significant CEQA work, the proposal was dropped by the landowner.

District, which will be heard at the Commission's August meeting in Santa Cruz.¹⁴ The Applicants also claim that because they are within CSA 12's sphere of influence (SOI) (formerly CSA 12's Sphere of Service (or Service Area) that they should be allowed this water because the definitions of sphere of service and USL correspond. However, the LCP clearly gives credence to the USL as the definitive service provider boundary line and Public Works Policy 1 clearly prohibits new development outside that line.

The Applicants further claim that the LCP includes an exception provision that allows such service. LCP Section 23.04.430 which states:

A land use permit for new development that requires water or disposal of sewage shall not be approved unless the applicable approval body determines that there is adequate water and sewage disposal capacity available to serve the proposed development, as provided by this section. Subsections a. and b. of this section give priority to infilling development within the urban service line over development proposed between the USL and URL. In communities with limited water and sewage disposal service capacities as defined by Resource Management System alert levels II or III:

- a. A land use permit for development to be located between an urban services line and urban reserve line shall not be approved unless the approval body first finds that the capacities of available water supply and sewage disposal services are sufficient to accommodate both existing development, and allowed development on presently-vacant parcels within the urban services line.*
- b. Development outside the urban services line shall be approved only if it can be served by adequate on-site water and sewage disposal systems, except that development of a single-family dwelling on an existing parcel may connect to a community water system if such service exists adjacent to the subject parcel and lateral connection can be accomplished without trunk line extension.*

Section 23.04.432 reads:

To minimize conflicts between agricultural and urban land uses, development requiring new community water or sewage disposal service extensions beyond the urban services line shall not be approved.

However, Subsections 23.04.430(a) and (b) only apply if there is a Resource Management System alert level of II or III, and this has yet to be verified.¹⁵ Even if there is a level II or III alert, the Applicants rely on 23.04.430(b) to claim that because they will not need a trunk line extension, and because in their view they are "adjacent" to a community water system, they should be allowed to connect to CSA 12. Contrary to the Applicants' assertion, however the services in question do not exist adjacent to the subject parcel. In fact, such services are approximately a half a mile away from the property, inside the USL on Avila Beach Road. This LCP policy is intended to account for the rare case when a single family residence is proposed

¹⁴ As discussed in more detail in the Commission's staff report (3-12-013-VRC). See agenda item W20a.

¹⁵ The Applicant's submittal on this point was received the day before this report was finalized. Commission staff was able to verify that there was no such level of alert according to the County's 2009/10 report.

actually adjacent to (not half a mile away from) an already existing water line present outside of the USL when a single-family development is proposed adjacent to it and no major line extension is required. That is clearly not this case. The Commission has not been provided with plans for the infrastructure necessary to connect the property to CSA 12 water lines, but even without those plans, it is clear that such infrastructure would involve more than half a mile of piping, significant grading and other landform alteration and potentially significant impacts on coastal resources. This is not the type of project envisioned by the narrow LCP exception cited above.

On-Site Water

Since the time the County-approved project was appealed to the Commission, Commission staff has worked with the Applicants to resolve the water supply/USL inconsistencies. The Applicants now indicate that they can use the on-site test well for their water supply.^{16,17} The Applicants have recently provided documentation indicating that the well is adequate for domestic use, and the County has recently concurred with this determination.¹⁸ In terms of water quantity, Title 19 of the San Luis Obispo County Code specifies that the minimum capacity for a domestic supply well shall be 5 gallons per minute (gpm) for a single family dwelling.¹⁹ The Applicants' well was tested in May 2010 by Cleath and Associates. The pump test was performed for 11.46 hours during which time the well produced 20 gpm. According to the County Health Agency, the data provided greatly exceeded the minimum testing requirements; however no recovery data was submitted by the applicant (to help verify the results).²⁰ Finally, in terms of water quality, Centauri Labs analyzed water samples from the Applicants' well.²¹ The County Health Agency determined that with the exception of cyanide and total coliform bacteria, the well produces water which meets the State of California Primary Drinking Water Standards.²²

Thus, it appears that the water supply issue can be resolved by eliminating the water line extension and instead allowing the Applicants to use the on-site well. The on-site well is not currently approved for domestic use by the County, however, so the Commission imposes Special Condition 4, requiring evidence that the CDP for this well has been amended by the County to allow it to be used for domestic purposes.

¹⁶ Personal communications between Coastal Commission Coastal Planner Daniel Robinson and the Applicant's representative Dave Watson (numerous phone calls and email dated May 23, 2012).

¹⁷ As indicated previously, approved by the County in 2010 (CDP DRC2006-00075). Again, uncertainty remains whether the well is on APN 076-231-060 (Parcel 1) or APN 076-231-063 (the subject property, Parcel 2)

¹⁸ The San Luis Obispo County Health Agency indicates that although the well completion report (Report No. 1090208) did not specify that it was for domestic use, the information provided indicates that the well was constructed in accordance with domestic water supply standards (e.g., there is a 60 foot cement annular seal, the casing material used was F480 PVC pipe, and the filter pack was pea gravel).

¹⁹ Per the Building and Construction Ordinance. This standard can also be adjusted down to 2.5 gpm if 1,000 gallons or more of approved on-site water storage is provided. The capacity is to be verified by a minimum four hour pump test with drawdown and recovery data.

²⁰ The County Health Agency expects the hydrogeologist who performed the testing would have the data available and that it was simply omitted from the summary of data provided to it.

²¹ From Enloe Well Drilling and Pump (dated June 11, 2010).

²² The County Health Agency indicates that there isn't necessarily a problem with cyanide levels, just that this analyte was omitted from the testing performed. They further indicate that test results indicated a "present" for total coliform bacteria; however since no confirming test was performed, these results may or may not be indicative of a bacteriological problem.

3. Public Service Extension Conclusion

The extension of water service outside of the LCP's USL to serve the proposed development is inconsistent with Public Works Policy 1. Special Condition 1 therefore requires that the extension of water utilities to the site be deleted from the project plans. As discussed above, with the addition of Special Condition 4, requiring the County to approve the on-site well for domestic use, the project can be found consistent with the LCP regarding water supply and extension of services.

J. ARCHEOLOGICAL AND CULTURAL RESOURCE PROTECTION

1. Applicable Policies

Archeology Policy 1 - Protection of Archeological Resources. *The county shall provide for the protection of both known and potential archeological resources. All available measures, including purchase, tax relief, purchase of development rights, etc., shall be explored at the time of a development proposal to avoid development on important archeological sites. Where these measures are not feasible and development will adversely affect identified archeological or paleontological resources, adequate mitigation shall be required.*

Archeology Policy 4 - Preliminary Site Survey for Development within Archeologically Sensitive Areas. *Development shall require a preliminary site survey by a qualified archeologist knowledgeable in Chumash culture prior to a determination of the potential environmental impacts of the project.*

Archeology Policy 5 - Mitigation Techniques for Preliminary Site Survey before Construction. *Where substantial archeological resources are found as a result of a preliminary site survey before construction, the county shall require a mitigation plan to protect the site. Some examples of specific mitigation techniques include:*

- (a) Project redesign could reduce adverse impacts of the project through relocation of open space, landscaping or parking facilities.*
- (b) Preservation of an archeological site can sometimes be accomplished by covering the site with a layer of fill sufficiently thick to insulate it from impact. This surface can then be used for building that does not require extensive foundations or removal of all topsoil.*
- (c) When a project impact cannot be avoided, it may be necessary to conduct a salvage operation. This is usually a last resort alternative because excavation, even under the best conditions, is limited by time, costs and technology. Where the chosen mitigation measure necessitates removal of archeological resources, the county shall require the evaluation and proper deposition of the findings based on consultation with a qualified archeologist knowledgeable in the Chumash culture.*
- (d) A qualified archeologist knowledgeable in the Chumash culture may need to be on-site during initial grading and utility trenching for projects within sensitive areas.*

CZLUO 23.07.104 - Archeologically Sensitive Areas. *To protect and preserve archaeological resources, the following procedures and requirements apply to development within areas of the coastal zone identified as archaeologically sensitive.*

- (a) Archaeologically sensitive areas. The following areas are defined as archaeologically sensitive:*
 - (1) Any parcel within a rural area which is identified on the rural parcel number list prepared by the California Archaeological Site Survey Office on file with the county Planning Department.*
 - (2) Any parcel within an urban or village area which is located within an archaeologically sensitive area as delineated by the official maps (Part III) of the Land Use Element.*
 - (3) Any other parcel containing a known archaeological site recorded by the California Archaeological Site Survey Office.*
- (b) Preliminary site survey required. Before issuance of a land use or construction permit for development within an archaeologically sensitive area, a preliminary site survey shall be required. The survey shall be conducted by a qualified archaeologist knowledgeable in local Native American culture and approved by the Environmental Coordinator. The County will provide pertinent project information to the Native American tribe(s).*
- (c) When a mitigation plan is required. If the preliminary site survey determines that proposed development may have significant effects on existing, known or suspected archaeological resources, a plan for mitigation shall be prepared by a qualified archaeologist. The County will provide pertinent project information to the Native American tribe(s) as appropriate. The purpose of the plan is to protect the resource. The plan may recommend the need for further study, subsurface testing, monitoring during construction activities, project redesign, or other actions to mitigate the impacts on the resource. Highest priority shall be given to avoiding disturbance of sensitive resources. Lower priority mitigation measures may include use of fill to cap the sensitive resources. As a last resort, the review authority may permit excavation and recovery of those resources. The mitigation plan shall be submitted to and approved by the Environmental Coordinator, and considered in the evaluation of the development request by the Review Authority.*
- (d) Archeological resources discovery. In the event archeological resources are unearthed or discovered during any construction activities, the standards of Section 23.05.140 of this title shall apply. Construction activities shall not commence until a mitigation plan, prepared by a qualified professional archaeologist reviewed and approved by the Environmental Coordinator, is completed and implemented. The County will provide pertinent project information to the affected Native American tribe(s) and consider comments prior to approval of the mitigation plan. The mitigation plan shall include measures to avoid the resources to the maximum degree feasible and shall provide mitigation for unavoidable impacts. A report verifying that the approved mitigation plan*

has been completed shall be submitted to the Environmental Coordinator prior to occupancy or final inspection, whichever occurs first.

2. Analysis

As described earlier, the Applicants' proposed project includes a series of patios/decks supported by retaining walls that would be located on top of an archaeological site. In this case, the LCP-designated Archeologically Sensitive Area (ASA) is located just south or downhill of the main SFD structures in an oval shape approximately 7,250 square feet in size (approximately 20 meters by 40 meters).

The LCP requires that archeological resources be protected and preserved. According to CZLUO Section 23.07.104 (c), priority shall be given to avoiding disturbance of sensitive resources. Lower priority mitigation measures may include use of fill to cap the sensitive resources. And as a last resort, the review authority may permit excavation and recovery of those resources. The Applicants are proposing to cap the proposed patio area with fill and to install the retaining walls and patio directly on top of the fill.

The reason for the ASA designation is that the area is historically and culturally important to the Chumash Indians, and thus there are several LCP-designated ASAs in the vicinity of the subject property and throughout the Avila Beach area.²³ According to the Applicants' archeological investigation, this territory was historically occupied by the Obispeno Chumash, the northernmost of the dialect area of the Chumash speaking peoples of California.²⁴ The Chumash community has been directly involved with many projects in the Avila Beach area over the years.

Previous fieldwork completed in 1981 indicated that portions of a prehistoric Chumash site (SLO-47) are present in the Pirates Cove area. The location of SLO-47 was along what was probably a main road between major cultural centers in Chumash territory (Avila Beach and Pismo Beach). Its proximity to Fossil Point and Whale's Cove, both places of spiritual significance to modern day Chumash, support the unique status of SLO-47 in San Luis Obispo. In general, the investigation concludes that, "the SLO-47 site contains significant archeological resources having potential scientific value and spiritual value as prehistoric cultural deposits in a state of good preservation".

On the subject property itself (deemed "Lot 2" by the archeological investigation), the investigation identified significant archeological resources near the project site. Shell remains found and soil characteristics in this area indicated a midden, marking the location of intensive prehistoric activity. In addition, the investigation deemed the area on the subject property to be the most intact and most dense concentration of cultural materials in the current sample from SLO-47 and is the most important area to avoid if possible.

The Applicants' proposal to cap and cover the entirety of the ASA has the potential to disturb such resources, especially since some limited surface artifacts were found around these areas.

²³ Again, the Chumash regard themselves as caretakers of Mother Earth and the Avila Beach area is at the spiritual center of their territory.

²⁴ According to "Results of Phase 2 Archeological Subsurface Testing at SLO-47, Lots 1-4, Whale's Cove Development Project, San Luis Obispo County, CA," prepared by Gibson's Archeological Consulting in 2003.

It appears that instead of capping and covering, the project could be modified to avoid this area entirely. In fact, the Applicants indicate that the proposed patio/deck area can be moved to avoid impacting the ASA area.²⁵ Because there are feasible design changes that can avoid the ASA area, the project as proposed cannot be found consistent with the LCP. As indicated above, avoiding disturbance of cultural resources is the highest priority according to the LCP, and a lower priority consists of filling and capping. Thus, consistent with the LCP, this approval is conditioned to avoid the ASA area (see Special Condition 1).

3. Archaeological and Cultural Resources Conclusion

The LCP requires that archaeological resources be protected and preserved, with the highest priority given to avoiding disturbance of the resources. The project site is located within an LCP-designated Archaeologically Sensitive Area, and includes a significant archaeological site in the area of the proposed project. The proposed series of retaining walls and multi-level patio/deck areas directly on top of the archaeological site are inconsistent with the LCP. Provided that the archaeological site is avoided as conditioned, the project can be found consistent with the archaeological policies of the LCP.

K. VISUAL AND SCENIC RESOURCE PROTECTION

1. Applicable Policies

Visual and Scenic Resources Policy 1 - Protection of Visual and Scenic Resources. Unique and attractive features of the landscape, including, but not limited to unusual landforms, scenic vistas and sensitive habitats are to be preserved and protected.

Visual and Scenic Resources Policy 2 - Site Selection for New Development. Permitted development shall be sited so as to protect views to and along the ocean and scenic coastal areas. Wherever possible, site selection for new development is to emphasize locations not visible from major public view corridors. In particular, new development should utilize slope created “pockets” to shield development and minimize visual intrusion.

Visual and Scenic Resources Policy 4 - New Development in Rural Areas. New development shall be sited to minimize its visibility from public view corridors. Structures shall be designed (height bulk style) to be subordinate to, and blend with, the rural character of the area. New development which cannot be sited outside of public view corridors is to be screened utilizing native vegetation; however, such vegetation, when mature, must also be selected and sited in such a manner as to not obstruct major public views. New land divisions whose only building site would be on a highly visible slope or ridgetop shall be prohibited.

Visual and Scenic Resources Policy 5 - Landform Alterations. Grading, earthmoving, major vegetation removal and other landform alterations within public view corridors are to be minimized. Where feasible, contours of the finished surface are to blend with adjacent natural terrain to achieve a consistent grade and natural appearance.

²⁵ The Applicant’s representative has expressed this to Staff over the phone, and submitted a conceptual plan of a design showing the patio and deck areas and all retaining walls outside the ASA in May to this effect.

CZLUO 23.04.210(c) - Standards for Critical Viewsheds and SRAs for protection of visual resources. *The following standards apply within areas identified as Critical Viewsheds or SRAs in the area plans for protection of visual resources:*

- (1) Location of Development.** *Locate development, including, but not limited to primary and secondary structures, accessory structures, fences, utilities, water tanks, and access roads, in the least visible portion of the site, consistent with protection of other resources. Emphasis shall be given to locations not visible from major public view corridors. Visible or partially visible development locations shall only be considered if no feasible non-visible development locations are identified, or if such locations would be more environmentally damaging. New development shall be designed (e.g., height, bulk, style, materials, color) to be subordinate to, and blend with, the character of the area. Use naturally occurring topographic features and slope-created “pockets” first and native vegetation and berming second, to screen development from public view and minimize visual intrusion.*
- (2) Structure visibility.** *Minimize structural height and mass by using low-profile design where feasible, including sinking structures below grade. Minimize the visibility of structures by using design techniques to harmonize with the surrounding environment.*
- (3) Ridgetop development.** *Locate structures so that they are not silhouetted against the skyline or ridgeline as viewed from the shoreline, public beaches, the Morro Bay estuary, and applicable roads or highways described in the applicable planning area standards in the area plans, unless compliance with this standard is infeasible or results in more environmental damage than an alternative.*
- (4) Landscaping for hillside and ridgetop development.** *Provide screening of development at plant maturity using native vegetation of local stock, non-invasive, or drought-tolerant vegetation without obstructing major public views (e.g., screening should occur at the building site rather than along a public road). The use of vegetation appropriate to the site shall be similar to existing native vegetation. Alternatives to such screening may be approved if visual impacts are avoided through use of natural topographic features and the design of structures. Provisions shall be made to maintain visual screening for the life of the development.*
- (5) Land divisions and lot-line adjustments - cluster requirement.** *New land divisions and lot-line adjustments where the only building site would be on a highly visible slope or ridgetop shall be prohibited. Land divisions and their building sites that are found consistent with this provision shall be clustered in accordance with Chapter 23.04 or otherwise concentrated in order to protect the visual resources.*
- (6) Open space preservation.** *Pursuant to the purpose of the Critical Viewshed or SRA to protect significant visual resources, sensitive habitat or watershed, open space preservation is a compatible measure. Approval of an application for new development in these scenic coastal areas is contingent upon the applicant executing an agreement with the county to maintain in open space use appropriate portions of the site within the*

Critical Viewshed or SRA (for visual protection). Guarantee of open space preservation may be in the form of public purchase, agreements, easement controls or other appropriate instrument approved by the Planning Director, provided that such guarantee agreements are not to provide for public access unless acceptable to the property owner or unless required to provide public access in accordance with the LCP.

Section 23.07.164(e). *Any land use permit application within a Sensitive Resource Area shall be approved only where the Review Authority can make the following required findings:*

- 1) The development will not create significant effects on the natural features of the site or vicinity that were the basis for the Sensitive Resource Area designation, and will preserve and protect such features through the site design.*
- 2) Natural features and topography have been considered in the design and siting of all proposed physical improvements.*
- 3) Any proposed clearing of topsoil, trees, or other features is the minimum necessary to achieve safe and convenient access and siting of proposed structures and will not create significant adverse effects on the identified sensitive resource.*
- 4) The soil and subsoil conditions are suitable for any proposed excavation; site preparation and drainage improvements have been designed to prevent soil erosion, and sedimentation of streams through undue surface runoff.*

In addition, the site is located in the LCP's Residential Rural Land Use Category, the purpose of which states:

To provide for residential development at a low density compatible with a rural atmosphere and life-style which maintains the character of the open countryside and is compatible with surrounding agricultural uses.

Thus, the LCP has multiple provisions that require new development to be sited and designed to ensure protection of significant visual resources, including views within public viewsheds. Such policies and protections specifically protect areas having regional public importance for their natural beauty by ensuring that new development is appropriately designed and constructed to have minimal to no adverse impact upon identified visual resources. Views from beaches and the shoreline are protected visual resources under the LCP.

2. Analysis

Location and Visual Setting

As described in greater detail above, the proposed project site is located on a section of rural coastal hillside between the more urban development in both Avila Beach and Pismo Beach. Forming a striking and picturesque surrounding above both of these communities is the Ontario Ridge, a significant coastal feature which rises steeply from the ocean to almost 750 feet above the ocean. In terms of the subject property, the ridge slopes from the summit in a southwesterly direction beginning at a dense wooded ridgetop down toward Cave Landing Road and the Pirates Cove public access and parking lot, a coastal terrace and bluff, and finally San Luis Bay and the

Pacific Ocean (see Exhibit 2). The majority of the property, at least the bottom two-thirds of the parcel, supports dense stands of non-native annual grassland and other weedy species considered ruderal. The upper one-third of the parcel supports dense coastal scrub and coast live oak woodlands. A flat swale with no defined channel (no bed, bank, or evidence of scour) occurs on the southeastern portion of the property. The swale is dominated by the same vegetation as the remainder of the lower portions of the property, including a few occurrences of coyote brush and castor bean. Slopes vary on the property but generally range between 20% and 30% (outside of the degraded building pad area).

Ontario Ridge is a LCP-mapped Sensitive Resource Area (SRA) and any such development along its slopes is afforded extra measures to ensure its visual and scenic resources are adequately protected. In general, the purpose of an SRA is to identify areas of high environmental quality and in so doing, to enhance and maintain the amenities accruing to the public from the preservation of the scenic and environmental quality of San Luis Obispo. As such, the LCP requires that 1) buildings and structures be designed and located in harmonious relationships with surrounding development and the natural environment; 2) buildings, structures and plant material be constructed, installed or planted to avoid unnecessary impairment of scenic views; and 3) potentially unsightly features be located to be inconspicuous from streets, highways, public walkways and surrounding properties; or effectively screened from view (see Exhibit 5).

In this case, the Ontario Ridge LCP-designation is based on the protection of its visual resources. According to the San Luis Bay Coastal Area Plan, hillside protection is important because [Ontario Ridge] form[s] a major scenic backdrop.²⁶ In addition, Ontario Ridge forms an important scenic backdrop for the coastal area of Avila Beach and Pismo Beach, as well as for Avila Valley.²⁷ The residential structures associated with the proposed project site would be located on the currently graded pad about a third of the way up the property (about 350 feet above sea level), and within the SRA. A portion of the project would be cut and built into the ridge just upslope of this pad and scarp, which is readily visible from the Pirate Cove accessway area and other public viewing locations in Avila Beach.

A variety of potential project sites was analyzed through site visits and associated biological, archeological and geological investigations. Yet, given the nature of the parcel with its steep slopes and prominent position on the coast, any development will be extremely visible, unless it were buried, including from the access/parking lot, the shoreline, the overlook, and from the public access trail (between the access/parking lot and the west end of Pismo Beach), as well as to a lesser degree from other areas in the region.

The Applicant has provided photo-simulations and artist's renderings showing the proposed development as seen from various viewpoints around the area, including through use of story poles (see Exhibit 9). In addition, Commission staff have visited the site and surrounding areas on numerous occasions, and have viewed the project from multiple angles and vantage points (see photos in Exhibit 8).²⁸ Taken together, these materials show the proposed project from

²⁶ Pirates Cove (Avila Beach Urban Area), pages 6-6 to 6-7.

²⁷ Ontario Ridge SRA, page 7-1.

²⁸ Staff visited the site on a site visit with one of the Applicants (Rob McCarthy) and the Applicants' representatives in December 2011, as well as informal visits to the surrounding area in February and June of 2012.

multiple angles within Avila Beach (from the west), Pismo Beach (to the east) and from various points to the south. From these renderings, it is clear that the proposed development will be strikingly visible from numerous public viewing locations in close proximity to the project site, and less visible from locations farther away from it. The public views most affected would be from the Pirates Cove accessway parking lot and overlook area, the public trail between Avila Beach and Pismo Beach, Cave Landing Road (on the Avila side and at the entry gate to the subject property and east toward the accessway parking lot), and areas along the Cave Landing Road end of Pismo Beach (throughout the public trail areas south of the Sunset Palisades residential development). Other public views affected, but much further way, include glimpses of the project from the Cal Poly Research Pier and the Avila Beach Pier in Avila Beach, Palisades Park, the Palisades Park tennis court parking lot, the Palisades Bluff Public Walkway, various locations within the Port San Luis area, and the Beachcomber parking lot along Shell Beach Road in Pismo Beach.

Policy Summary

Visual and Scenic Resource Policy 1 provides broad protections for scenic features, which in this case includes the Ontario Ridge. This policy states that unique and attractive features of the landscape, including, but not limited to unusual landforms, scenic vistas and sensitive habitats are to be preserved and protected. By providing a scenic backdrop to both Avila Beach and Pismo Beach, the Ontario Ridge is a significant feature to be preserved. Visual and Scenic Resource Policies 2 and 4 provide standards for new development in San Luis Obispo. According to Policy 2, “permitted development must be sited so as to protect views to and along the ocean and scenic coastal areas.” In addition, Policy 2 states that, “wherever possible, site selection for new development is to emphasize locations not visible from major public view corridors.” Visual and Scenic Resource Policy 4 further reiterates that new development must be minimized to limit impacts to views in rural areas, as is the case with this project: “new development shall be sited to minimize its visibility from public view corridors.” More specifically, “Structures shall be designed (height, bulk, style) to be subordinate to, and blend with, the rural character of the area.” The purpose of the Rural Residential land use category that applies here is to provide low density residential development that is “compatible with a rural atmosphere and life-style which maintains the character of the open countryside and is compatible with surrounding agricultural uses.” As is the case here, “new development which cannot be sited outside of public view corridors is to be screened utilizing native vegetation; however, such vegetation, when mature, must also be selected and sited in such a manner as to not obstruct major public views.”

Project Would Degrade Significant Public Views

The proposed development is located within a scenic coastal area and a significant public viewshed (including from the public access trail and from the Pirates Cove accessway/parking lot to the west end of Pismo Beach). The Pirates Cove accessway/parking lot is currently an uneven doughnut-shaped dirt informal parking area which has a number of public access trails leading from it to various destinations in the area, including the Pirates Cove beach to the southeast and a coastal terrace and bluff overlook to the south. This access/parking area is heavily used, especially in the summertime, for those wishing to hike the ridgetop or bluffs, stroll the public access trail, or access the beach below. While the accessway/parking area currently remains an informal meeting spot and access point, both the parking area and long sliver of beach have long and storied histories of public use. Recently, the County has embarked on plans

to upgrade and improve the parking area by adding permeable pavement, trailheads, and a bathroom facility. As part of this public access improvement project, the County also has plans to redesign the public trail, for walking and biking, which currently runs from the dirt accessway/parking area to a parking area at the end of Indio Drive in Pismo Beach.²⁹ Specifically, the project will redesign the existing trail outside and uphill of an active landslide area just to the southeast of the subject parcel. Approximately 800 linear square feet will be removed and replaced by approximately 1,000 square feet of new multi-purpose trail in this new alignment (see Exhibit 11 for the County's proposed site plan for this area).

The proposed project would be strikingly visible in this significant public viewshed. In particular, it would significantly negatively impact the views from and the public's enjoyment of the Pirates Cove area that is a primary visitor destination, including for the scenic and panoramic public views it provides. The proposed project would be located on what is now essentially an undeveloped hillside, it would silhouette into the sky as seen from portions of the accessway (particularly the trails), and it would both stick out from the slope profile (including through architectural features like roofs and trellises designed to extend up and away from the slope) and it would wrap significantly along the knoll (over 200 feet in length). The series of retaining walls and the multi-level patio/deck areas extending down the slope would likewise jut out and introduce decidedly unnatural elements into this natural setting, and the paved driveway winding up the slope to the site from Cave Landing Road would further degrade the setting.

In short, the approved project does not conform to the LCP's visual policies at the most basic level because its scale and style are not subordinate to and not consistent with the rural undeveloped hillside character of the area, and it will significantly degrade the public viewshed, including particularly with respect to views associated with the popular Pirate's Cove accessway area.

These public viewshed issues are not readily addressable at this site. There do not appear to be any locations on the property for siting a residential development in such a way as to be hidden from view as directed by the SRA policies (see CZLUO Section 23.04.210(c)) and other LCP visual policies (such as Policies 2 and 4).

Taken as a whole, the LCP objective for this site would be that there be no such residential development on it, but if visual resource impacts cannot be avoided, the LCP requires, at a minimum, that the development be sited and designed to preserve and protect natural features (see CZLUO Section 23.04.210(c)(1)). It also requires that development be subordinate to and blend in with the rural character of the area. As discussed below, the Commission imposes special conditions to ensure that the project conforms to these LCP requirements.

Modifications Required to Protect Significant Public Views

As indicated, the site is a very prominent knoll in the public viewshed where development on it cannot be hidden or significantly screened, and thus if any development is to be allowed here the main mechanism to address LCP visual compatibility requirements is to try as best as possible to better conform the development to the hillside area, including through reducing its massing and exposure extending out from the slope, and revising its design so it evokes a more pastoral/rural

²⁹ A network of blufftop trails connects the parking lot at the end of Indio Drive with Cave Landing Road in the City of Pismo Beach.

character consistent with its sensitive setting. Such changes are necessary to achieve consistency with LCP visual resource protection policies, including policies requiring that scenic vistas and views be preserved and protected (LCP Policies 1 and 2), that development be sited outside of SRAs and major public views if possible (LCP Policy 2 and CZLUO Section 23.04.210(c)(1)), that structures not silhouette against the sky in SRAs (CZLUO Section 23.04.210(c)(3)), that development maintain the character of the open countryside (LCP Rural Residential land use purpose), and that development be subordinate to and made to blend with the rural character of the area (LCP Policy 4 and CZLUO Section 23.04.210(c)(1)). This prominent knoll is not the location for a large sprawling architectural statement designed to make a statement, as is proposed, but rather to be consistent with the LCP the project needs to be significantly reduced and redesigned.

There are five main ways of appropriately revising the project: limiting its footprint, limiting its volume above-grade (particularly where it silhouettes against the sky), revising its design so it evokes a more pastoral/rural character consistent with its sensitive setting, providing screening vegetation, and mitigating unavoidable impacts through restoring all disturbed areas and leaving the undeveloped portion of the site in open space.

In terms of the development footprint, the existing graded pad and scarp on the hillside slope is both an existing feature in the viewshed, and a location where residential development can likely best be tucked and contoured to most sensitively conform to the setting per the LCP. If development must be sited in significant public views and SRAs, the LCP explicitly identifies the use of such “pockets” to shield development and minimize visual intrusion (LCP Policy 2 and CZLUO Section 23.04.210(c)(1)). This “pocket” area was previously disturbed from agricultural activity, and a reduced scale and more compact home within this already disturbed area would replace the scarp feature in the viewshed with residential development. While not ideal from an LCP perspective, the fact that the pad and scarp is already present means that a residential development in the same area would help limit its effect on public views. The pad area appears to be approximately 3,000 square feet, or roughly half (and in a different shape) than the “Area of Previous Grading” the Applicants identified, and in which they primarily sited their proposed development. Such an area provides adequate space within which to place the footprint of residential features (e.g., a single story 3,000 square foot house, or a stepped one and a half story 4,500 square foot house).

Within this framework, it is possible that the Applicant could even utilize some subsurface development to help maximize residential space (as identified as an appropriate tool by CZLUO Section 23.04.210(c)(2)), as long as such below grade development does not impact the archeological site and doesn’t lead to slope stability concerns, and as long as such underground development is within the same general graded pad area on the site. This may be most relevant in terms of necessary water storage that will need to be located underground unless the Applicant chooses to use some portion of the graded pad area for this purpose. In any case, all utilities (including but not limited to well and wastewater system components, gas lines, electrical lines, telephone/data lines, etc.) must be located underground to avoid further clutter of the hillside. With the exception of the well and wastewater system and related connection lines, such utilities must also be limited to the driveway footprint area to avoid unnecessary hillside disturbance.

In terms of limiting the volume of development visible above grade, this is best accomplished through stepping and height limitations and requirements that all such development conform as much as possible to the slope profile. In that sense, given the slopes of the hillside, a single-story or stepped design (i.e., single-story elements nearest Cave Landing Road with two-story elements furthest from Cave Landing Road and tucked into the inland side of the scarp feature) best blends the structure into the natural features of the site. Such low-profile design and similar tools to minimize visibility is required by LCP Visual Resource Protection Policies (see Policy 1, 2, 4, and CZLUO Section 23.04.210(c)(2)). Such a design better conforms to the slope, and better subordinates the development to the rural character of the area, as required by the LCP (see LCP Policy 4 and CZLUO Section 23.04.210(c)(1)). In terms of height, the Applicants' proposed maximum of 21.5 feet appears taller than the existing scarp (which was estimated by the Applicants' geologic report at 12 feet), but would appear to be sufficient as applied to the any stepped second-story feature (to the rear of the scarp), in tandem with the limited footprint and the stepped design, to address mass and scale compatibility policies of the LCP. The single-story element near the front of the scarp would need to be at most about half that tall. All above ground and visible residential development must be sited and designed so as to not silhouette against the sky in public views from the Pirates Cove accessway area (including from the parking lot and all public trails) (per LCP Policy 4 and CZLUO Section 23.04.210(c)(3)). Berming may be necessary along the southeast side of the site to shield the development from those walking along the public trail between the Pirates Cove access/parking lot and the cul-de-sac on Cave Landing Road in Pismo Beach, as long as such berming itself is designed to conform and integrate as seamlessly as possible to the slope profile, and to not itself lead to view impacts (e.g., silhouetting in public views).

In terms of design, the proposed architectural style of the house, above and beyond its spread layout and highly visible site location, also adds to the overall visual dichotomy the proposed project represents in this highly scenic rural viewshed. While the Applicants contend that the style of the primary residence is designed to blend in and be subordinate to the surrounding Ontario Ridge (employing a house color to match the dry landscape during the summer and fall months), even expressing that the sloped roof helps to match the rolling nature of the hillside surrounding it, it is clear that the development will not blend in with rural rolling hills in which it is sited. From the site plans and visual simulations, it is evident that the house has a decidedly modern look, out of place on a generally undeveloped hillside in a rural setting. In fact, design elements of the proposed "barn" that sits partly blocked by the primary residence, is likely a better representation of a design that can more readily blend in or be subordinate to the rural character of the area (as required by Policy 4 and CZLUO Section 23.04.210(c)(1)).

In order to blend the residential development with, and to subordinate it to, this setting, the LCP requires a more rural and agrarian design theme. Typical farm house and barn design reflects the type of design that is most appropriate and seen in rural settings where there are limited or no other developments in close proximity. Such development is a common feature in many rural landscapes, and one that is perceived in such viewsheds as compatible, in ways that more modern or showy designs are not. Thus, it will be critical in this case that the residence be modified to reflect a rural agricultural theme (i.e., simple and utilitarian lines and materials, such as board and bats, corrugated metal, muted earth tone colors, etc.). Other architectural details that are common features of historic barn-like residences in the area include a clerestory, casement windows, wide window trim, board and bat siding, corrugated metal roofing, and widow's peaks

on the roof. In addition, all development needs to be constructed of materials expected to blend visually with the surroundings, including to avoid reflected glare from windows and other reflective surfaces, including through the use of such measures as the proposed unpainted wood siding and potentially a corrugated metal roof that would be expected to develop a patina over time.

In addition, proposed driveway needs to similarly be sited and designed to have the least impact on the viewshed for visual compatibility and subordination as required by the LCP (see Policy 4 and CZLUO Section 23.04.210(c)(1)). Toward this end, the driveway must be sited and designed in such a way as to limit its visibility in the public view as much as possible, including through limiting its width and length as much as possible, and coloring its surface to match the surrounding bluffs as much as possible. On the former, all extraneous elements (like the turnouts proposed to the adjacent parcel and up the hill) must be removed, and the driveway area limited as much as possible. Berming and landscaping should be applied to help screen the driveway from public view, as long as such berming and landscaping doesn't itself lead to viewshed impacts. Similarly, any required access to the well site (e.g., for maintenance and repair) must be from the Sycamore Mineral Springs side of Ontario Ridge on an as-needed basis as opposed to through a developed road so as to avoid a road running up the slope in the viewshed.

In terms of landscaping, landscaping must be provided that is capable (at maturity) of partial/mottled screening and softening of the appearance of the development as seen from the Pirates Cove accessway area (including from the parking lot and all public trails) and Avila Beach. Landscaping can be a potent tool for minimizing visual impacts, and must be applied to this project for that purpose. Such landscaping is not intended to require a complete vegetative screen to completely hide the development, rather such landscaping is intended to help soften and somewhat filter the residence from those public areas consistent with views of typical agricultural development in other places in coastal California.

Lighting must be limited as much as possible. In particular, the site is currently an unlit area in the night sky, and any lighting is going to lead to nighttime view impacts. In a similar way, nighttime construction work would negatively impact nighttime views for similar reasons, and is not allowed. Thus, exterior night lighting must be limited to the minimum necessary for pedestrian and vehicular safety purposes. All lighting must be downward directed and designed so that it limits the amount of light or glares visible from the Pirates Cove accessway area (including from the parking lot and all public trails) and Avila Beach as much as possible, including through directed all interior lighting away from windows as much as possible.

In addition, construction must be limited in scale and scope as much as possible to limit the visual impacts from construction, which would be similar if not greater than those expected at project conclusion.

Finally, even as re-sited and re-designed, the approved project will be unavoidably visible in a protected public view and SRA area. To mitigate for such project impacts, all disturbed areas on the project site outside of the building and driveway footprint area, including all existing disturbed areas (e.g., existing jeep trails, etc.), all areas where development is underground (e.g., well and wastewater system components, etc.), and all areas disturbed by construction must be restored to a natural state as much as possible, including through recontouring and landscaping. In addition, and as required by CZLUO Section 23.04.210(c)(6), the areas of the site not given

over to the building and driveway footprint must be maintained in perpetuity as open space, where development is otherwise prohibited except for underground utility infrastructure that may be necessary in the future and landscape maintenance activities on the site.

See Special Conditions 1 (revised plans required), limiting exterior and interior lighting), 3 (restricting areas outside of the residential footprint and driveway to open space uses), and 5 (ensuring that the conditions of this permit are recorded as covenants, conditions, and restrictions against the property).

3. Visual and Scenic Resource Protection Conclusion

The LCP strongly protects public viewsheds, and provides a range of policies to ensure that development is sited to protect scenic views, to minimize visibility in public view corridors, to be located in the least visible portion of the site, to minimize structural height and mass by using low-profile design, to maintain the character of the open countryside, and overall to be subordinate to and blend with the rural character of the area (including LCP Visual and Scenic Resources Policies 1, 2, 4, and 5, LCP Rural Residential land use purpose, and LCP CZLUO Section 23.04.210(c)). The project site is located in a rural area outside the USL within an LCP-designated special scenic area (the Ontario Ridge Sensitive Resource Area (SRA)) on an undeveloped hillside knoll that extends above Cave Landing Road and the public parking lot and trailhead above Pirates Cove. This site is prominent in these near views, and also forms an important scenic backdrop for views from Avila Beach. The proposed project would introduce a very large SFD complex in multiple stories with both a series of retaining walls and multi-level patio/deck areas extending down the slope as well as a paved driveway winding up the slope to the site from Cave Landing Road. The residential complex wraps around the knoll and extends significantly out from it, including through a sweeping roof feature and other features that are designed to stick out as opposed to blend in. The approved project does not conform to the LCP's visual policies at the most basic level because its scale and style are not subordinate to and not consistent with the rural undeveloped hillside character of the area, and it will significantly degrade the public viewshed, including particularly with respect to views associated with the popular Pirate's Cove accessway area.

These public viewshed issues are not easily addressed. Really, the LCP objective for this site would be that there be no such residential development on it, or at least that such development be hidden from view. But there is no location on this site in which to site development where it would not have adverse visual resource impacts. To best address LCP visual compatibility requirements, the project must better conform the development to the hillside area, including through reducing its massing and exposure extending out from the slope, and revising its design so it evokes a more pastoral/rural character consistent with its sensitive setting. This prominent knoll is not the location for residential structure designed to make a statement, as is proposed, but rather to be consistent with the LCP the project needs to be significantly reduced and redesigned. Thus conditions are required that limit the area within which the residential development can be constructed on an existing hillside pad and scarp, requires that the development not silhouette in public views from the Pirates Cove accessway area, requires that it be stepped up the slope within the scarp (i.e., higher in back allowed, lower in front), limits its height to 21.5 at the back of the scarp area, requires landscaping (and potentially berming) to provide visual screening and mottling, and applies other siting and design mitigations to reduce and otherwise mitigate for unavoidable public view impacts. Within this framework, the Applicants are afforded a

residential use and development, and the public viewshed is protected as much as possible. As conditioned, the project can be found consistent with the visual and scenic resource protection policies of the LCP.

L. PUBLIC ACCESS AND RECREATION

1. Applicable Policies

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 proposed project is located seaward of the first through public road and thus such a finding is required. Coastal Act Sections 30210 through 30213 and 30221 specifically protect public access and recreation. In particular:

***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 30213.** Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. ...*

***Section 30220.** Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

***Section 30221.** Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

***Section 30222.** The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*

***Section 30223.** Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Coastal Act Section 30240(b) also protects parks and recreation areas, such as the adjacent Pirates Cove accessway area. Section 30240(b) states:

***30240(b).** Development in areas adjacent to environmentally sensitive habitat areas and*

parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

LCP policies amplify such requirements, including:

Access Policy 2. *Maximum public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development...*

Recreation Policy 1. *Coastal recreational and visitor-serving facilities, especially lower-cost facilities, shall be protected, encouraged and where feasible provided by both public and private means.*

Recreation Policy 2. *Recreational development and commercial visitor-serving facilities shall have priority over non-coastal dependent use, but not over agriculture or coastal dependent industry in accordance with PRC 30222.*

In summary, the California Constitution³⁰ and the federal Coastal Zone Management Act³¹ mandate the protection and enhancement of public access to and along California's coastline. The Coastal Act and the County's certified LCP refine these requirements, including prioritizing public recreational use and development in areas along the shoreline such as this one. Coastal Act Section 30210 requires that public recreational opportunities be maximized,³² and Section 30211 further requires that development not interfere with existing public access. Section 30221 protects oceanfront land such as the Pirates Cove accessway area for recreational use, Section 30222 prioritizes the use of lands suitable for visitor-serving commercial recreational facilities, and Section 30223 similarly reserves upland areas necessary to support public recreational uses for such uses. Coastal Act Section 30213 requires lower-cost visitor and recreation facilities to be protected, encouraged, and where feasible, provided. These overlapping policies protect the Pirates Cove accessway area, including access along Cave Landing Road, the parking lot, the trails and the scenic overlook, including in terms of lower-cost access and recreational opportunities.

2. Analysis

As described in the preceding finding, the proposed project would significantly impact public views from recreational access areas. These impacts would be most felt by the public at the

³⁰ Section 4 of Article X of the California Constitution provides: "No individual, partnership, or corporation, claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this State shall be permitted to exclude the right of way to such water whenever it is required for any public purpose, nor to destroy or obstruct the free navigation of such water; and the Legislature shall enact such laws as will give the most liberal construction to this provision, so that access to the navigable waters of this State shall be always attainable for the people thereof."

³¹ The federal Coastal Zone Management Act requires its State partners to "exercise effectively [its] responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone" (16 U.S.C. Section 1452(2)) so as to provide for "public access to the coasts for recreational purposes." (Section 1452(2)(e))

³² Coastal Act Section 30210 direction to maximize access represents a different threshold than to simply provide or protect such access, and is fundamentally different from other like provisions in this respect. In other words, it is not enough to simply provide access to and along the coast, and not enough to simply protect access, rather such access must also be maximized. This terminology distinguishes the Coastal Act in certain respects, and provides fundamental direction with respect to projects along the California coast that raise public access issues, like this one.

Pirates Cove accessway area, including access along Cave Landing Road, the parking lot, the trails and the scenic overlook, and including in terms of lower-cost access and recreational opportunities. This is a primarily and significant public access destination that is heavily used.³³

Public coastal recreational experience in this area will be diminished by the presence of a large residential development adjacent to this accessway. Lower cost access, in particular, will be negatively affected because the Pirate Cove accessway amenities are free to the public. In addition, because the Pirates Cove accessway is such a highly used public destination area, construction activities, particularly as they affect Cave Landing Road could negatively impact public access users, including through intruding on the ambiance and utility the Pirates Cove access areas. Thus, construction must be structured so as to have the least impact on Cave Landing Road, and to avoid high public use times altogether (i.e., holidays and weekends). The Commission has imposed Special Condition 2 to address some of these concerns. In addition, as discussed above, Special Conditions 1 and 3, in particular, require the residential development on site to be reduced and open space to be protected, which will reduce the project's impacts on visitors to the Pirates Cove accessway area. Thus, as conditioned, the proposed project can be found to be consistent with Coastal Act and LCP access and recreation policies.

M. OTHER

The LCP contain a number of coastal watershed policies which provide protection against new development affecting marine resources and other waterways. These policies aim to ensure that construction minimizes sedimentation, erosion, and that drainage does not cause increased erosion (see Exhibit 5). LCP Coastal Watershed Policy 8 generally prevents construction from occurring during the rainy season. This project would involve large equipment that would drive up Cave Landing Road, up the dirt driveway and/or from the inland side of Ontario Ridge (Sycamore Mineral Springs), include a staging area, impact the public's use and enjoyment of Cave Landing Road and the Pirates Cove accessway/parking lot, include overnight storage of large equipment, and generally intrude and negatively impact the aesthetics, ambiance, serenity, and safety of the recreational public experience in this area.

These impacts can be contained through a construction condition that includes limiting the width of construction corridors, limiting the times when work can take place, clearly fencing off the minimum construction area necessary, clearly delineating and avoiding to the maximum extent feasible public use areas, and protecting marine and groundwater through BMPs (see special condition 2).

N. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

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

³³ And as described earlier is slated for an enhancement project that will only increase its value and utility for public recreational access pursuits in the future.

The County of San Luis Obispo, acting as lead agency, conducted an environmental review for the proposed project as required by CEQA and issued a Mitigated Negative Declaration.

The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. The Commission has reviewed the relevant coastal resource issues associated with the proposed project, and has identified appropriate and necessary modifications to address adverse impacts to such coastal resources. All public comments received to date have been addressed in the findings above. All above findings are incorporated herein in their entirety by reference.

The Commission finds that only as modified and conditioned by this permit will the proposed project avoid significant adverse effects on the environment within the meaning of CEQA. As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects that approval of the proposed project, as modified, would have on the environment within the meaning of CEQA. If so modified, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).

APPENDIX A: Substantive File Documents

Slope Stability Investigation, Pirates Cove Development – Proposed 4 Lot Residential Subdivision, SLO County, CA, Prepared for San Miguelito Partners by Cotton, Shires & Associates, November, 2003

Results of Phase 2 Archeological Subsurface Testing at SLO-47, Lots 1-4, Whale's Cove Development Project, SLO County, CA, Prepared by R.O. Gibson and J.A. Parsons, Gibson's Archeological Consulting.

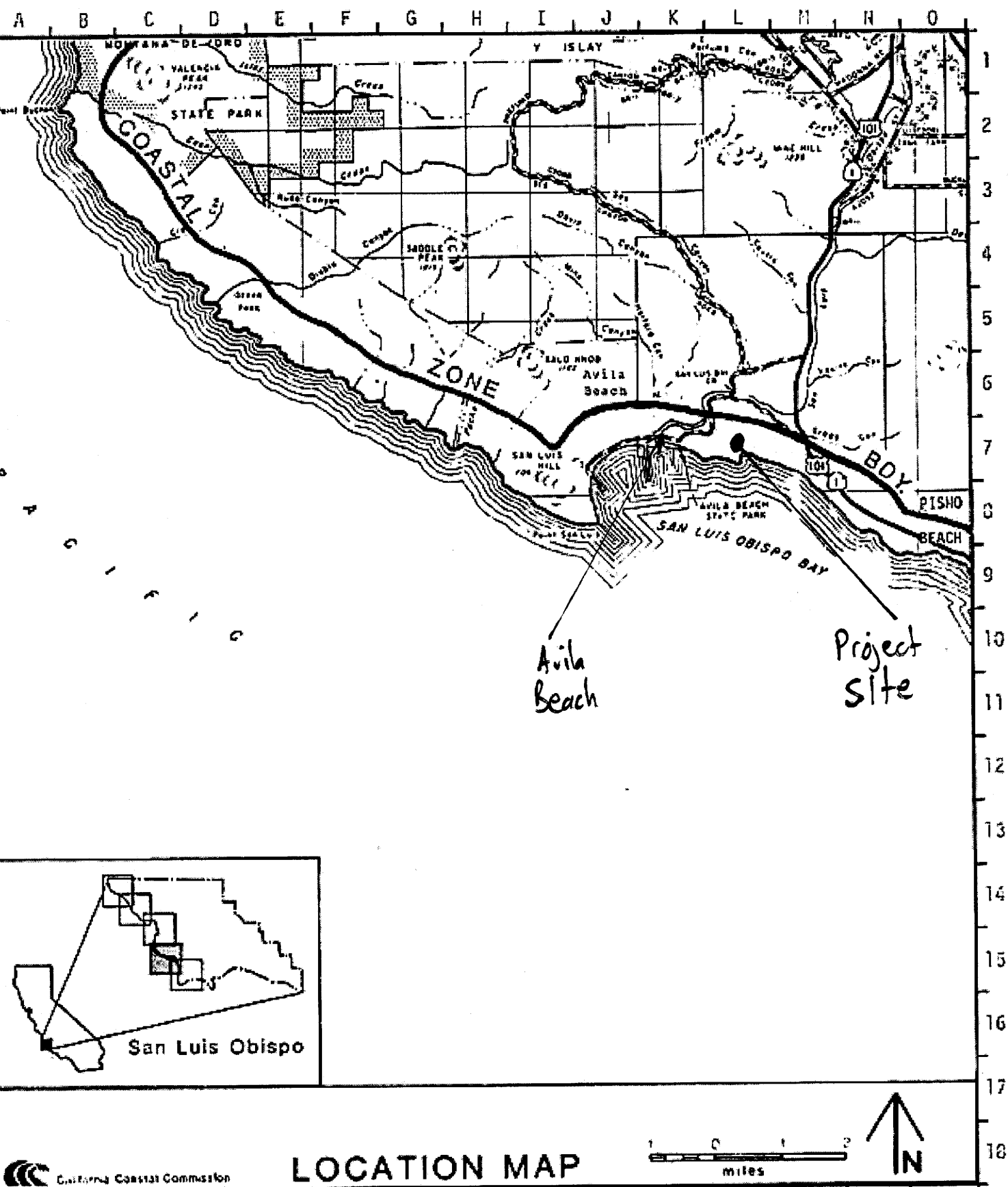
Biological Resource Assessment – San Miguelito Property, Parcel 2, Cave Landing Road, Near Avila Beach, California prepared by Terra Verde Environmental Consulting, LLC., May 2010

Preliminary Hydrologic and Hydraulic Analysis Report, Prepared by Cannon, May, 2010

Engineering Geologic Review, Prepared for Rob McCarthy by Geosinsite, Inc., June 2010

Initial Study and Mitigated Negative Declaration prepared for Rob and Judi McCarthy by the San Luis Obispo County (June 2011)

Soils Engineering and Geologic Hazards Report, McCarthy Residence, Parcel 2, Cave Landing Road, Avila Beach Area of San Luis Obispo County, California, Prepared for the County of San Luis Obispo by EarthSystems Pacific, January 25, 2011



California Coastal Commission

LOCATION MAP

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miles



County of San Luis Obispo

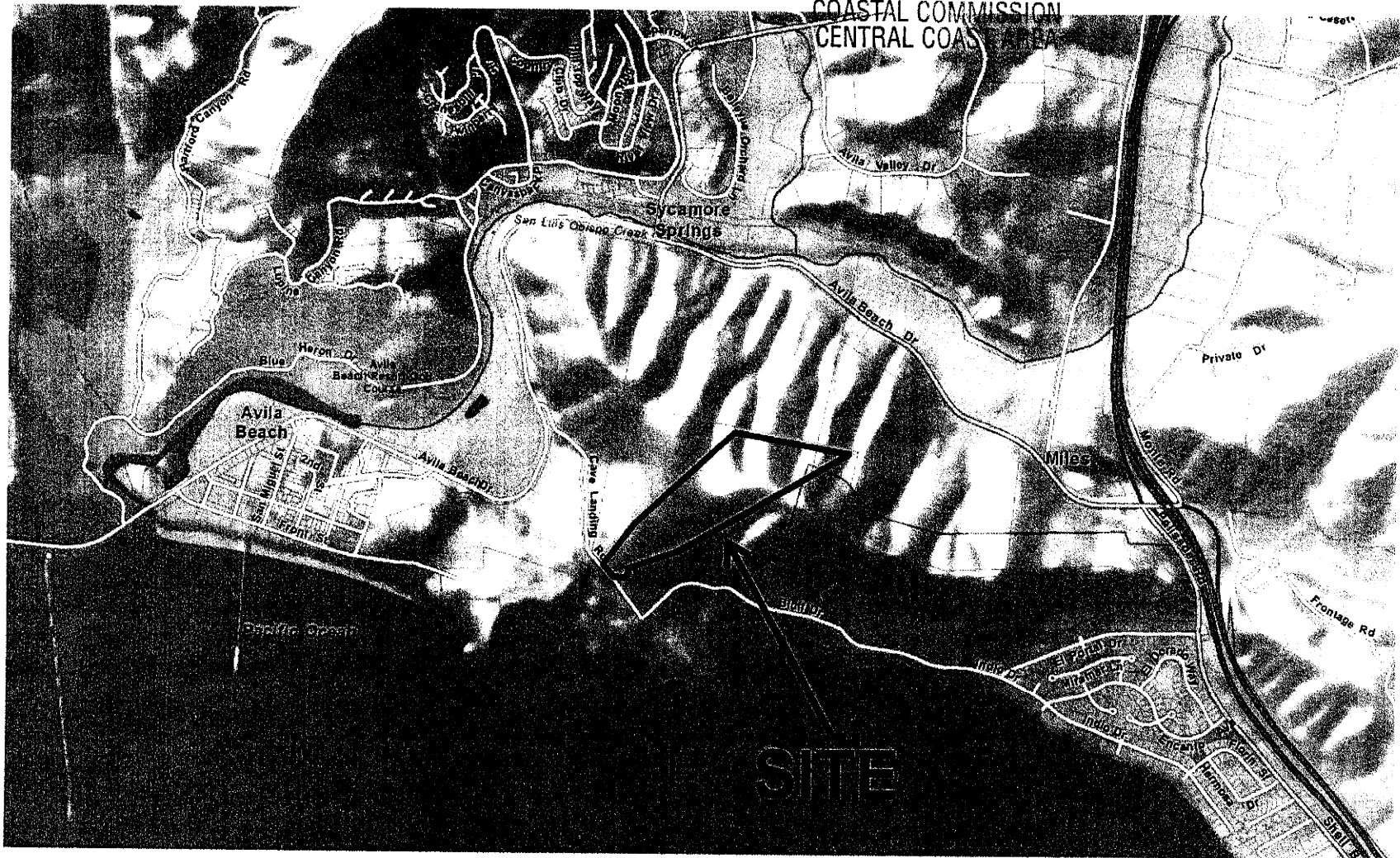
Sheet 4 of 5

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APR 25 2012

SAN LUIS OBISPO COUNTY DEPARTMENT OF BUILDING AND PLANNING

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA



PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT

Vicinity Map

Exhibit 1

Page 2 of 3

3-39

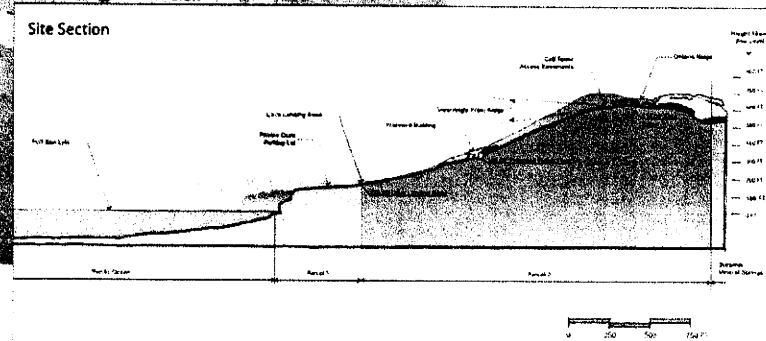
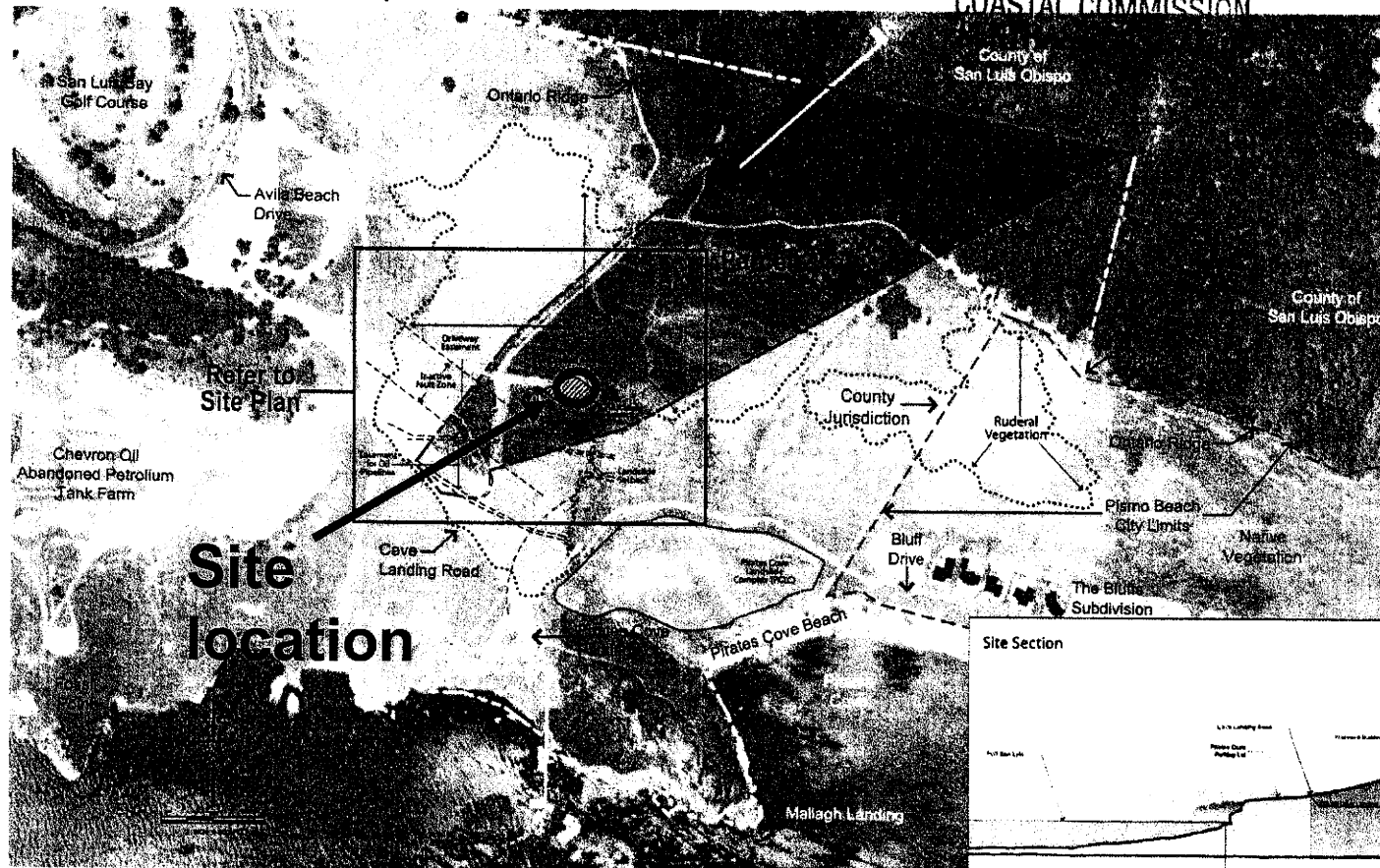
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APR 25 2012

Cave Landing Ranch

CALIFORNIA
COASTAL COMMISSION

Site Analysis Map
& Vicinity Map



PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT

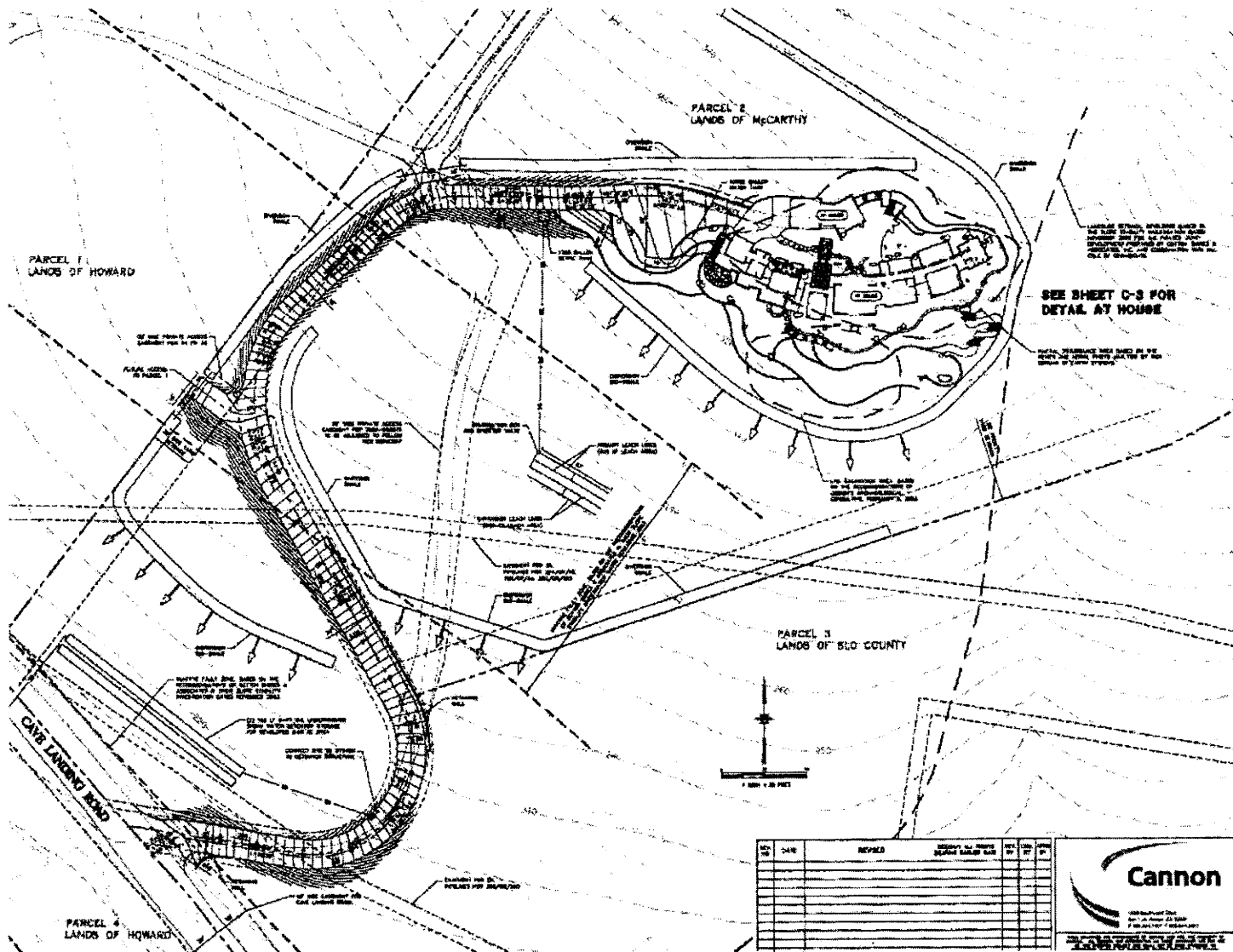
Site Analysis & Vicinity Map

Exhibit 1

Page 3 of 3

3-42

SAN LUIS OBISPO COUNTY DEPARTMENT OF BUILDING AND PLANNING



NO.	DATE	REVISION	BY	CHECKED	DATE



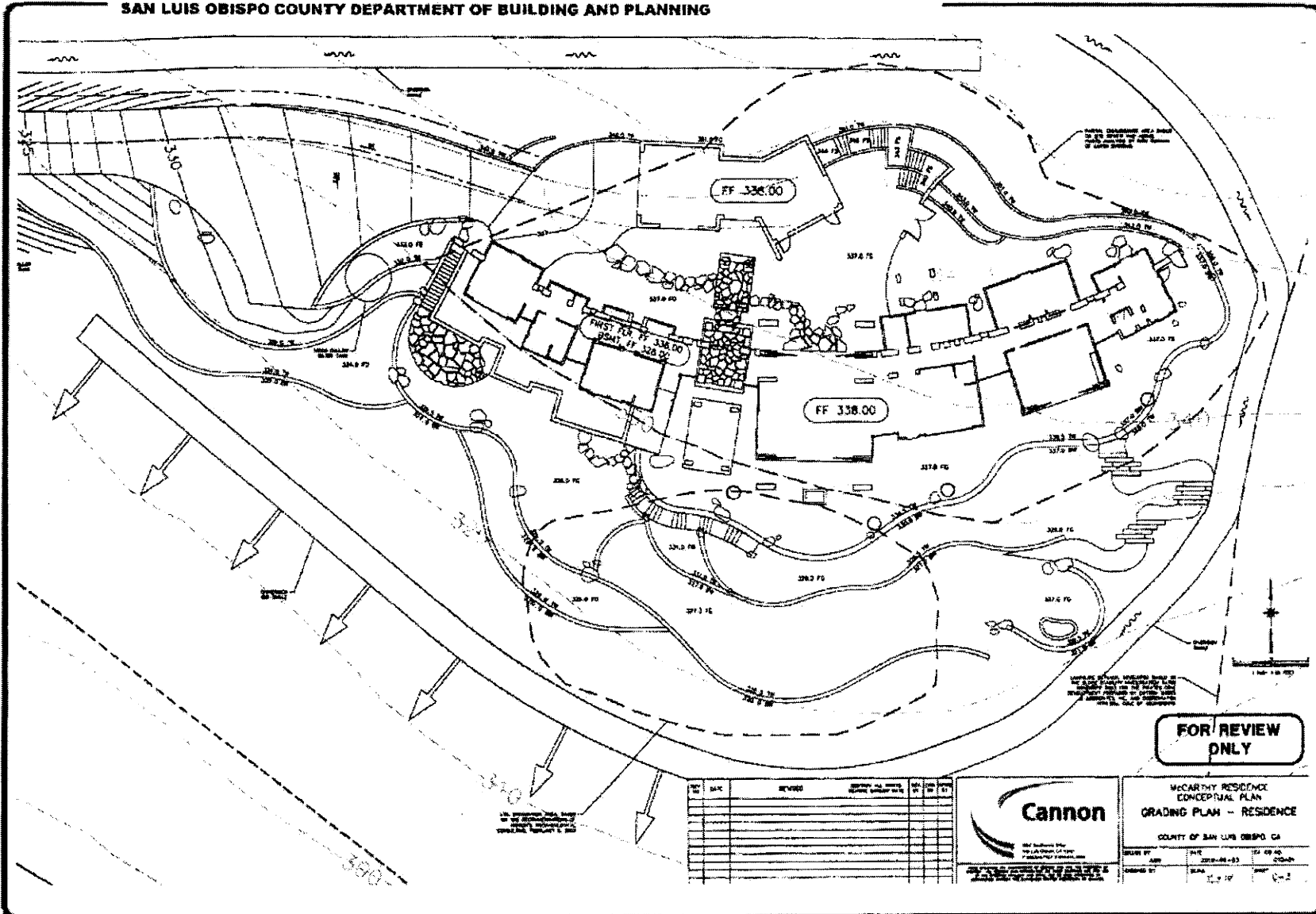
PROJECT
Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT
Grading Plan

3-141

SAN LUIS OBISPO COUNTY DEPARTMENT OF BUILDING AND PLANNING



3-142

PROJECT
Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT
Grading Plan-Residence

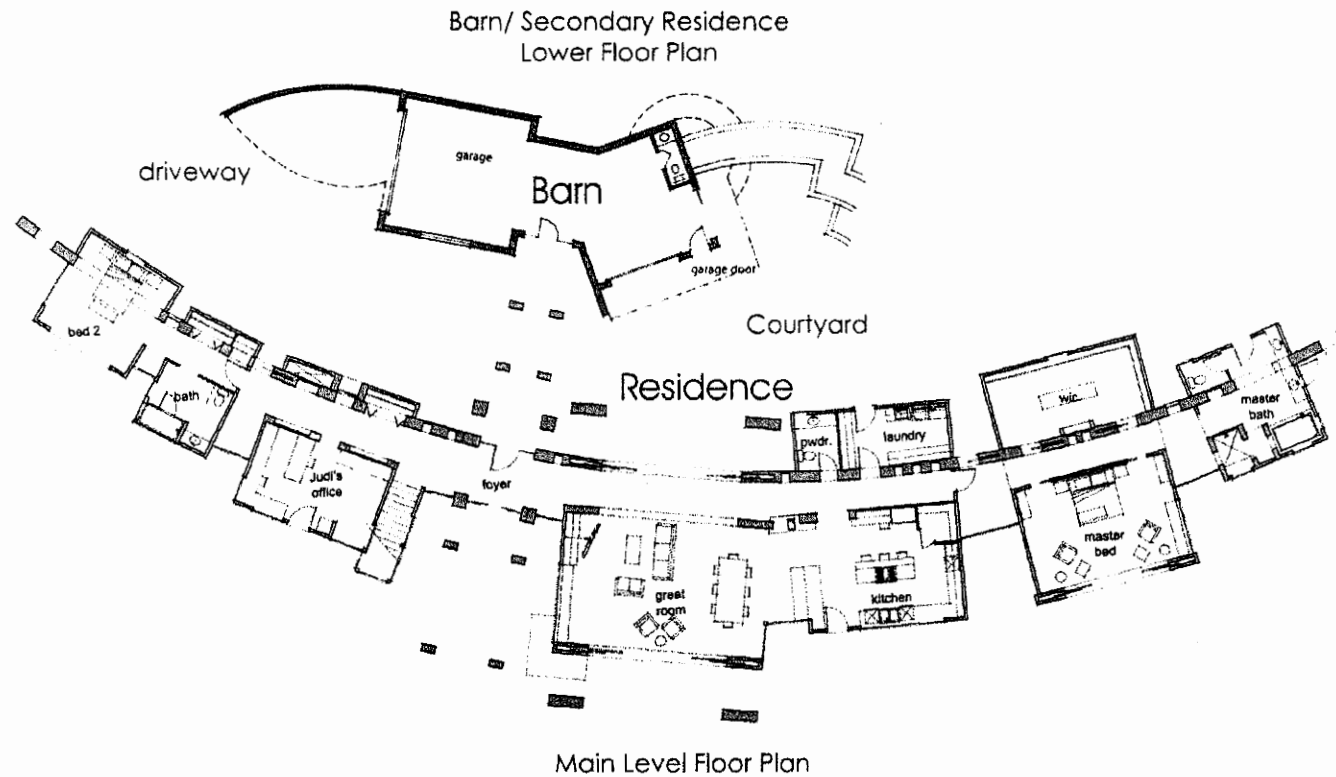
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APR 25 2012

SAN LUIS OBISPO COUNTY DEPARTMENT OF BUILDING AND PLANNING

Cave Landing Ranch

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA
Main Residence/Secondary Residence Floor Plan



PROJECT

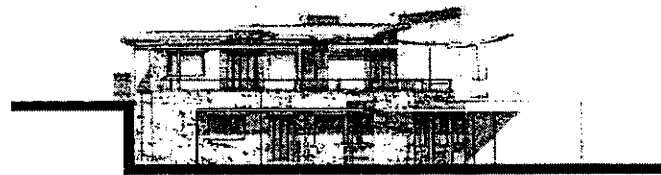
Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT

Floor Plan

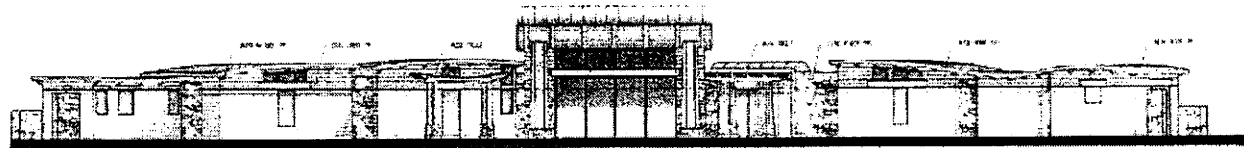
SAN LUIS OBISPO COUNTY DEPARTMENT OF BUILDING AND PLANNING



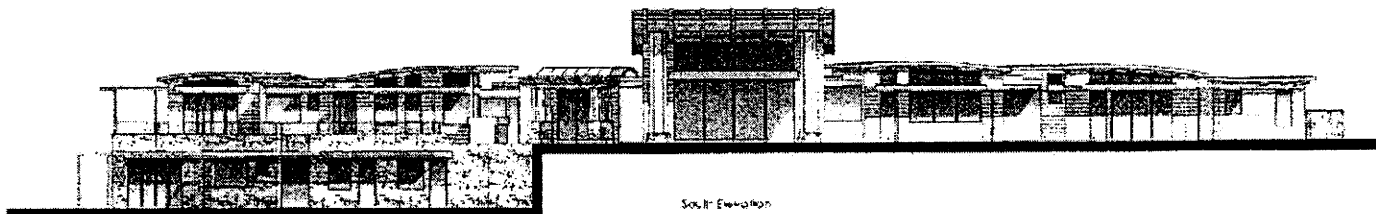
West Elevation



East Elevation



North Elevation



South Elevation



3-48

PROJECT

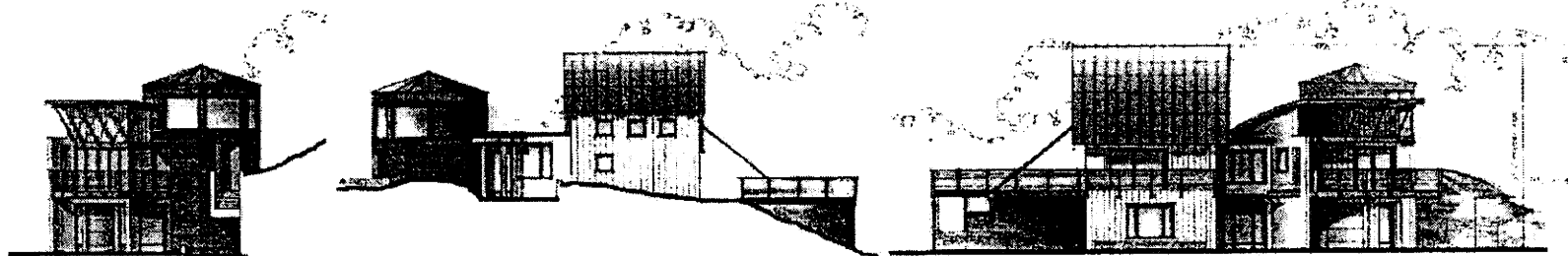
Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT

Elevations

SAN LUIS OBISPO COUNTY DEPARTMENT OF BUILDING AND PLANNING



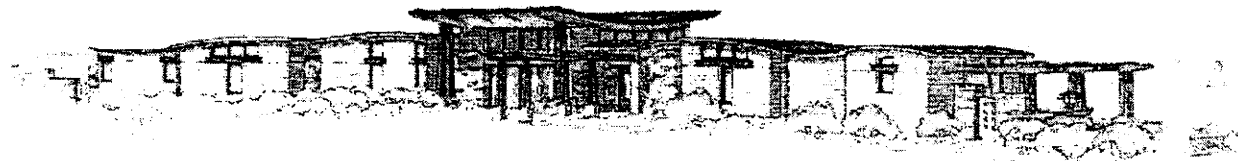
Right Elevation

Rear Elevation

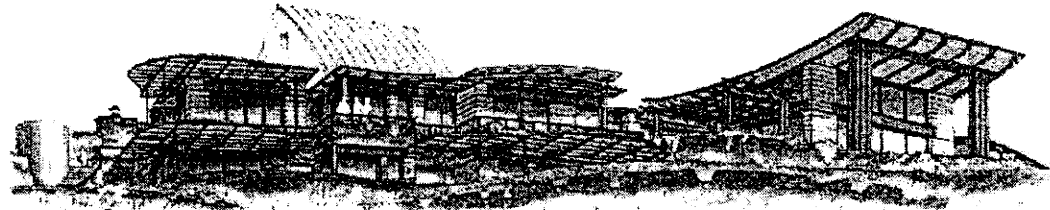
View from Courtyard



Left Elevation



Main Residence View from Courtyard N.T.S.



Main Residence View from Gate N.T.S.



3-49

PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT

Elevations & Sketches



SAN LUIS OBISPO COUNTY
DEPARTMENT OF PLANNING AND BUILDING

August 3, 2011

AICP
Attn: David Watson
PO BOX 385
Pismo Beach, CA 93448-0385

Rob and Judi McCarthy
1800 19th Street
Bakersfield, CA 93301

**FINAL LOCAL
ACTION NOTICE**

REFERENCE # 3-SLO-11-173
APPEAL PERIOD 8/17-8/30/11

RECEIVED

AUG 16 2011

California Coastal Commission,
Central Coast Area

NOTICE OF FINAL COUNTY ACTION

HEARING DATE: July 28, 2011

SUBJECT: ROB AND JUDI McCARTHY / County File Number: DRC2009-00095

LOCATED WITHIN COASTAL ZONE: YES

The above-referenced application was approved by the San Luis Obispo County Planning Commission on the hearing date shown. A copy of the Resolution of approval, with final findings and conditions attached, is enclosed. The conditions of approval must be carried out as set forth in that document.

This action is appealable to the Board of Supervisors within 14 days of this action. If there are Coastal grounds for the appeal there will be no fee. If an appeal is filed with non-coastal issues there is a fee of \$616.00. An appeal to the Board of Supervisors must be made to the Planning Commission Secretary, Department of Planning and Building.

This action may also be appealable to the California Coastal Commission pursuant to regulations contained in Coastal Act Section 30603 and the County Coastal Zone Land Use Ordinance 23.01.043. These regulations contain specific time limits to appeal, criteria, and procedures that must be followed to appeal this action. The regulations provide the California Coastal Commission 10 working days following the expiration of the County appeal period to appeal the decision. This means that no construction permits can be issued until both the County appeal period and the additional Coastal Commission appeal period have expired without an appeal being filed.

Exhaustion of appeals at the county level is required prior to appealing the matter to the California Coastal Commission. This second appeal must be made directly to the

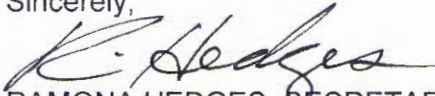
California Coastal Commission Office. Contact the Commission's Santa Cruz Office at (831) 427-4863 for further information on their appeal procedures.

If the use authorized by this Permit approval has not been established or if substantial work on the property towards the establishment of the use is not in progress after a period of twenty-four (24) months from the date of this approval or such other time period as may be designated through conditions of approval of this Permit, this approval shall expire and become void unless an extension of time has been granted pursuant to the provisions of Section 23.02.050 of the Land Use Ordinance.

If the use authorized by this Permit approval, once established, is or has been unused, abandoned, discontinued, or has ceased for a period of six (6) months or conditions have not been complied with, such Permit approval shall become void.

If you have any questions regarding these procedures, please contact me at (805) 781-5611. If you have questions regarding your project, please contact your planner at (805) 781-5600.

Sincerely,



RAMONA HEDGES, SECRETARY
COUNTY PLANNING COMMISSION

(Planning Department Use Only)

Date NOFA copy mailed to Coastal Commission: after 8/11/11

Enclosed: X Staff Report
 X Findings and Conditions

PLANNING COMMISSION
COUNTY OF SAN LUIS OBISPO, STATE OF CALIFORNIA

Thursday, July 28, 2011

PRESENT: Carlyn Christianson, Dan O'Grady, Tim Murphy, Jim Irving, and Ken
Topping

ABSENT: None

PC RESOLUTION NO. 2011-019
RESOLUTION RELATIVE TO THE GRANTING
OF A DEVELOPMENT PLAN/COASTAL DEVELOPMENT PERMIT

WHEREAS, The County Planning Commission of the County of San Luis Obispo, State of California, did, on the 28th day of July, 2011 grant a Development Plan/Coastal Development Permit to ROB AND JUDI MCCARTHY to allow for the construction of a 5,500 square foot single family residence, and a 1,000 square foot secondary residence to be located above a proposed detached 1,000 square foot garage/workshop. Proposed site improvements include: improvements to an existing access road/driveway off of Cave Landing Road which involves paving and retaining walls, site preparation for building pads, roads and septic systems which includes approximately 9,368 cu yards of grading (both cut and fill), a 10,000 gallon water tank for fire suppression, and landscaping around the residence. In addition, site improvements also include extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site and associated grading for the residence to receive water service from County Service Area 12. The project will result in a total area of disturbance of approximately 35,575 square feet, on a 37.06 acre parcel. The project is located on the north side of Cave Landing Road in Avila Beach, within the San Luis Bay (Coastal) planning area within the Residential Rural Land Use Category. Also to be

considered at the hearing will be approval of the Environmental Document prepared for the item. The Environmental Coordinator, after completion of the initial study, finds that there is no substantial evidence that the project may have a significant effect on the environment, and the preparation of an Environmental Impact Report is not necessary. Therefore, a Mitigated Negative Declaration (pursuant to Public Resources Code Section 21000 et seq., and CA Code of Regulations Section 15000 et seq.) has been issued on June 16, 2011 for this project. Mitigation measures are proposed to address air quality, biological resources, cultural resources, geology and soils, transportation and circulation, and public utilities and are included as conditions of approval. The property is in the San Luis Bay (Coastal) Planning Area, APN: 076-231-063. County File Number: DRC2009-00095. Supervisorial District #3.

WHEREAS, the Planning Commission, after considering the facts relating to such application, approves this Permit based on the Findings listed in Exhibit A.

WHEREAS, the Planning Commission, after considering the facts relating to such application, approves this Permit subject to the Conditions listed in Exhibit B.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission of the County of San Luis Obispo, State of California, in a regular meeting assembled on the 28th day of July, 2011, does hereby grant the aforesaid Permit No. DRC2009-00095.

If the use authorized by this Permit approval has not been established or if substantial work on the property towards the establishment of the use is not in progress after a period of twenty-four (24) months from the date of this approval or such other time period as may be designated through conditions of approval of this Permit, this approval shall expire and become void unless an extension of time has been granted pursuant to the provisions of Section 23.02.050 of the Land Use Ordinance.

If the use authorized by this Permit approval, once established, is or has been unused, abandoned, discontinued, or has ceased for a period of six months (6) or conditions have not been complied with, such Permit approval shall become void.

On motion of Commissioner Cooper, seconded by Commissioner Liberto-Blanck,

and on the following roll call vote, to-wit:

AYES: Chairperson Christianson, Commissioners O'Grady, Topping, Murphy,
and Irving

NOES: None

ABSENT: None

the foregoing resolution is hereby adopted.

/s/ Carlyn Christianson
Chairman of the Planning Commission

ATTEST:

/s/ Ramona Hedges
Secretary, Planning Commission

EXHIBIT A
FINDINGS DEVELOPMENT PLAN/COASTAL DEVELOPMENT PERMIT

Environmental Determination

- A. The Environmental Coordinator, after completion of the initial study, finds that there is no substantial evidence that the project may have a significant effect on the environment, and the preparation of an Environmental Impact Report is not necessary. Therefore, a Mitigated Negative Declaration (pursuant to Public Resources Code Section 21000 et seq., and CA Code of Regulations Section 15000 et seq.) has been issued on June 16, 2011 for this project. Mitigation measures are proposed to address air quality, biological resources, cultural resources, geology and soils, public services, and transportation and are included as conditions of approval.

Development Plan

- B. The proposed project or use is consistent with the San Luis Obispo County General Plan because the use is an allowed use and as conditioned is consistent with all of the General Plan policies.
- C. As conditioned, the proposed project or use satisfies all applicable provisions of Title 23 of the County Code.
- D. The establishment and subsequent operation or conduct of the use will not, because of the circumstances and conditions applied in the particular case, be detrimental to the health, safety or welfare of the general public or persons residing or working in the neighborhood of the use, or be detrimental or injurious to property or improvements in the vicinity of the use because the proposed residence does not generate activity that presents a potential threat to the surrounding property and buildings. This project is subject to Ordinance and Building Code requirements designed to address health, safety and welfare concerns.
- E. The proposed project or use will not be inconsistent with the character of the immediate neighborhood or contrary to its orderly development because the single family residence, garage, and secondary dwelling unit are similar to, and will not conflict with, the surrounding lands and uses.
- F. The proposed project or use will not generate a volume of traffic beyond the safe capacity of all roads providing access to the project, either existing or to be improved with the project because the project is located on Cave Landing Road, a local road constructed to a level able to allow the additional residence and secondary dwelling unit.

Archeological Sensitive Area

- G. The site design and development incorporate adequate measures to ensure that archeological resources will be acceptably and adequately protected because the project is conditioned to include a monitoring plan which will require a qualified professional approved by the county to monitoring any ground disturbing activities.

Coastal Access

- H. The proposed use is in conformity with the public access and recreation policies of Chapter 3 of the California Coastal Act, because the project is not adjacent to the coast and the project will not inhibit access to the coastal waters and recreation areas.

Sensitive Resource Area

- I. The development will not create significant adverse effects on the natural features of the site or vicinity that were the basis for the Sensitive Resource Area designation, and will preserve and protect such features through the site design. In this particular case, the basis for the Sensitive Resource Area is the Ontario Ridge viewshed. The project will not create significant adverse effects for the Ontario Ridge viewshed as the project is designed to minimize and eliminate views of the project site from Avila Beach, and is located much lower than the ridgeline which will keep the visible high elevations of the hillside free of development.
- J. Natural features and topography have been considered in the design and siting of all proposed physical improvements. The proposed project is located on an existing bench from an old water tank which has since been removed which will reduce site impacts by keeping development on previously disturbed areas to the maximum amount feasible.
- K. Any proposed clearing of topsoil, trees, or other features is the minimum necessary to achieve safe and convenient access and siting of proposed structures, and will not create significant adverse effects on the identified sensitive resource.

The soil and subsoil conditions are suitable for any proposed excavation; site preparation and drainage improvements have been designed to prevent soil erosion, and sedimentation of streams through undue surface runoff.
- M. The development can obtain water service from County Service Area 12 (CSA-12) and the permits for the necessary water line infrastructure are a part of this development plan application.

EXHIBIT B
CONDITIONS OF APPROVAL FOR DEVELOPMENT PLAN/COASTAL DEVELOPMENT PERMIT

Approved Development

1. This approval authorizes a Development Plan/Coastal Development Permit to allow for the construction of a 5,500 square foot single family residence, and a 1,000 square foot secondary residence to be located above a proposed detached 1,000 square foot garage/workshop. Proposed site improvements include: improvements to an existing access road/driveway off of Cave Landing Road which involves paving and retaining walls, site preparation for building pads, roads and septic systems, a 10,000 gallon water tank for fire suppression, and landscaping around the residence. In addition, site improvements also include extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site and associated grading for the residence to receive water service by County Service Area 12. The project will result in total area of disturbance of approximately 35,575 sq. ft., on a 37.06 acre parcel.

Conditions required to be completed at the time of application for construction permits

Site Development

2. **At the time of application for construction permits** plans submitted shall show all development consistent with the approved site plan, floor plans and elevations.

Lighting Plan

3. **At the time of application for building permits**, the applicant shall provide a Lighting Plan. The plan shall include the height, location and intensity of all exterior lighting. All light fixtures shall be shielded so that neither the lamp nor the reflective interior surface is visible from areas outside the project site. All light poles, fixtures and hoods shall be dark (non-reflective) colored. All exterior lighting sources shall be low-level and adjusted so that light is directed into the project site. Security lighting shall be shielded so as not to create glare when viewed outside the project boundaries.

Fire Safety

4. **At the time of application for construction permits**, all plans submitted to the Department of Planning and Building shall meet the fire and life safety requirements of the California Fire Code. Requirements shall include, but not be limited to those outlined in the Fire Safety Plan, prepared by the CDF/County Fire Department for this proposed project and dated June 8, 2011.

Services

5. **At the time of application for construction permits**, the applicant shall provide a letter from County Service Area 12 stating they are willing and able to service the property.

Conditions to be completed prior to issuance of a construction permit

Public Works

6. **Prior to issuance of construction permits** the applicant shall obtain all necessary approvals from County Public Works, and all recommendations from Public Works shall

be incorporated in the project plans. A drainage plan and sedimentation and erosion control plan shall also be prepared for review and approval by County Public Works.

Septic System

7. **At the time of application for construction permits**, the applicant shall submit evidence that a septic system, adequate to serve the proposal, can be installed on the site. Septic systems shall also be reviewed and approved by County Environmental Health Department.

Fees

8. **Prior to issuance of a construction permit**, the applicant shall pay all applicable school and public facilities fees.

Air Quality

9. *Fugitive PM10 Mitigation Measures* (All required PM10 measures shall be shown on applicable grading or construction plans. In addition, the developer shall designate personnel to insure compliance and monitor the effectiveness of the required dust control measures (as conditions dictate, monitor duties may be necessary on weekends and holidays to insure compliance); the name and telephone number of the designated monitor(s) shall be provided to the APCD **prior to construction/ grading permit issuance**)
- A. Reduce the amount of the disturbed area where possible;
 - B. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (nonpotable) water should be used whenever possible;
 - C. All dirt stock-pile areas should be sprayed daily as needed;
 - D. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;
 - E. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast-germinating native grass seed and watered until vegetation is established;
 - F. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
 - G. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
 - H. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
 - I. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114.
 - J. Install Wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site, and

- K. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.

Natural-Occurring Asbestos

10. "Naturally-occurring asbestos" has been identified by the State Air Resources Board as a toxic air contaminant. Serpentine and ultramafic rocks are very common in the state and may contain naturally occurring asbestos. Under the State Air Resources Board Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, **prior to construction permit issuance**, a geologic investigation will be prepared and then submitted to the county to determine the presence of naturally-occurring asbestos. If naturally occurring asbestos is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM before grading begins. These requirements may include, but are not limited to, 1) preparation of an "Asbestos Dust Mitigation Plan", which must be approved by APCD before grading begins; 2) an "Asbestos Health and Safety Program", as determined necessary by APCD. (For any questions regarding these requirements, contact Karen Brooks (APCD) at (805) 781-5912 or go to <http://www.slocleanair.org/business/asbestos.asp>). **Prior to final inspection or occupancy**, whichever occurs first, if naturally-occurring asbestos is encountered, the applicant shall provide verification from APCD that the above measures have been incorporated into the project.

Wood-Burning Devices

11. Only the following types of wood burning devices shall be allowed (based on District Rule 504): a) EPA-Certified Phase II wood burning devices; b) catalytic wood burning devices emitting less than or equal to 4.1 grams per hour of particulate matter, as verified by a nationally-recognized testing lab; c) non catalytic wood burning devices which emit less than or equal to 7.5 grams per hour of particulate matter, as verified by a nationally-recognized testing lab; d) pellet-fueled woodheaters; or e) dedicated gas-fired fireplaces. **Prior to construction permit issuance**, such devices shall be shown on all applicable plans, and installed as approved by the county.

Portable Equipment

12. **Prior to issuance of construction permits**, the applicant shall provide evidence they have contacted APCD on any proposed portable equipment requiring APCD or CARB registration, such as: 50-hp portable generators, IC engines, unconfined abrasive blasting operations, concrete batch plants, rock and pavement crushing, tub grinders, trammel screens, etc. Should any of these types of equipment be used during construction activities California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit may be required.

Cultural Resources

13. Prior to issuance of a construction permit, the applicant shall submit a monitoring plan, prepared by a subsurface-qualified archaeologist, for the review and approval by the Environmental Coordinator. The monitoring plan shall include at a minimum:
- A. List of personnel involved in the monitoring activities;
 - B. Description of how the monitoring shall occur;
 - C. Description of frequency of monitoring (e.g. full-time, part time, spot checking);

- D. Description of what resources are expected to be encountered;
- E. Description of circumstances that would result in the halting of work at the project site (e.g. What is considered "significant" archaeological resources?);
- F. Description of procedures for halting work on the site and notification procedures
- G. Description of monitoring reporting procedures

Cultural Resources

14. Improvements (including landscaping) shall be located outside of the identified areas containing cultural materials or shall be limited to surface work only to the maximum extent feasible. Improvements (including landscaping) shown within the identified areas potentially containing cultural materials will be designed to be placed in fill material to the extent feasible, or in cases where excavation into native materials is unavoidable, shall follow the Phase III protocol below. The Phase III study will include but not be limited to the following:

1. **Prior to issuance of a construction permit**, the applicant shall submit to the Environmental Coordinator (and possibly subject to peer review) for review and approval, a detailed research design for a Phase III (data recovery) archaeological investigation. The Phase III program shall be prepared by a subsurface qualified archaeologist approved by the Environmental Coordinator. The consulting archaeologist responsible for the Phase III program shall be provided with a copy of the previous archaeological investigations (Parker). The Phase III program shall include at least the following:

- A. standard archaeological data recovery practices;
- B. recommendation of sample size adequate to mitigate for impacts to archaeological site, including basis and justification of the recommended sample size. Sample size should be between 2-10% of the volume of disturbed area. If a lesser sample size is recommended, supporting information shall be presented that justifies the smaller sample size.
- C. identification of location of sample sites/test units;
- D. detailed description of sampling techniques and material recovery procedures (e.g. how sample is to be excavated, how the material will be screened, screen size, how material will be collected);
- E. disposition of collected materials;
- F. proposed analysis of results of data recovery and collected materials, including timeline of final analysis results;
- G. list of personnel involved in sampling and analysis.

Once approved, these measures shall be shown on all applicable plans and implemented during construction.

2. **Prior to issuance of a construction permit** the applicant shall submit to the Environmental Coordinator, a letter from the consulting archaeologist indicating that all necessary field work as identified in the Phase III program has been completed.

Geology and Soils

15. **Prior to issuance of construction permits**, all geology recommendations outlined in the Developers Statement shall be incorporated into all construction documents.

Conditions to be completed during project construction

Biological Resources

16. To protect bird and raptor species protected by the Migratory Bird Treaty Act and Fish and Game code, the applicant shall avoid vegetation clearing and earth disturbance during the typical nesting season (March 1 – August 15). If avoiding construction during this season is not feasible, a qualified biologist shall survey the area one week prior to activity beginning on site. If nesting birds are located, they shall be avoided until they have successfully fledged. A buffer zone of 50 feet will be placed around all non-sensitive bird species and all activity will remain outside of that buffer until the applicant's biologist has determined that the young have fledged. High visibility exclusion fencing will be placed at the buffer zone to ensure no work occurs within this zone. If special status bird species are located, no work will begin until an appropriate buffer is determined by consultation with the County and/or the local California Department of Fish and Game biologist.

Cultural Resources

17. During all ground disturbing construction activities, the applicant shall retain a qualified archaeologist (approved by the Environmental Coordinator) and Native American to monitor all earth disturbing activities, per the approved monitoring plan. If any significant archaeological resources or human remains are found during monitoring, work shall stop within the immediate vicinity (precise area to be determined by the archaeologist in the field) of the resource until such time as the resource can be evaluated by an archaeologist and any other appropriate individuals, and procedures required by County and State law can be implemented. If intact burials are found, the applicant shall re-design the structure to avoid impacting the intact burials consistent with the recommendations of the on-site archaeologist, Native American Monitor, designated Most Likely Descendent, and the State Native American Heritage Commission.

Geology and Soils

Prior to issuance of construction permits, the following measures shall be shown on construction plans and verified by a qualified professional:

Site Preparation

18. The ground surface in the grading area will be prepared for construction by *removing all existing fill*, vegetation, large roots, debris, and other deleterious materials. Existing utility lines that will not remain in service will be either removed or properly abandoned. The appropriate method of utility abandonment will depend upon the type and depth of the utility. Recommendations for abandonment can be made as necessary.
19. Voids created by the removal of materials or utilities will be called to the attention of the soils engineer. No fill will be placed unless the underlying soil has been observed by the soils engineer or engineering geologist.

Grading

20. *Prior to issuance of construction permits, conditions 21 through 116 shall be shown on all construction documents and complied with during project construction as required by the project engineering geologist, and outlined in the Developers Statement:*
20. Where fill will be placed on existing ground that slopes steeper than 10 percent, the surface will be cut into level benches that penetrate entirely into rock or firm colluvial soil, as directed by the soils engineer or engineering geologist during construction. The benches will be 10 to 15 feet wide, depending upon the site conditions during construction, and angled 2 to 3 percent back into the slope. Benches will be planned at vertical intervals of 3 to 5 feet.
21. Where fill will be placed on ground that slopes steeper than 20 percent, a keyway will be constructed at the toe of the fill. The keyway will be 10 to 15 feet wide, depending upon the site conditions during construction, angled 2 to 3 percent back into the slope, and will penetrate a minimum of 3 feet into firm colluvial soil or bedrock, as directed by the soils engineer or engineering geologist.
22. Soil exposed in the bottoms of keyways and benches will be scarified a minimum of 12 inches, moisture conditioned, and recompact to a minimum of 90 percent of maximum dry density. In situ bedrock exposed in benches and keyways need not be scarified or compacted.
23. Back drains will be planned for keyways and on benches, unless otherwise directed by the soils engineer or engineering geologist during construction. Typical bench and keyway, and back drain details are included in Appendix F of the Soils Engineering and Geologic Hazards Report by Earth Systems Pacific, dated January 25, 2011.
24. In building areas, grading will allow for the placement of a minimum of 18 inches of imported nonexpansive material. The soil surface upon which the import material will be placed will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact. A minimum of 18 inches of nonexpansive imported material will then be moisture conditioned and placed throughout the building areas.
25. Within the building areas, the upper 18 inches of fill material will consist exclusively of imported nonexpansive materials. Nonexpansive materials are defined as belonging in the GM, GC, SP, SW, SC and SM categories per ASTM D 2487-06, and that have an expansion index of 10 or less (ASTM D 4829-08a). Proposed imported nonexpansive materials will be reviewed by the soils engineer before being brought to the site, and on an intermittent basis during placement. The subslab sand layer described in the "Slabs-on-Grade and Exterior Flatwork" section of this report (if utilized), is considered to be part of the minimum 18 inches of imported nonexpansive material, not in addition to it.
26. The subfloor areas below any raised wood floors will be graded to a low point or a series of low points, and drainage inlets will be provided at the low points, to direct any accumulated water to an appropriate outlet. As an alternative to drainage inlets in the subfloor areas, gravel intercept drains can be provided at all low areas, to collect and

discharge accumulated water. The gravel drains will be a minimum of 12 inches wide and 12 inches deep, wrapped with geotextile filter fabric, and drained with a rigid perforated PVC pipe. They will discharge, in a nonerosive manner, to appropriate discharge points.

27. Beyond the building areas, surfaces to receive fill or surface improvements will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact.
28. The on-site soils, crushed siltstone or claystone, and appropriate imported soils, once cleared of any vegetation and deleterious materials and thoroughly mixed to a reasonably uniform consistency, may be used as fill up to 18 inches below slab areas and to finish grade or subgrade beyond slab areas.
29. The soils and bedrock in the tank foundation area will be overexcavated to a minimum depth of 3 feet below pad grade. The resultant surface will be scarified to a depth of 1 foot, moisture conditioned, and recompact. Fill soils will be moisture conditioned, placed, and compacted in accordance with the recommendations presented below. The upper foot of material in the tank foundation area will consist exclusively of Class 2 base, crushed gravel, or other material as specified by the tank manufacturer. These are general recommendations and may be subject to revision depending upon site constraints or the tank manufacturer's recommendations.
30. In site retaining wall foundation areas, the soil will be removed to bottom-of-footing elevation (not including any keyway). The resulting surface will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact. Alternately, 1 foot of material may be removed from the foundation area, and the exposed surface moisture conditioned and recompact. The previously removed material will then be put back in the excavation as properly placed and compacted fill material as described in this section.
31. All materials used as fill will be cleaned of all debris, and any rocks larger than 3 inches in diameter. If fill material includes rocks, the rocks will be placed in a sufficient soil matrix to ensure that voids caused by nesting of the rocks will not occur and that the fill can be properly compacted.
32. All fill will be placed with moisture contents at optimum moisture content or just above. Moisture contents well in excess of optimum will be avoided, as unstable conditions could result and mitigating measures (as noted in the following paragraph) could be needed.
33. Depending on *in situ* soil moisture content at the time of construction, there is a potential for the site soils to become unstable during grading. Unstable soils are difficult to properly compact and are unsuitable for the placement of additional lifts of fill. Methods to correct instability include scarification and aeration of the soils in place, or the placement of gravel layers or geotextiles. The appropriate method to be utilized will depend on the conditions observed at the time of construction.

34. In general, all fill will be placed in maximum lifts of 8 inches in loose thickness and compacted to a minimum of 90 percent of the maximum dry density. The upper 12 inches of subgrade and all aggregate base in areas to be paved with asphalt concrete or Portland cement concrete will be compacted to a minimum of 95 percent of maximum dry density.
35. Aggregate base and subgrade will be firm and unyielding when proofrolled by heavy rubber-tired equipment prior to paving.
36. Unretained fill slopes will not exceed a 2:1 (horizontal to vertical) slope ratio. Likewise, unretained cut slopes will not exceed a 2:1 slope ratio, unless reviewed on an individual basis by the soils engineer or engineering geologist.
37. The recommended soil moisture content will be maintained throughout construction, and during the life of the residence. Failure to maintain the soil moisture content can result in desiccation cracks and disturbance, which are an indication of degradation of soil compaction. If desiccation cracks are allowed to develop, or if soils desiccate near improvements such as foundations, curbs, flatwork, etc., damage to those improvements may result. Soils that have cracked due to desiccation or are otherwise disturbed will be removed, moisture conditioned, and recompacted. To reduce the potential for disruption of drainage patterns, rodent activity will be aggressively controlled.
38. Any recommendations of the radon consultant that involve a grading solution will be reviewed by the soils engineer and/or the engineering geologist prior to being implemented.

Utility Trenches

39. Unless otherwise recommended, utility trenches adjacent to footings or grade beams will not be excavated within the zone of foundation influence, as shown in Typical Detail A in Appendix G of the Earth Systems Pacific report (January 25, 2011).
40. Utilities that must pass beneath a footing or grade beam will be placed with properly compacted utility trench backfill and the foundation will be designed to span the trench.
41. A select, noncorrosive, granular, easily compacted material will be used as bedding and shading immediately around utilities. The site soil, crushed bedrock, or imported nonexpansive soil may be used for trench backfill above the select material. At a minimum, the final 18 inches of trench backfill below all slabs-on-grade will consist of imported nonexpansive material per the "Grading" section of this report.
42. In general, trench backfill will be compacted to a minimum of 90 percent of maximum dry density. In areas to be paved (or that will support vehicular flatwork), a minimum of 95 percent of maximum dry density will be maintained for all trenches in the upper 12 inches of subgrade and in all aggregate base. A minimum of 85 percent of maximum

dry density will generally be sufficient where trench backfill is located in landscaped or other unimproved areas where settlement would not be detrimental.

43. Trench backfill will be placed in level lifts not exceeding 6 inches in loose thickness and compacted to the minimums noted above. Trench backfill will be moisture conditioned to optimum moisture content or just above prior to application of compactive effort.
44. Where on or off-site utility trenches will slope steeper than 20 percent, sand-cement slurry or lean concrete plugs (seepage collars) will be placed in the trenches at maximum 150-foot intervals. The plugs will extend a minimum of 2 feet below the bottom of the trench and will be cut a minimum of 2 feet into the sides of the trench. The top of the plug will be a minimum of 1 foot above the top of utility.
45. A gravel pocket drain will be constructed upgradient of each clay or slurry plug. Each drain will consist of a minimum of 1 cubic foot of free-draining gravel per foot of trench width. The drain gravel will be wrapped in a permeable synthetic filter fabric conforming to Caltrans Standard 88-1.03 for underdrains. A solid rigid PVC pipe will extend from the gravel drain at a minimum 1 percent slope to an appropriate discharge point.
46. In Cave Landing Road, flexible pipe, sleeves, and/or connections will be used in the water line from Station 109+00 to Station 116+25 in an effort to reduce the potential for damage to the line in the event that the landslide in this area activates. Similar measures may be used in the dry utilities at the discretion of the architect/engineer.
47. For compaction of trench backfill soils by jetting or flooding to be successful, a free drainage path must be provided that will allow the water to dissipate very rapidly without causing erosion within the trench. Consequently, compaction of trench backfill by jetting or flooding is not recommended except under extraordinary circumstances. However, to aid in *encasing* utility conduits, particularly corrugated drain pipes, and multiple, closely-spaced conduits in a single trench, jetting or flooding may be useful. Flooding or jetting will only be attempted with extreme caution, and any jetting operation will be subject to review by the soils engineer.
48. The recommendations of this section are minimums only, and may be superseded by the architect/engineer based upon soil corrosivity or the requirements of pipe manufacturers, utility companies or the governing jurisdiction. Soil corrosivity test results and recommendations for mitigation of soil corrosivity are included in Appendix D for use by the architect/engineer in specifying corrosion protection measures.

Foundations

Footings Bearing in Rock

49. The lower level of the main residence, the northerly region of the main residence, and the barn may all be founded on footings that bear in the siltstone bedrock. In these areas, continuous and spread (pad) footings bearing a minimum of 12 inches into the bedrock may be used. Other dimensions will be per the CBC or the specification of the architect/engineer.

50. The footing excavations will be level and stepped as necessary to follow any slope of the bedrock surface.
51. Continuous footings will be reinforced, at a minimum, by two No. 4 rebar, one at the top and one at the bottom, or as required by the architect/engineer. Spread footings will be reinforced in accordance with the requirements of the architect/engineer.
52. Footings will be designed using maximum allowable bearing capacities of 1,800 psf dead load and 2,700 psf dead plus live loads. Using these criteria, maximum settlement and differential settlement are expected to be on the order of 3/8-inch and 1/4-inch in 25 feet, respectively.
53. In design of footings to resist lateral loads, a passive equivalent fluid pressure of 300 pcf for the soil and 500 pcf for the rock; as well as a coefficient of friction of 0.40 may be used. Lateral capacity is based on the assumption that backfill adjacent to foundations is properly compacted.
54. A grade beam, meeting the same depth and reinforcing criteria as the continuous footings will be cast across each vehicle opening in the barn.
55. Bedrock exposed in footing and grade beam excavations will be lightly moistened to approximately optimum moisture and no desiccation cracks will be present prior to concrete placement.

Drilled Cast-in-Place Caissons

56. Drilled, cast-in-place caissons will be used to support all areas of the residence where the bedrock is sufficiently deep that footings are no longer viable. These areas are believed to be mainly the seaward areas of the main level of the primary residence.
57. The caissons will have a minimum diameter of 18 inches and will extend a minimum depth of 4 feet into bedrock. They will not be constructed closer than three diameters (clear span) to each other without approval from the soils engineer.
58. An allowable skin friction value of 800 psf in compression or 600 psf in tension will be assumed for the bedrock; no friction capacity in the overlying soils or end bearing capacity will be used in the design.
59. Lateral loads on caissons may be resisted by friction and by passive resistance of the soil and bedrock. In design of caissons to resist short-term loads, a passive equivalent fluid pressure of 300 pcf for soil 500 pcf for bedrock may be applied across two caisson diameters. If lateral loads will be sustained, the passive values presented will be reduced by one-third, and will be applied across only one caisson diameter.

60. The caissons will be connected by grade beams so that the foundation acts as an integral unit. The grade beams will have a minimum depth of 21 inches below lowest adjacent grade and will be reinforced, at a minimum by two No. 4 rebar, one at the top and one at the bottom, or as required by the architect/engineer.
61. The soils and bedrock may not stand vertically during the caisson construction operations. Casing, drill fluid, or other means of keeping the holes open could be necessary.
62. Although no subsurface water was encountered in the test pits, depending on the location of the caissons and the weather conditions at and preceding the time of construction, subsurface water could be encountered during the caisson drilling operation. Therefore, caisson reinforcing will be designed to accommodate a minimum 5-inch diameter tremie pipe. Any water encountered will be removed from the hole prior to placing concrete, or the concrete will be tremied. Appendix H of the Earth Systems Pacific report (January 25, 2011) contains a description of the recommended tremie method.
63. As caissons will utilize skin friction for support, it is not necessary to thoroughly clean the bottoms of the excavations, although excessive loose debris and slough material will be removed using a clean out bucket or by other means. As stated earlier, use of end-bearing capacity is not recommended.
64. Concrete used in caissons will be placed at a slump between 4 and 6 inches in dry excavations and between 6 and 9 inches when placed under water.
65. The caissons will not deviate from a plumb line taken from the center of the caisson by more than 2 percent of the caisson length, from the top to the point of interest. Adequate caisson oversize may be assumed to provide the required tolerance.
66. Caisson excavations will be observed by the soils engineer during drilling operations. Special inspection will be provided during reinforcing steel and concrete placement.
67. The construction will be planned such that each caisson will be cast on the same day that it is drilled, as caisson excavation sidewalls can deteriorate rapidly over time and the deterioration can adversely affect frictional capacity. If caissons cannot be cast the day that they are drilled, the rotating auger will be raised and lowered the full depth of the excavation to re-establish frictional capacity on the day of the concrete pour.
68. Soils in grade beam excavations will be moistened to approximately optimum moisture and no desiccation cracks will be present prior to concrete placement.

Foundations, General

69. Allowable bearing capacity may be increased by one-third when transient loads such as wind or seismicity are included. Foundations may be designed using the following

seismic parameters which are based, in part, on a latitude of 35.1784 degrees north, and a longitude of 120.7187 degrees west:

Site Class (CBC Table 1613.5.2)	C
Mapped Spectral Accelerations (Site Class B)	
0.2 second period - S_s	1.50g
1.0 second period - S_1	0.551g
Design Response Spectral Acceleration (Site Class C)	
0.2 second period - S_{DS}	0.999g
1.0 second period - S_{D1}	0.477g

Interior Slabs-on-Grade and Exterior Flatwork

70. Prior to completion of the design of slabs, a radon consultant will be retained to evaluate the potential for radon to adversely impact the project. The recommendations of the consultant will be incorporated in the design and construction process. Any radon mitigation recommendations that conflict with the geotechnical recommendations presented herein will be brought to the attention of the soils engineer to affect a solution prior to the completion of design.
71. Interior slabs-on-grade will have a minimum thickness of 4 full inches. Reinforcement size, placement, and dowels will be as directed by the architect/engineer; minimum slab and flatwork reinforcement will consist of No. 3 rebar placed at 24 inches on-center each way. At a minimum, the interior slabs-on-grade will be doweled to footings and grade beams with No. 3 dowels lapped to the slab rebar at 24 inches on-center.
72. Due to the current use of impermeable floor coverings, water-soluble flooring adhesives, and the speed at which buildings are now constructed, moisture vapor transmission through slabs is a much more common problem than in past years. Where moisture vapor transmitted from the underlying soil would be undesirable, the slabs will be protected from subsurface moisture vapor. A number of options for vapor protection are discussed below, however, the means of vapor protection, including the type and thickness of the vapor retarder, if specified, are left to the discretion of the architect/engineer.
73. Several recent studies, including those of American Concrete Institute (ACI) Committees 302 and 306, have concluded that excess water above the vapor retarder increases the potential for moisture damage to floor coverings and could increase the potential for mold growth or other microbial contamination. The studies also concluded that it is preferable to eliminate the typical sand layer beneath the slab and place the slab concrete in direct contact with a "Class A" vapor retarder, particularly during wet weather construction. However, placing the concrete directly on the vapor retarder requires special attention to using the proper vapor retarder (see discussion below), a very low water-cement ratio in the concrete mix, and special finishing and curing techniques.
74. Probably the next most effective option would be the use of vapor-inhibiting admixtures in the slab concrete mix and/or application of a sealer to the surface of the slab. This

would also require special concrete mixes and placement procedures, depending upon the recommendations of the admixture or sealer manufacturer.

75. Another option that may be a reasonable compromise between effectiveness and cost considerations is the use of a subslab vapor retarder protected by a sand layer. If a "Class A" vapor retarder (see discussion below) is specified, the barrier can be placed directly on the prepared subgrade. The retarder will be covered with a minimum 2 inches of *clean* sand. If a less durable vapor retarder is specified (Class B or C), a minimum of 4 inches of clean sand will be provided on top of the prepared subgrade, and the retarder will be placed in the center of the clean sand layer. Clean sand is defined as a well or poorly graded sand (ASTM D 2487-06) of which less than 3 percent passes the No. 200 sieve. The clean sand layer, if utilized, is considered to be part of the nonexpansive layer recommended in the "Grading" section of this report to be placed below slabs-on-grade, not in addition to it.
76. Where specified, vapor retarders will conform to ASTM Standard E 1745-97/2004. This standard specifies properties for three performance classes, Class A, B and C. The appropriate class will be selected based on the sensitivity of floor coverings to moisture intrusion and the potential for damage to the vapor retarder during placement of slab reinforcement and concrete.
77. Regardless of the underslab vapor retarder selected, proper installation of the retarder is critical for optimum performance. All seams must be properly lapped, and all seams and utility penetrations properly sealed in accordance with the vapor retarder manufacturer's recommendations.
78. If sand is used between the vapor retarder and the slab, it will be moistened only as necessary to promote concrete curing; saturation of the sand will be avoided, as the excess moisture would be on top of the vapor retarder, potentially resulting in vapor transmission through the slab for months or years.
79. If sand is used as nonexpansive import beneath vehicular flatwork (see following paragraphs), the flatwork will be designed by the architect/engineer using a subgrade modulus (K_{30}) of 200 pci (psi/in). If a higher subgrade modulus is preferred, the flatwork may be designed using a subgrade modulus of 400 pci. In this case, the nonexpansive material will consist of a minimum 12-inch thick layer of Class 2 aggregate base.
80. In conventional construction, it is common to use 4 to 6 inches of sand beneath exterior pedestrian flatwork. Due to the expansion potential of the soil on this site, there will be a risk of movement and damage to such flatwork if conventional measures are used. Heaving and cracking are likely to occur. This movement could be reduced by the placement of 12 to 18 inches of compacted, nonexpansive material beneath the flatwork.
81. Another measure that can be taken to reduce the risk of movement of flatwork due to expansive soils is to provide thickened edges or grade beams around the perimeters of the flatwork. The thickened edges or grade beams could be from 12 to 18 inches deep, with the deeper edges or grade beams providing better protection. At a minimum, the

thickened edge or grade beam will be reinforced by two No. 4 rebar, one at the top and one at the bottom.

82. Flatwork will be constructed with frequent joints to allow articulation as flatwork moves in response to expansion and contraction of the soil. The expansive soil in the subgrade will be moistened to at least optimum moisture content and no desiccation cracks will be present prior to casting the flatwork.
83. Flatwork may be doweled to the foundation or may be allowed to "float free," at the discretion of the architect/engineer. At doorways and other areas where keeping the flatwork at a specific elevation is desired, the flatwork will be doweled to the foundation as recommended previously for interior slabs-on-grade.
84. To reduce shrinkage cracks in concrete slabs and flatwork, the concrete aggregates will be of appropriate size and proportion, the water/cement ratio will be low, the concrete will be properly placed and finished, contraction joints will be installed, and the concrete will be properly cured. This is particularly applicable to slabs that will be cast directly upon a vapor retarder and those that will be protected from transmission of vapor by use of admixtures or surface sealers. Concrete materials, placement, and curing specifications will be at the direction of the architect/engineer; ACI 302.1R-04 and ACI 302.2R-04 are suggested as resources for the architect/engineer in preparing such specifications.

Retaining Walls

85. Walls that are part of, or will be rigidly attached to, either of the residential structures will be founded in bedrock. Penetration into the bedrock, bearing capacities, etc. for these walls will be per the "Foundations" section of this report.
86. Site retaining walls may bear in soil that has been overexcavated and recompacted per the "Grading" section, or in bedrock. Footings for site walls bearing in soil will penetrate to a minimum of 21 inches (not including any keyway) below the lowest grade within 5 feet of the wall. Where footings will bear in bedrock, the footing will penetrate bedrock a minimum of 6 inches, with a minimum overall depth of 21 inches. Footings will be horizontal, and may step to follow site grade or the slope of the bedrock, as appropriate. If a site retaining wall footing will transition from soil to bedrock, a construction joint will be placed in the wall and footing at the transition line.
87. Generally, site retaining wall footings will not bear in the backfill of any lower retaining wall; the upper wall's footing will be deepened to penetrate through the backfill and to bear in the underlying soil or bedrock, as appropriate. An exception would be where the lower wall is backfilled with *crushed* gravel. An upper retaining wall may bear a minimum of 18 inches into crushed gravel, provided that the gravel is placed in thin lifts and each lift is compacted with a vibrating plate compactor or other suitable means. The lower wall will be designed to accommodate the surcharge of the upper wall. The diagrams in Appendix I may be used to calculate such surcharges.

88. Design of retaining walls will be based on the following parameters:

Active equivalent fluid pressure (native soil backfill).....	55 pcf
Active equivalent fluid pressure (imported sand or gravel backfill)	35 pcf
At rest equivalent fluid pressure (native soil backfill)	70 pcf
At-rest equivalent fluid pressure (imported sand or gravel backfill)	50 pcf
Passive equivalent fluid pressure, soil.....	300 pcf
Passive equivalent fluid pressure, bedrock	500 pcf
Maximum toe pressure, soil	1,200 psf
Maximum toe pressure, bedrock	2,500 psf
Coefficient of sliding friction, soil	0.35
Coefficient of sliding friction, bedrock	0.40

89. No surcharges are taken into consideration in the above values. The maximum allowable toe pressures are *allowable* values; no factors of safety, load factors or other factors have been applied to the remaining values. With the exception of the maximum toe pressures, these values will require application of appropriate factors of safety, load factors, and/or factors as deemed appropriate by the architect/engineer.
90. If the equivalent fluid pressures for sand or gravel backfill are used in the design, sand or gravel backfill will be exclusively utilized above 1:1 plane from the base of the wall to 1 foot from the top of the backfill. The upper foot of backfill will be native soil.
91. The above pressures are applicable to a retained surface that is horizontal at the top of the wall. Walls having a retained surface that slopes upward from the top of the wall will be designed for an additional equivalent fluid pressure of 1 pcf for the active case and 1.5 pcf for the at-rest case, for every degree of slope inclination.
92. Based upon a PGA estimated to be 0.40g by the CBC and 0.29 for the DBE, and work by Atik and Sitar (2010), seismic loads on retaining walls will be insignificant and may be ignored for walls up to 12 feet in retained height. For walls over 12 feet in retained height that will primarily retain bedrock (such as the main retaining wall in the barn structure) seismic loads may also be ignored. If any walls over 12 feet in retained height will primarily retain colluvium or fill, the soils engineer will be consulted for design recommendations.
93. The active and at-rest pressures presented are for fully drained conditions; therefore all retaining walls will be drained with perforated pipe encased in a free-draining gravel blanket. Retaining wall drains can consist of perforated pipe encased in free-draining gravel. Where this type of system is used, the pipe will be placed perforations downward and will discharge in a nonerosive manner away from foundations and other improvements. The gravel zone will have a width of approximately 1 foot and will extend upward to 1 foot from the top of the wall backfill. The upper foot of backfill will consist of native soils or topsoil to reduce the flow of surface drainage into the wall drain system. To reduce infiltration of the soil into the drain gravel, a permeable synthetic filter fabric, conforming to Caltrans Section 88-1.03 for Underdrains, will be placed between the two.

94. Manufactured synthetic drains such as Miradrain or Enkadrain are acceptable alternatives to the use of gravel drains, provided that they are installed in accordance with the recommendations of the manufacturer. Where weep hole drainage can be properly discharged, the perforated pipe may be omitted in lieu of weep holes on maximum 4-foot centers. A filter fabric as described above will be placed between the weep holes and the drain gravel.
95. Walls facing habitable areas or areas where moisture transmission through the wall would be undesirable will be *thoroughly* waterproofed in accordance with the requirements of the architect/engineer. At a minimum, the waterproofing will cover the retaining side of the wall and will extend a minimum of 2 feet across the top of the heel of the footing.
96. Retaining walls by their nature are flexible structures, and surface treatments on walls often crack. Where walls are to be plastered or will otherwise have a finish surface applied, the flexibility will be considered in determining the suitability of the surfacing material, spacing of horizontal and vertical joints, etc. The flexibility will also be considered where a retaining wall will abut or be connected to a rigid structure, and where the geometry of the wall is such that its flexibility will vary along its length.
97. It is assumed that site wall heights will not exceed 10 feet; walls that are part of a structure will not exceed 14 feet in height.

Drainage and Maintenance

98. Generally, a zone of irrigated landscaping will be established for at least 5 feet around the perimeter of the structures and exterior flatwork. If drought tolerant vegetation or xeroscaping is planned, or if this zone around the structures or flatwork is allowed to dry out for any other reason, the soils engineer will be contacted for modified recommendations. The landscaping and irrigation system will be maintained to keep the soils near structures and flatwork moist yet free of erosion.
99. Per Section 1804.3 of the CBC, unpaved ground surfaces will be *finish graded* to direct surface runoff away from foundations, slopes, flatwork, and other improvements at a minimum 5 percent grade for a minimum distance of 10 feet. The site will be similarly sloped to drain away from foundations, slopes, flatwork, and other improvements during construction. If this is not feasible due to the terrain, property lines, or other factors, swales with improved surfaces, area drains, or other drainage features will be provided to divert drainage away from these areas.
100. Collection or diversion swales (brow ditches) will be constructed above all cut and fill slopes, or grade will slope such that runoff will be directed away from such slopes. Where runoff will be collected and then disbursed onto the site, disbursing will occur well away from all improvements.

101. Finished asphalt and concrete pavement surfaces will be sloped to freely drain toward appropriate drainage facilities. Water will not be allowed to stand or pond on or adjacent to pavement as it could infiltrate into the aggregate base and subgrade, causing premature pavement deterioration.
102. Any raised planter boxes constructed adjacent to the structures will be installed with drains, and sealed sides and bottoms to prevent planter drainage from gaining access to subslab or subfloor areas. Drains will also be provided in all areas adjacent to foundations and flatwork that would not otherwise drain freely.
103. All eaves of the structures will be provided with roof gutters. Runoff from roof gutters, downspouts, area drains, weep holes, etc., will discharge to an appropriate outlet in a nonerosive manner away from foundations and other improvements in accordance with the requirements of the governing agencies. Erosion protection will be placed at drainage outlets unless discharge is to an asphalt or concrete surface.
104. Diversion swales, dispersion swales, brow ditches, retaining wall drains, etc. will be cleaned and repaired as necessary to maintain free-flowing conditions.
105. The on-site soils are erodible. Stabilization of surface soils, particularly those disturbed during construction, by vegetation or other means *during and following construction* is essential to protect the site from erosion damage. Care will be taken to establish and maintain vegetation. The landscaping will be installed to maintain the surface drainage recommended in the previous paragraphs.
106. To reduce the potential for disruption of drainage patterns and undermining of structures, fill areas, etc., all rodent activity will be aggressively controlled.

Observation and Testing

107. It must be recognized that the recommendations contained in this report are based, in part, on the work of others and a limited number of test pits excavated at the site and rely on continuity of the subsurface conditions encountered.
108. Unless otherwise stated, the terms "compacted" and "recompacted" refer to soils placed in level lifts not exceeding 8 inches in loose thickness and compacted to a minimum of 90 percent of maximum dry density.
109. Unless otherwise stated, "moisture conditioning" refers to the moistening or drying of soils to optimum moisture content or just above, prior to application of compactive effort.
110. The standard tests used to define maximum dry density and field density will be ASTM D 1557-09 and ASTM D 6938-08a, respectively, or other methods acceptable to the soils engineer and jurisdiction.

111. At a minimum, the soils engineer will be retained to provide:
- Review of grading, retaining wall, and foundation plans and details, and the recommendations of the radon consultant as they near completion
 - Professional observation during grading
 - Oversight of compaction testing during grading and backfill
 - Oversight of soil and caisson special inspection during grading
112. As per the recommendations of the project geologist, Richard Gorman (CEG) with Earth Systems Pacific, special inspection of grading and caisson construction will be provided as per Section 1704.7 and Table 1704.7 of the CBC; the special inspector will be under the direction of the soils engineer. At this time, it is Earth Systems opinion that, there are no operations that are sufficiently critical as to warrant *continuous* special inspection of grading; periodic special inspection of grading and caisson construction will suffice, subject to approval by the building official. The following will be inspected by the special inspector:
- Stripping and clearing of vegetation
 - Verification of overexcavation to the correct depth
 - Keying, benching and back drains
 - Scarification, moisture conditioning and recompaction of the bottoms of the overexcavation areas
 - Utility trench backfill
 - Retaining wall backfill
 - Fill quality, placement, moisture conditioning, and compaction, including nonexpansive material
 - Foundation excavations (including caisson excavations)
 - Placement of rebar and concrete in caissons
113. A program of quality control will be developed prior to the beginning of the project. The contractor or project manager will determine any additional inspection items required by the architect/engineer or the governing jurisdiction.
114. Locations and frequency of compaction tests will be as per the recommendation of the soils engineer at the time of construction. The recommended test location and frequency may be subject to modification by the soils engineer, based upon soil and moisture conditions encountered, size and type of equipment used by the contractor, the general trend of the results of compaction tests, or other factors.
115. A preconstruction conference among the owner, the County, the soils engineer, the soil special inspector, the architect/engineer, and contractors is recommended to discuss planned construction procedures and quality control requirements.
116. The soils engineer will be notified at least 48 hours prior to beginning construction operations. If Earth Systems Pacific is not retained to provide construction observation

and testing services, it shall not be responsible for the interpretation of the information by others or any consequences arising there from.

117. A letter from the project geologist shall be submitted **prior to final inspection** outlining how all the geologic conditions of the referenced geologic investigations (see reference section of the Mitigated Negative Declaration) have been complied with.

**Conditions to be completed prior to occupancy or final building inspection
/establishment of the use**

118. Upon completion of all monitoring/mitigation activities, and prior to occupancy or final inspection (whichever occurs first), the consulting archaeologist shall submit a report to the Environmental Coordinator summarizing all monitoring/mitigation activities and confirming that all recommended mitigation measures have been met. If the analysis included in the Phase III program is not complete by the time final inspection or occupancy will occur, the applicant shall provide to the Environmental Coordinator, proof of obligation to complete the required analysis.
119. **Prior to final building inspection**, the applicant shall record a notice against the property notifying any subsequent purchaser that failure to meet the requirements of 23.08.169 (2) (occupancy of primary and secondary units) will subject the second unit to abatement by the county pursuant to Chapter 23.10 of the Coastal Zone Land Use Ordinance.
120. Landscaping in accordance with the approved landscaping plan shall be installed or bonded for before final building inspection. If bonded for, landscaping shall be installed within 60 days after final building. All landscaping shall be maintained in a viable condition in perpetuity.
121. **Prior to occupancy or final inspection**, which ever occurs first, the applicant shall obtain final inspection and approval from CDF of all required fire/life safety measures.
122. **Prior to occupancy of any structure associated with this approval**, the applicant shall contact the Department of Planning and Building to have the site inspected for compliance with the conditions of this approval.
123. **Prior to issuance of a construction permit or commencement of construction activities**, the applicant shall record an open space easement over the portions of the property outside the building envelope pursuant to section 23.04.210 c(6) of the Coastal Zone Land Use Ordinance. The open space easement shall allow the applicant to construct the driveway, install the landscaping in accordance with the landscaping plan, and utilities necessary to support the project. The open space easement shall be in a form approved by County Counsel and shall be approved by the County Planning Director and the Executive Director of the California Coastal Commission.

On-going conditions of approval (valid for the life of the project)

Developmental Burning

124. As of February 25, 2000, the APCD prohibits developmental burning of vegetative material within San Luis Obispo County. However, under certain circumstances where no technically feasible alternatives are available, limited developmental burning under

restrictions may be allowed. Any such exception must complete the following prior to any burning: APCD approval; payment of fee to APCD based on the size of the project; and issuance of a burn permit by the APCD and the local fire department authority. As a part of APCD approval, the applicant shall furnish them with the study of technical feasibility (which includes costs and other constraints) at the time of application. For any questions regarding these requirements, Karen Brooks of APCD's Enforcement Division may be contacted (805/781-5912).

125. The owner of the site shall agree to occupy one unit on the site as his/her primary residence.
126. This land use permit is valid for a period of 24 months from its effective date unless time extensions are granted pursuant to Land Use Ordinance Section 23.02.050 or the land use permit is considered vested. This land use permit is considered to be vested once a construction permit has been issued and substantial site work has been completed. Substantial site work is defined by Land Use Ordinance Section 23.02.042 as site work progressed beyond grading and completion of structural foundations; and construction is occurring above grade.
127. All conditions of this approval shall be strictly adhered to, within the time frames specified, and in an on-going manner for the life of the project. Failure to comply with these conditions of approval may result in an immediate enforcement action by the Department of Planning and Building. If it is determined that violation(s) of these conditions of approval have occurred, or are occurring, this approval may be revoked pursuant to Section 23.10.160 of the Land Use Ordinance.
128. The applicant shall as a condition of approval of this Development Plan / Coastal Development Permit defend, at his sole expense, any action brought against the County of San Luis Obispo, its present or former officers, agents, or employees, by a third party challenging either its decision to approve this Development Plan / Coastal Development Permit or the manner in which the County is interpreting or enforcing the conditions of this Development Plan / Coastal Development Permit, or any other action by a third party relating to approval or implementation of this Development Plan / Coastal Development Permit. The applicant shall reimburse the County for any cost and attorney's fees which the County may be required by a court to pay as a result of such action, but such participation shall not relieve the applicant of his obligation under this condition.



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COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF PLANNING AND BUILDING
STAFF REPORT
PLANNING COMMISSION

California Coastal Commission,
Central Coast Area

MEETING DATE July 28, 2011 LOCAL EFFECTIVE DATE August 11, 2011 APPROX FINAL EFFECTIVE DATE September 1, 2011	CONTACT/PHONE Ryan Hostetter, Project Manager (805) 788-2351 rhostetter@co.slo.ca.us	APPLICANT Rob and Judi McCarthy	FILE NO. DRC2009-00095
SUBJECT Hearing to consider a request by Rob and Judi McCarthy for a Development Plan/Coastal Development Permit to allow for the construction of a 5,500 square foot single family residence, and a 1,000 square foot secondary residence to be located above a proposed detached 1,000 square foot garage/workshop. Proposed site improvements include: improvements to an existing access road/driveway off of Cave Landing Road which involves paving and retaining walls, site preparation for building pads, roads and septic systems, a 10,000 gallon water tank for fire suppression, and landscaping around the residence. In addition, site improvements also include extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site and associated grading for the residence to receive water service by County Service Area 12. The project will result in total area of disturbance of approximately 35,575 sq. ft., on a 37.06 acre parcel. The project is located on the north side of Cave Landing Road in Avila Beach, within the San Luis Bay Coastal planning area.			
RECOMMENDED ACTION 1. Adopt the Mitigated Negative Declaration in accordance with the applicable provisions of the California Environmental Quality Act, Public Resources Code Section 21000 et seq. 2. Approve Development Plan/Coastal Development Permit based on the findings listed in Exhibit A and the conditions listed in Exhibit B.			
ENVIRONMENTAL DETERMINATION The Environmental Coordinator, after completion of the initial study, finds that there is no substantial evidence that the project may have a significant effect on the environment, and the preparation of an Environmental Impact Report is not necessary. Therefore, a Mitigated Negative Declaration (pursuant to Public Resources Code Section 21000 et seq., and CA Code of Regulations Section 15000 et seq.) has been issued on June 16, 2011 for this project. Mitigation measures are proposed to address air quality, biological resources, cultural resources, geology and soils, public services, and transportation and are included as conditions of approval.			
LAND USE CATEGORY Residential Rural	COMBINING DESIGNATION Archaeologically Sensitive Area, Local Coastal Program, Coastal Appealable Zone, Geologic Study Area and Sensitive Resource Area	ASSESSOR PARCEL NUMBER 076-231-063	SUPERVISOR DISTRICT(S) 3
PLANNING AREA STANDARDS: Site Planning, Ontario Ridge SRA, Cave Landing Permit Requirements			
LAND USE ORDINANCE STANDARDS: Setbacks, Height Requirements, Secondary Dwelling Unit Requirements, Visual Resources, Parking, Combining Designations			
EXISTING USES: Site is currently vacant			
SURROUNDING LAND USE CATEGORIES AND USES: North: Residential Rural, Open Space; undeveloped East: Rural Lands; undeveloped South: Residential Rural; undeveloped, Pirates Cove Parking area and Trail West: Open Space; undeveloped			
ADDITIONAL INFORMATION MAY BE OBTAINED BY CONTACTING THE DEPARTMENT OF PLANNING & BUILDING AT: COUNTY GOVERNMENT CENTER γ SAN LUIS OBISPO γ CALIFORNIA 93408 γ (805) 781-5600 γ FAX: (805) 781-1242			

OTHER AGENCY / ADVISORY GROUP INVOLVEMENT: The project was referred to: Avila Community Advisory Council, Public Works, Environmental Health, County Parks, Cal Fire, Avila Community Services District, APCD, Cal Trans, RWQCB, and the California Coastal Commission	
TOPOGRAPHY: Varies from nearly level to steeply sloping property	VEGETATION: grasses
PROPOSED SERVICES: Water supply: Community system Sewage Disposal: On-Site System Fire Protection: CDF	ACCEPTANCE DATE: March 21, 2011

PROJECT HISTORY:

On August 26, 2010 the Planning Commission heard an appeal of a Planning Directors Determination regarding this property. Specifically this determination involved the use of public or community water service for this subject property which is outside the Urban Service Line, and permitting requirements for installation of infrastructure related to bringing the water to this property. The Planning Director determined that the property would need to be within the Urban Service Line to receive community water from County Service Area 12 (CSA-12), and the property owner appealed this decision to the Planning Commission. The Planning Commission partially upheld the applicant's appeal and made the determination that this property, while outside the Urban Service Line, is within the sphere of service of the water purveyor (CSA-12) and could receive water service without amending the General Plan maps to include the property within the Urban Service Area. The commission also determined that the permits necessary for the water line infrastructure shall be obtained, and therefore are a part of this Development Plan application.

PROJECT DESCRIPTION:

The proposed project includes a request by Rob and Judi McCarthy for a Development Plan/Coastal Development Permit to allow for the construction of a 5,500 square foot single family residence, and a 1,000 square foot secondary residence to be located above a proposed detached 1,000 square foot garage/workshop. Proposed site improvements include: improvements to an existing access road/driveway off of Cave Landing Road which involves paving and retaining walls, site preparation for building pads, roads and septic systems which includes approximately 9,368 cu yards of grading (both cut and fill), a 10,000 gallon water tank for fire suppression, and landscaping around the residence. In addition, site improvements also include extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site and associated grading for the residence to receive water service by County Service Area 12. The project will result in total area of disturbance of approximately 35,575 sq. ft., on a 37.06 acre parcel. The project is located on the north side of Cave Landing Road in Avila Beach, within the San Luis Bay (Coastal) planning area.

ORDINANCE COMPLIANCE:

Following is a list of the applicable ordinance requirements for this proposed project, and a statement of compliance that addresses each requirement:

23.04.100 Setback Requirements – Required setbacks are as follows: front shall be a minimum 25 feet, side shall be a minimum of 30 feet, and the rear property line setback shall be a minimum of 30 feet. Additionally the project includes interior setbacks between detached structures such as the house and detached secondary dwelling which are to be a minimum of 10 feet, and can be as low as 6 feet between residential and accessory buildings such as workshops and carports. *This project complies with these setback requirements as the*

structures are a minimum of approximately 200 to 1400 feet from property lines, and interior setbacks between the detached structures are 25 feet and 6 feet from the secondary dwelling and porte-cochere respectively.

23.04.120 Height limit- Maximum height limits for single family residential structures is 35 feet as measured from the average natural grade. The project complies with this requirement at a proposed height for the residence of 21.5 feet and the secondary unit/garage at a proposed height of 33 feet.

23.08.169 Secondary dwelling unit - A Secondary Dwelling Unit shall be accessory to a primary dwelling and shall not be established on any site containing a guesthouse or more than one dwelling unit. Additionally, the owner of the site shall agree to occupy one unit on the site as their primary residence. Prior to final building inspection, the applicant for a second unit shall record a notice against the property notifying any subsequent purchaser that failure to meet this requirement will subject the second unit to abatement by the county pursuant to Chapter 23.10 of the Coastal Zone Land Use Ordinance. Following is a table listing the ordinance requirements for the secondary dwelling unit, and the project's compliance:

Standard	Required	Proposed
Minimum Site Area	One Acre (43,560 square feet gross)	37 acres
Maximum Floor Area	1,200 square feet	1,000 square feet
Distance From Primary Dwelling Unit	50 feet	Approx 20 feet
Required Parking (not including primary residence)	one off street space	Proposed garage

23.04.160 Parking – Single family residences are required to provide two parking spaces per dwelling, plus the one off street space required for the secondary dwelling unit. None of the parking spaces are required to be covered. The proposed project complies with this requirement with the proposed 1,000 square foot garage and driveway parking.

23.04.210 - Visual Resources – The proposed project site is located within a Sensitive Resource Area as listed in the San Luis Bay Coastal Area Plan for visual and scenic resources. Specific development standards for these sensitive resource areas include location of development, visibility, ridgetop development, landscaping requirements, and open space preservation. Following is a list of standards along with responses showing how this proposed project complies with these requirements:

- a. Location of Development - Development shall be located on the least visible portion of the site, consistent with protection of other resources. Emphasis shall be given to locations not visible from major public view corridors. Visible or partially visible development locations shall only be considered if no feasible non-visible development locations are identified, or if such locations would be more environmentally damaging. New development shall be designed (e.g., height, bulk, style, materials, color) to be subordinate to, and blend with, the character of the area. Use naturally occurring topographic features and slope-created

"pockets" first and native vegetation and berming second, to screen development from public view and minimize visual intrusion. *This proposed project complies with this requirement as the building site is situated within an existing bench created for an old water tank, which has since been removed, midway up the length of the property from Cave Landing Road. This specific building location is compact and allows for a large buffer from Cave Landing Road which limits views of the project from the road, and the visible hillside behind the building site is left open to the top of the ridge. The most visible portions of the property are on the steep hillside above the building to the top of the ridge which is proposed to be left open. Additionally the proposed house is low profile as it faces Cave Landing, and the taller secondary dwelling unit is mostly blocked by the main house. The materials are proposed to be neutral colors which blend into the hillside during the summer months.*

- b. Structure visibility - Minimize structural height and mass by using low-profile design where feasible, including sinking structures below grade. Minimize the visibility of structures by using design techniques to harmonize with the surrounding environment. *The project includes a linear low profile design and looks like a single story development from Cave Landing Road. The structures are lower than the allowed height limits by 13.5 feet for the residence and two feet for the secondary dwelling unit. The topography of the building site is the most hidden spot on this visible property due to the topography of the existing bench created from a previous water tank on the site.*
- c. Ridgetop development - Locate structures so that they are not silhouetted against the skyline or ridgeline as viewed from the shoreline, public beaches, the Morro Bay estuary, and applicable roads or highways described in the applicable planning area standards in the area. *This project complies with this requirement as there is no ridgetop development proposed.*
- d. Landscaping for hillside and ridgetop development - Provide screening of development at plant maturity using native vegetation of local stock, non-invasive, or drought-tolerant vegetation without obstructing major public views (e.g., screening should occur at the building site rather than along a public road). The use of vegetation appropriate to the site shall be similar to existing native vegetation. Alternatives to such screening may be approved if visual impacts are avoided through use of natural topographic features and the design of structures. *The proposed project complies with this requirement as a landscape plan was submitted for review with the proposed project that includes native drought-tolerant vegetation which blend into the native vegetation of this hillside. A majority of the landscaping is coastal scrub and low-lying vegetation as the hillside currently contains mostly grasses and some scrub. Introducing large trees would draw more attention to the site therefore, staff agreed to keep the scrub and native vegetation for the proposed landscape plan rather than large trees blocking all views to the building site. Additionally, the topography of the building site allows for a majority of the site screening.*
- e. Open space preservation - Pursuant to the purpose of the Critical Viewshed or SRA to protect significant visual resources, sensitive habitat or watershed, open space preservation is a compatible measure. Approval of an application for new development in these scenic coastal areas is contingent upon the applicant executing an agreement with the county to maintain in open space use appropriate portions of the site within the Critical Viewshed or SRA (for visual protection). Guarantee of open space preservation may be in the form of public purchase, agreements, easement controls or other appropriate instrument approved by the Planning Director, provided that such guarantee agreements are not to provide for public access unless acceptable to the property owner or

unless required to provide public access in accordance with the LCP. *This project is conditioned to comply with this requirement (see condition no. 123), by recording an open space agreement over portions of the property outside the building envelope.*

23.04.320 Outdoor lighting – Outdoor lighting requirements are intended to keep lighting on site and eliminate any type of lighting nuisance for the neighborhood. Standards include light shielding, direction, and height requirements. *The project is conditioned to comply with outdoor lighting requirements (see condition no. 3).*

COMBINING DESIGNATIONS:

Sensitive Resource Area 23.07.166 - Minimum Site Design and Development Standards -

All uses within a Sensitive Resource Area shall conform to the following standards:

- a. Surface mining is not permitted except in areas also included in an Energy and Extractive Resource Area combining designation by the Land Use Element. Where the dual designation exists, surface mining is allowed only after approval of surface mining permit and reclamation plan, approved in accordance with Section 23.08.180.
- b. Shoreline areas shall not be altered by grading, paving, or other development of impervious surfaces for a distance of 100 feet from the mean high tide line, 75 feet from any lakeshore, or 50 feet from any streambank, except where authorized through Development Plan approval. Where the requirements of the California Department of Fish and Game or other public agency having jurisdiction are different, the more restrictive regulations shall apply. Special requirements for setbacks from wetlands, streams, and the coastline are established by Sections 23.07.172 through 23.07.178.
- c. Construction and landscaping activities shall be conducted to not degrade lakes, ponds, wetlands, or perennial watercourses within an SRA through filling, sedimentation, erosion, increased turbidity, or other contamination.
- d. Where an SRA is applied because of prominent geological features visible from off-site (such as rock outcrops), those features are to be protected and remain undisturbed by grading or development activities.
- e. Where an SRA is applied because of specified species of trees, plants or other vegetation, such species shall not be disturbed by construction activities or subsequent operation of the use, except where authorized by Development Plan approval.

The proposed project is located within a Sensitive Resource Area due to the Ontario Ridge viewshed as outlined in the San Luis Bay Coastal Area Plan. The project has been designed with this in mind, and complies with the viewshed requirements as outlined above in 23.04.210 - Visual Resources. The project is not impacting sensitive vegetation or species, will not include surface mining, will not be adjacent to the coastal bluff, and will not impact streams or lakes as none exist near the site.

23.07.086 - Geologic Study Area Special Standards - All uses within a Geologic Study Area are to be established and maintained in accordance with the following, as applicable:

- a. Grading: Any grading not otherwise exempted from the permit requirements of Sections 23.05.020 et seq. (Grading) is to be performed as engineered grading under the provisions of those sections.
- b. Seismic hazard areas: As required by California Public Resources Code Sections 2621 et seq. and California Administrative Code Title 14, Sections 3600 et seq., no structure intended for human occupancy shall be located within 50 feet of an active fault trace within an Earthquake Fault Zone.

- c. Erosion and geologic stability. New development shall insure structural stability while not creating or contributing to erosion, sedimentation or geologic instability.

The proposed project complies with the requirements of 23.07.086 for Geologic Study Area Special Standards. An engineering geology investigation has been completed and reviewed by the County Geologist. Specific mitigation measures are included in the conditions of approval as well as outlined in the proposed Mitigated Negative Declaration for this project.

23.07.104 Archaeologically Sensitive Area - To protect and preserve archaeological resources, the following procedures and requirements apply to development within areas of the coastal zone identified as archaeologically sensitive.

- a. Preliminary site survey required. Before issuance of a land use or construction permit for development within an archaeologically sensitive area, a preliminary site survey shall be required. The survey shall be conducted by a qualified archaeologist knowledgeable in local Native American culture and approved by the Environmental Coordinator. The County will provide pertinent project information to the Native American tribe(s).
- b. When a mitigation plan is required. If the preliminary site survey determines that proposed development may have significant effects on existing, known or suspected archaeological resources, a plan for mitigation shall be prepared by a qualified archaeologist. The County will provide pertinent project information to the Native American tribe(s) as appropriate. The purpose of the plan is to protect the resource. The plan may recommend the need for further study, subsurface testing, monitoring during construction activities, project redesign, or other actions to mitigate the impacts on the resource. Highest priority shall be given to avoiding disturbance of sensitive resources. Lower priority mitigation measures may include use of fill to cap the sensitive resources. As a last resort, the review authority may permit excavation and recovery of those resources. The mitigation plan shall be submitted to and approved by the Environmental Coordinator, and considered in the evaluation of the development request by the Review Authority.
- c. Archeological resources discovery. In the event archeological resources are unearthed or discovered during any construction activities, the standards of Section 23.05.140 of this title shall apply. Construction activities shall not commence until a mitigation plan, prepared by a qualified professional archaeologist reviewed and approved by the Environmental Coordinator, is completed and implemented. The County will provide pertinent project information to the affected Native American tribe(s) and consider comments prior to approval of the mitigation plan. The mitigation plan shall include measures to avoid the resources to the maximum degree feasible and shall provide mitigation for unavoidable impacts. A report verifying that the approved mitigation plan has been completed shall be submitted to the Environmental Coordinator prior to occupancy or final inspection, whichever occurs first.

This proposed project complies with the Archaeologically Sensitive Area requirements as outlined in 23.07.104 of the coastal Zone Land Use Ordinance. A cultural resources investigation was conducted and reviewed by the Environmental Coordinator for the property (Gibson's Archaeological Consulting, February 5, 2003) which identified archeological resources on the subject property. Based on this survey, specific recommendations are outlined in the proposed Mitigated Negative Declaration and the recommendations are also incorporated into the conditions of approval for the project.

23.07.120 Local Coastal Program -The project site is located within the California Coastal Zone as determined by the California Coastal Act of 1976 and is subject to the provisions of the Local Coastal Program which have been outlined in this staff report.

23.01.043 Coastal Appealable Zone -The project is appealable to the Coastal Commission because the project is between the first public road and the ocean.

PLANNING AREA STANDARDS:

Following is a list of the applicable area plan standards for this proposed project, and a statement of compliance with those requirements:

Site Planning - Development Plan Projects - Projects requiring Development Plan approval are to concentrate proposed uses in the least sensitive portions of properties. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas. Native vegetation is to be retained as much as possible. *The project complies with this requirement as the compact building area is located on the site of a previous water tank which will reduce the amount of grading for the building pads. There are no sensitive habitat areas around the proposed building site as well.*

Mallagh Landing Permit Requirement - Development plan approval is required for all uses, except secondary dwellings and shall include the following:

- a. A preliminary archaeological survey shall be required. Mitigation measures and residential site selection shall emphasize the protection of known archaeological sites.
- b. A geologic report shall be required to indicate areas of landslide risk, bluff erosion, or where engineered foundations may be required. The residential clusters should be located consistent with these identified geologic concerns.
- c. Appropriate methods for ensuring public access and recreational use of Pirates Cove and the adjacent bluff top shall be identified. (A detailed discussion of public access standards, see Land Use Element combining designation in Chapter 7 of this document.)

The project complies with the above Mallagh Landing permit requirements. This Development Plan application is being processed as required above for all uses except secondary dwellings. The project includes the primary residence, garage, and secondary dwelling unit therefore, staff has determined that the Development Plan is necessary for all the uses combined. Additionally, the archaeological and geologic studies have been conducted and reviewed by the Environmental Coordinator and are incorporated with mitigation measures in the draft Mitigated Negative Declaration and conditions of approval attached in Exhibit B.

Combining designation - Ontario Ridge (SRA) - This major ridge forms an important scenic backdrop for the coastal area of Avila Beach and Pismo Beach, as well as for Avila Valley. Open space agreements on the slopes should be obtained at the time of development proposals. *The project complies with this requirement as outlined in condition of approval number 123.*

COASTAL PLAN POLICIES:

Shoreline Access: Policy No(s): 2

Recreation and Visitor Serving: ☒ N/A

Energy and Industrial Development: ☒ N/A

Commercial Fishing, Recreational Boating and Port Facilities: ☒ N/A

Environmentally Sensitive Habitats: ☒ N/A

Agriculture: ☒ N/A

Public Works: Policy No(s): 1 & 7

Coastal Watersheds: Policy No(s): 7, 9, 10

Visual and Scenic Resources: Policy No(s): 4

Hazards: ☒ N/A

Archeology: Policy No(s): 1

Air Quality: ☒ N/A

Does the project meet applicable Coastal Plan Policies: Yes, as conditioned

COASTAL PLAN POLICY DISCUSSION:

Public Works:

Policy 1: Availability of Service Capacity applies to the project. The applicant has an intent to serve letter with County Service Area 12 for this proposed project.

Policy 7: Permit requirements. A permit is required for projects within the coastal zone. The applicant is requesting approval of a Development Plan / Coastal Development Permit, consistent with the requirements of this policy.

Shoreline Access:

Policy 2: Vertical accessways will be required at the time of new development when adequate vertical access is not available within a reasonable distance (one-quarter mile within urban areas and one mile in rural areas) and where prescriptive rights may exist. The site is not adjacent to the coast, and currently public access exists on the property just to the south-west which provides access to Pirates Cove Beach area.

Coastal Watersheds:

Policy 7: Siting of New Development. Grading for the purpose of creating a site for a structure or other development shall be limited to slopes of less than 20 percent. Grading that will occur on slopes of greater than 20 percent requires a Minor Use Permit or Development Plan approval and shall consider site characteristics such as proximity of nearby streams, erosion potential, and slope stability, amount of grading necessary, and measures proposed to reduce potential erosion and sedimentation. The project is designed on an existing bench on the site which will allow for minimal grading. A small amount of grading against the hillside is proposed and has been reviewed by the project engineering geologist. There is an existing access road which will require re-surfacing and minimal grading for drainage as well. All project grading has been reviewed in the proposed Mitigated Negative Declaration with recommendations from the project engineering geologist that have been incorporated into the conditions of approval for the project.

Policy 9: Techniques for Minimizing Sedimentation. Appropriate control measures shall be utilized to minimize erosion and sedimentation. The project complies with this project as conditioned (see condition of approval 6).

Policy 10: Drainage Provisions. Site design shall ensure that drainage does not increase erosion. The project has been sited and designed to ensure runoff does not increase erosion. Additionally, conditions of approval have been put in place to ensure construction documents show compliance with this requirement (see conditions of approval 6).

Visual and Scenic Resources:

Policy 4: New Development in Rural Areas. New development shall be sited to minimize its visibility from public view corridors. *The project is designed to minimize views from public vantage points through building design and site location. It is not feasible to create an invisible building site, however views of the project are generally seen from the closest public vantage point on Cave Landing Road immediately in front of the property. Views from the Pier are possible, however will be difficult to see due to the distance from the project site. Views from the town of Avila Beach are not possible due to the topography of adjacent sites such as the Tank Farm (large property immediately to the east of the town of Avila Beach) which block the project site views.*

Archaeology:

Policy 1: Protection of Archaeological Resources. *The project includes mitigation measures which ensure the protection of archaeological resources. Archaeological site surveys have been conducted which include recommendations for building. These recommendations are outlined in the proposed Mitigated Negative Declaration and are incorporated as conditions of approval.*

COMMUNITY ADVISORY GROUP COMMENTS: The Avila Valley Advisory Council (AVAC) adopted the recommendations of the Avila Beach Committee meeting at their August 9, 2010 meeting. Comments included: View studies show no visibility from Avila Beach, negligible visibility from the Poly Pier, moderate visibility from the Avila Pier and high visibility from the parking area for Pirates Cove. Shape of the main residence is mostly consistent with the hill backdrop, excepting for the visually prominent large convex canopy at the front portion of the house. Because of its higher height than the main residence the upper portion of the barn is visually prominent. Recommendations: Approval of the project with the following comments: The viewshed implications of the 33' barn height and convex shape of the large front canopy be addressed, Resolution of the water supply and drainage provisions should occur prior to project approval, and also demonstration of septic system capability. Roads should be minimized by requiring elimination of the steep wide road scar below the proposed homesite.

Staff response to AVAC recommendations and comments: The visibility and project design have been addressed through visual simulations which demonstrate that the visibility is limited, and the building site location is appropriate because it is not on or near the ridgeline which is the most visible portion of the property. While the shape of the roof is unique, staff has determined that the architectural features are appropriate because of the neutral materials proposed for project construction, the relatively low profile design of the main house with the "convex roof," and the project is below the required height limit. The "barn" which is the secondary dwelling unit and garage building are also lower than the height maximum, and are a part of the visual simulations. The entire building site is compact and located on an existing bench which was graded for a water tank. This building site is the most environmentally superior location because it limits grading, avoids on site landslides, mapped cultural resources, and it is at an elevation which keeps the buildings invisible from the town of Avila Beach.

The views from the parking lot for the Pirates Cove trail are the same views from the fronting street Cave Landing. This view is the closest view as it is immediately in front of the project, and is not possible to eliminate entirely. Staff did not recommend planting large trees at the street or in front of the building as it would add new large vegetation which would make the site more visible as the existing landscape includes rolling grasslands with low lying coastal scrub. Landscape plans are proposed to include landscaping in front of the residence to soften the views and include native drought tolerant coastal scrub which is proposed to fit the natural landscape today.

The water use issues mentioned by AVAC have been resolved by the Planning Commission decision on the Planning Director's Determination which is also mentioned earlier in this staff report under project history.

The septic design has been reviewed by the project engineers and engineering geologists. The geologic investigations determine that the proposed septic site and design are appropriate for this project.

The last issue regarding the roads will be addressed through the project road improvements. The project plans include re-surfacing the roads with pavement and installing formal drainage infrastructure which have been designed by project engineers and reviewed by County Public Works. Conditions of approval also address that construction documents address the same drainage issues and incorporate the mitigation measures into the conditions of approval (see condition of approval no. 6).

AGENCY REVIEW (responses shown):

Public Works- "Road fees, drainage, sedimentation and erosion control plans required with building permits (encroachment permit for driveway approach also)."

Environmental Health – "Septic system to be designed and installation certified by a registered civil engineer due to slope" (attached)

Cal Fire - Fire safety plan completed dated June 8, 2011 (attached)

California Coastal Commission - email attached dated August 4, 2010

LEGAL LOT STATUS:

The lot was legally created by deed at a time when that was a legal method of creating lots.

Staff Report prepared by Ryan Hostetter and reviewed by Bill Robeson

EXHIBIT A
FINDINGS DEVELOPMENT PLAN/COASTAL DEVELOPMENT PERMIT

Environmental Determination

- A. The Environmental Coordinator, after completion of the initial study, finds that there is no substantial evidence that the project may have a significant effect on the environment, and the preparation of an Environmental Impact Report is not necessary. Therefore, a Mitigated Negative Declaration (pursuant to Public Resources Code Section 21000 et seq., and CA Code of Regulations Section 15000 et seq.) has been issued on June 16, 2011 for this project. Mitigation measures are proposed to address air quality, biological resources, cultural resources, geology and soils, public services, and transportation and are included as conditions of approval.

Development Plan

- B. The proposed project or use is consistent with the San Luis Obispo County General Plan because the use is an allowed use and as conditioned is consistent with all of the General Plan policies.
- C. As conditioned, the proposed project or use satisfies all applicable provisions of Title 23 of the County Code.
- D. The establishment and subsequent operation or conduct of the use will not, because of the circumstances and conditions applied in the particular case, be detrimental to the health, safety or welfare of the general public or persons residing or working in the neighborhood of the use, or be detrimental or injurious to property or improvements in the vicinity of the use because the proposed residence does not generate activity that presents a potential threat to the surrounding property and buildings. This project is subject to Ordinance and Building Code requirements designed to address health, safety and welfare concerns.
- E. The proposed project or use will not be inconsistent with the character of the immediate neighborhood or contrary to its orderly development because the single family residence, garage, and secondary dwelling unit are similar to, and will not conflict with, the surrounding lands and uses.
- F. The proposed project or use will not generate a volume of traffic beyond the safe capacity of all roads providing access to the project, either existing or to be improved with the project because the project is located on Cave Landing Road, a local road constructed to a level able to allow the additional residence and secondary dwelling unit.

Archeological Sensitive Area

- G. The site design and development incorporate adequate measures to ensure that archeological resources will be acceptably and adequately protected because the project is conditioned to include a monitoring plan which will require a qualified professional approved by the county to monitoring any ground disturbing activities.

Coastal Access

- I. The proposed use is in conformity with the public access and recreation policies of Chapter 3 of the California Coastal Act, because the project is not adjacent to the coast and the project will not inhibit access to the coastal waters and recreation areas.

Sensitive Resource Area

- J. The development will not create significant adverse effects on the natural features of the site or vicinity that were the basis for the Sensitive Resource Area designation, and will preserve and protect such features through the site design. In this particular case, the basis for the Sensitive Resource Area is the Ontario Ridge viewshed. The project will not create significant adverse effects for the Ontario Ridge viewshed as the project is designed to minimize and eliminate views of the project site from Avila Beach, and is located much lower than the ridgeline which will keep the visible high elevations of the hillside free of development.
- K. Natural features and topography have been considered in the design and siting of all proposed physical improvements. The proposed project is located on an existing bench from an old water tank which has since been removed which will reduce site impacts by keeping development on previously disturbed areas to the maximum amount feasible.
- L. Any proposed clearing of topsoil, trees, or other features is the minimum necessary to achieve safe and convenient access and siting of proposed structures, and will not create significant adverse effects on the identified sensitive resource.
- M. The soil and subsoil conditions are suitable for any proposed excavation; site preparation and drainage improvements have been designed to prevent soil erosion, and sedimentation of streams through undue surface runoff.

EXHIBIT B
CONDITIONS OF APPROVAL FOR DEVELOPMENT PLAN/COASTAL DEVELOPMENT PERMIT

Approved Development

1. This approval authorizes a Development Plan/Coastal Development Permit to allow for the construction of a 5,500 square foot single family residence, and a 1,000 square foot secondary residence to be located above a proposed detached 1,000 square foot garage/workshop. Proposed site improvements include: improvements to an existing access road/driveway off of Cave Landing Road which involves paving and retaining walls, site preparation for building pads, roads and septic systems, a 10,000 gallon water tank for fire suppression, and landscaping around the residence. In addition, site improvements also include extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site and associated grading for the residence to receive water service by County Service Area 12. The project will result in total area of disturbance of approximately 35,575 sq. ft., on a 37.06 acre parcel.

Conditions required to be completed at the time of application for construction permits

Site Development

2. **At the time of application for construction permits** plans submitted shall show all development consistent with the approved site plan, floor plans and elevations.

Lighting Plan

3. **At the time of application for building permits**, the applicant shall provide a Lighting Plan. The plan shall include the height, location and intensity of all exterior lighting. All light fixtures shall be shielded so that neither the lamp nor the reflective interior surface is visible from areas outside the project site. All light poles, fixtures and hoods shall be dark (non-reflective) colored. All exterior lighting sources shall be low-level and adjusted so that light is directed into the project site. Security lighting shall be shielded so as not to create glare when viewed outside the project boundaries.

Fire Safety

4. **At the time of application for construction permits**, all plans submitted to the Department of Planning and Building shall meet the fire and life safety requirements of the California Fire Code. Requirements shall include, but not be limited to those outlined in the Fire Safety Plan, prepared by the CDF/County Fire Department for this proposed project and dated June 8, 2011.

Services

5. **At the time of application for construction permits**, the applicant shall provide a letter from County Service Area 12 stating they are willing and able to service the property.

Conditions to be completed prior to issuance of a construction permit

Public Works

6. **Prior to issuance of construction permits** the applicant shall obtain all necessary approvals from County Public Works, and all recommendations from Public Works shall be incorporated in the project plans. A drainage plan and sedimentation and erosion control plan shall also be prepared for review and approval by County Public Works.

Septic System

7. **At the time of application for construction permits**, the applicant shall submit evidence that a septic system, adequate to serve the proposal, can be installed on the site. Septic systems shall also be reviewed and approved by County Environmental Health Department.

Fees

8. **Prior to issuance of a construction permit**, the applicant shall pay all applicable school and public facilities fees.

Air Quality

9. **Fugitive PM₁₀ Mitigation Measures** (All required PM₁₀ measures shall be shown on applicable grading or construction plans. In addition, the developer shall designate personnel to insure compliance and monitor the effectiveness of the required dust control measures (as conditions dictate, monitor duties may be necessary on weekends and holidays to insure compliance); the name and telephone number of the designated monitor(s) shall be provided to the APCD **prior to construction/ grading permit issuance**)
 - A. Reduce the amount of the disturbed area where possible;
 - B. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (nonpotable) water should be used whenever possible;
 - C. All dirt stock-pile areas should be sprayed daily as needed;
 - D. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;
 - E. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast-germinating native grass seed and watered until vegetation is established;
 - F. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
 - G. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
 - H. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
 - I. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114.
 - J. Install Wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site, and
 - K. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.

Natural-Occurring Asbestos

10. "Naturally-occurring asbestos" has been identified by the State Air Resources Board as

a toxic air contaminant. Serpentine and ultramafic rocks are very common in the state and may contain naturally occurring asbestos. Under the State Air Resources Board Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, **prior to construction permit issuance**, a geologic investigation will be prepared and then submitted to the county to determine the presence of naturally-occurring asbestos. If naturally occurring asbestos is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM before grading begins. These requirements may include, but are not limited to, 1) preparation of an "Asbestos Dust Mitigation Plan", which must be approved by APCD before grading begins; 2) an "Asbestos Health and Safety Program", as determined necessary by APCD. (For any questions regarding these requirements, contact Karen Brooks (APCD) at (805) 781-5912 or go to <http://www.slocleanair.org/business/asbestos.asp>). **Prior to final inspection or occupancy**, whichever occurs first, if naturally-occurring asbestos is encountered, the applicant shall provide verification from APCD that the above measures have been incorporated into the project.

Wood-Burning Devices

11. Only the following types of wood burning devices shall be allowed (based on District Rule 504): a) EPA-Certified Phase II wood burning devices; b) catalytic wood burning devices emitting less than or equal to 4.1 grams per hour of particulate matter, as verified by a nationally-recognized testing lab; c) non catalytic wood burning devices which emit less than or equal to 7.5 grams per hour of particulate matter, as verified by a nationally-recognized testing lab; d) pellet-fueled woodheaters; or e) dedicated gas-fired fireplaces. **Prior to construction permit issuance**, such devices shall be shown on all applicable plans, and installed as approved by the county.

Portable Equipment

12. **Prior to issuance of construction permits**, the applicant shall provide evidence they have contacted APCD on any proposed portable equipment requiring APCD or CARB registration, such as: 50-hp portable generators, IC engines, unconfined abrasive blasting operations, concrete batch plants, rock and pavement crushing, tub grinders, trammel screens, etc. Should any of these types of equipment be used during construction activities California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit may be required.

Cultural Resources

13. Prior to issuance of a construction permit, the applicant shall submit a monitoring plan, prepared by a subsurface-qualified archaeologist, for the review and approval by the Environmental Coordinator. The monitoring plan shall include at a minimum:
 - A. List of personnel involved in the monitoring activities;
 - B. Description of how the monitoring shall occur;
 - C. Description of frequency of monitoring (e.g. full-time, part time, spot checking);
 - D. Description of what resources are expected to be encountered;
 - E. Description of circumstances that would result in the halting of work at the project site (e.g. What is considered "significant" archaeological resources?);

- F. Description of procedures for halting work on the site and notification procedures
- G. Description of monitoring reporting procedures

Cultural Resources

14. Improvements (including landscaping) shall be located outside of the identified areas containing cultural materials or shall be limited to surface work only to the maximum extent feasible. Improvements (including landscaping) shown within the identified areas potentially containing cultural materials will be designed to be placed in fill material to the extent feasible, or in cases where excavation into native materials is unavoidable, shall follow the Phase III protocol below. The Phase III study will include but not be limited to the following:

1. **Prior to issuance of a construction permit**, the applicant shall submit to the Environmental Coordinator (and possibly subject to peer review) for review and approval, a detailed research design for a Phase III (data recovery) archaeological investigation. The Phase III program shall be prepared by a subsurface qualified archaeologist approved by the Environmental Coordinator. The consulting archaeologist responsible for the Phase III program shall be provided with a copy of the previous archaeological investigations (Parker). The Phase III program shall include at least the following:

- A. standard archaeological data recovery practices;
- B. recommendation of sample size adequate to mitigate for impacts to archaeological site, including basis and justification of the recommended sample size. Sample size should be between 2-10% of the volume of disturbed area. If a lesser sample size is recommended, supporting information shall be presented that justifies the smaller sample size.
- C. identification of location of sample sites/test units;
- D. detailed description of sampling techniques and material recovery procedures (e.g. how sample is to be excavated, how the material will be screened, screen size, how material will be collected);
- E. disposition of collected materials;
- F. proposed analysis of results of data recovery and collected materials, including timeline of final analysis results;
- G. list of personnel involved in sampling and analysis.

Once approved, these measures shall be shown on all applicable plans and implemented during construction.

2. **Prior to issuance of a construction permit** the applicant shall submit to the Environmental Coordinator, a letter from the consulting archaeologist indicating that all necessary field work as identified in the Phase III program has been completed.

Geology and Soils

15. **Prior to issuance of construction permits**, all geology recommendations outlined in the Developers Statement shall be incorporated into all construction documents.

Conditions to be completed during project construction***Biological Resources***

16. To protect bird and raptor species protected by the Migratory Bird Treaty Act and Fish and Game code, the applicant shall avoid vegetation clearing and earth disturbance during the typical nesting season (March 1 – August 15). If avoiding construction during this season is not feasible, a qualified biologist shall survey the area one week prior to activity beginning on site. If nesting birds are located, they shall be avoided until they have successfully fledged. A buffer zone of 50 feet will be placed around all non-sensitive bird species and all activity will remain outside of that buffer until the applicant's biologist has determined that the young have fledged. High visibility exclusion fencing will be placed at the buffer zone to ensure no work occurs within this zone. If special status bird species are located, no work will begin until an appropriate buffer is determined by consultation with the County and/or the local California Department of Fish and Game biologist.

Cultural Resources

17. During all ground disturbing construction activities, the applicant shall retain a qualified archaeologist (approved by the Environmental Coordinator) and Native American to monitor all earth disturbing activities, per the approved monitoring plan. If any significant archaeological resources or human remains are found during monitoring, work shall stop within the immediate vicinity (precise area to be determined by the archaeologist in the field) of the resource until such time as the resource can be evaluated by an archaeologist and any other appropriate individuals, and procedures required by County and State law can be implemented. If intact burials are found, the applicant shall re-design the structure to avoid impacting the intact burials consistent with the recommendations of the on-site archaeologist, Native American Monitor, designated Most Likely Descendent, and the State Native American Heritage Commission.

Geology and Soils

The following measures shall be shown on construction plans and verified by a qualified professional:

Site Preparation

18. The ground surface in the grading area will be prepared for construction by *removing all existing fill*, vegetation, large roots, debris, and other deleterious materials. Existing utility lines that will not remain in service will be either removed or properly abandoned. The appropriate method of utility abandonment will depend upon the type and depth of the utility. Recommendations for abandonment can be made as necessary.
19. Voids created by the removal of materials or utilities will be called to the attention of the soils engineer. No fill will be placed unless the underlying soil has been observed by the soils engineer or engineering geologist.

Grading

20. Where fill will be placed on existing ground that slopes steeper than 10 percent, the surface will be cut into level benches that penetrate entirely into rock or firm colluvial soil, as directed by the soils engineer or engineering geologist during construction. The

benches will be 10 to 15 feet wide, depending upon the site conditions during construction, and angled 2 to 3 percent back into the slope. Benches will be planned at vertical intervals of 3 to 5 feet.

21. Where fill will be placed on ground that slopes steeper than 20 percent, a keyway will be constructed at the toe of the fill. The keyway will be 10 to 15 feet wide, depending upon the site conditions during construction, angled 2 to 3 percent back into the slope, and will penetrate a minimum of 3 feet into firm colluvial soil or bedrock, as directed by the soils engineer or engineering geologist.
22. Soil exposed in the bottoms of keyways and benches will be scarified a minimum of 12 inches, moisture conditioned, and recompact to a minimum of 90 percent of maximum dry density. In situ bedrock exposed in benches and keyways need not be scarified or compacted.
23. Back drains will be planned for keyways and on benches, unless otherwise directed by the soils engineer or engineering geologist during construction. Typical bench and keyway, and back drain details are included in Appendix F of the Soils Engineering and Geologic Hazards Report by Earth Systems Pacific, dated January 25, 2011.
24. In building areas, grading will allow for the placement of a minimum of 18 inches of imported nonexpansive material. The soil surface upon which the import material will be placed will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact. A minimum of 18 inches of nonexpansive imported material will then be moisture conditioned and placed throughout the building areas.
25. Within the building areas, the upper 18 inches of fill material will consist exclusively of imported nonexpansive materials. Nonexpansive materials are defined as belonging in the GM, GC, SP, SW, SC and SM categories per ASTM D 2487-06, and that have an expansion index of 10 or less (ASTM D 4829-08a). Proposed imported nonexpansive materials will be reviewed by the soils engineer before being brought to the site, and on an intermittent basis during placement. The subslab sand layer described in the "Slabs-on-Grade and Exterior Flatwork" section of this report (if utilized), is considered to be part of the minimum 18 inches of imported nonexpansive material, not in addition to it.
26. The subfloor areas below any raised wood floors will be graded to a low point or a series of low points, and drainage inlets will be provided at the low points, to direct any accumulated water to an appropriate outlet. As an alternative to drainage inlets in the subfloor areas, gravel intercept drains can be provided at all low areas, to collect and discharge accumulated water. The gravel drains will be a minimum of 12 inches wide and 12 inches deep, wrapped with geotextile filter fabric, and drained with a rigid perforated PVC pipe. They will discharge, in a nonerosive manner, to appropriate discharge points.

27. Beyond the building areas, surfaces to receive fill or surface improvements will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact.
28. The on-site soils, crushed siltstone or claystone, and appropriate imported soils, once cleared of any vegetation and deleterious materials and thoroughly mixed to a reasonably uniform consistency, may be used as fill up to 18 inches below slab areas and to finish grade or subgrade beyond slab areas.
29. The soils and bedrock in the tank foundation area will be overexcavated to a minimum depth of 3 feet below pad grade. The resultant surface will be scarified to a depth of 1 foot, moisture conditioned, and recompact. Fill soils will be moisture conditioned, placed, and compacted in accordance with the recommendations presented below. The upper foot of material in the tank foundation area will consist exclusively of Class 2 base, crushed gravel, or other material as specified by the tank manufacturer. These are general recommendations and may be subject to revision depending upon site constraints or the tank manufacturer's recommendations.
30. In site retaining wall foundation areas, the soil will be removed to bottom-of-footing elevation (not including any keyway). The resulting surface will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact. Alternately, 1 foot of material may be removed from the foundation area, and the exposed surface moisture conditioned and recompact. The previously removed material will then be put back in the excavation as properly placed and compacted fill material as described in this section.
31. All materials used as fill will be cleaned of all debris, and any rocks larger than 3 inches in diameter. If fill material includes rocks, the rocks will be placed in a sufficient soil matrix to ensure that voids caused by nesting of the rocks will not occur and that the fill can be properly compacted.
32. All fill will be placed with moisture contents at optimum moisture content or just above. Moisture contents well in excess of optimum will be avoided, as unstable conditions could result and mitigating measures (as noted in the following paragraph) could be needed.
33. Depending on *in situ* soil moisture content at the time of construction, there is a potential for the site soils to become unstable during grading. Unstable soils are difficult to properly compact and are unsuitable for the placement of additional lifts of fill. Methods to correct instability include scarification and aeration of the soils in place, or the placement of gravel layers or geotextiles. The appropriate method to be utilized will depend on the conditions observed at the time of construction.
34. In general, all fill will be placed in maximum lifts of 8 inches in loose thickness and compacted to a minimum of 90 percent of the maximum dry density. The upper 12 inches of subgrade and all aggregate base in areas to be paved with asphalt concrete or

Portland cement concrete will be compacted to a minimum of 95 percent of maximum dry density.

35. Aggregate base and subgrade will be firm and unyielding when proofrolled by heavy rubber-tired equipment prior to paving.
36. Unretained fill slopes will not exceed a 2:1 (horizontal to vertical) slope ratio. Likewise, unretained cut slopes will not exceed a 2:1 slope ratio, unless reviewed on an individual basis by the soils engineer or engineering geologist.
37. The recommended soil moisture content will be maintained throughout construction, and during the life of the residence. Failure to maintain the soil moisture content can result in desiccation cracks and disturbance, which are an indication of degradation of soil compaction. If desiccation cracks are allowed to develop, or if soils desiccate near improvements such as foundations, curbs, flatwork, etc., damage to those improvements may result. Soils that have cracked due to desiccation or are otherwise disturbed will be removed, moisture conditioned, and recompacted. To reduce the potential for disruption of drainage patterns, rodent activity will be aggressively controlled.
38. Any recommendations of the radon consultant that involve a grading solution will be reviewed by the soils engineer and/or the engineering geologist prior to being implemented.

Utility Trenches

39. Unless otherwise recommended, utility trenches adjacent to footings or grade beams will not be excavated within the zone of foundation influence, as shown in Typical Detail A in Appendix G of the Earth Systems Pacific report (January 25, 2011).
40. Utilities that must pass beneath a footing or grade beam will be placed with properly compacted utility trench backfill and the foundation will be designed to span the trench.
41. A select, noncorrosive, granular, easily compacted material will be used as bedding and shading immediately around utilities. The site soil, crushed bedrock, or imported nonexpansive soil may be used for trench backfill above the select material. At a minimum, the final 18 inches of trench backfill below all slabs-on-grade will consist of imported nonexpansive material per the "Grading" section of this report.
42. In general, trench backfill will be compacted to a minimum of 90 percent of maximum dry density. In areas to be paved (or that will support vehicular flatwork), a minimum of 95 percent of maximum dry density will be maintained for all trenches in the upper 12 inches of subgrade and in all aggregate base. A minimum of 85 percent of maximum dry density will generally be sufficient where trench backfill is located in landscaped or other unimproved areas where settlement would not be detrimental.

43. Trench backfill will be placed in level lifts not exceeding 6 inches in loose thickness and compacted to the minimums noted above. Trench backfill will be moisture conditioned to optimum moisture content or just above prior to application of compactive effort.
44. Where on or off-site utility trenches will slope steeper than 20 percent, sand-cement slurry or lean concrete plugs (seepage collars) will be placed in the trenches at maximum 150-foot intervals. The plugs will extend a minimum of 2 feet below the bottom of the trench and will be cut a minimum of 2 feet into the sides of the trench. The top of the plug will be a minimum of 1 foot above the top of utility.
45. A gravel pocket drain will be constructed upgradient of each clay or slurry plug. Each drain will consist of a minimum of 1 cubic foot of free-draining gravel per foot of trench width. The drain gravel will be wrapped in a permeable synthetic filter fabric conforming to Caltrans Standard 88-1.03 for underdrains. A solid rigid PVC pipe will extend from the gravel drain at a minimum 1 percent slope to an appropriate discharge point.
46. In Cave Landing Road, flexible pipe, sleeves, and/or connections will be used in the water line from Station 109+00 to Station 116+25 in an effort to reduce the potential for damage to the line in the event that the landslide in this area activates. Similar measures may be used in the dry utilities at the discretion of the architect/engineer.
47. For compaction of trench backfill soils by jetting or flooding to be successful, a free drainage path must be provided that will allow the water to dissipate very rapidly without causing erosion within the trench. Consequently, compaction of trench backfill by jetting or flooding is not recommended except under extraordinary circumstances. However, to aid in *encasing* utility conduits, particularly corrugated drain pipes, and multiple, closely-spaced conduits in a single trench, jetting or flooding may be useful. Flooding or jetting will only be attempted with extreme caution, and any jetting operation will be subject to review by the soils engineer.
48. The recommendations of this section are minimums only, and may be superseded by the architect/engineer based upon soil corrosivity or the requirements of pipe manufacturers, utility companies or the governing jurisdiction. Soil corrosivity test results and recommendations for mitigation of soil corrosivity are included in Appendix D for use by the architect/engineer in specifying corrosion protection measures.

Foundations

Footings Bearing in Rock

49. The lower level of the main residence, the northerly region of the main residence, and the barn may all be founded on footings that bear in the siltstone bedrock. In these areas, continuous and spread (pad) footings bearing a minimum of 12 inches into the bedrock may be used. Other dimensions will be per the CBC or the specification of the architect/engineer.
50. The footing excavations will be level and stepped as necessary to follow any slope of the bedrock surface.

51. Continuous footings will be reinforced, at a minimum, by two No. 4 rebar, one at the top and one at the bottom, or as required by the architect/engineer. Spread footings will be reinforced in accordance with the requirements of the architect/engineer.
52. Footings will be designed using maximum allowable bearing capacities of 1,800 psf dead load and 2,700 psf dead plus live loads. Using these criteria, maximum settlement and differential settlement are expected to be on the order of 3/8-inch and 1/4-inch in 25 feet, respectively.
53. In design of footings to resist lateral loads, a passive equivalent fluid pressure of 300 pcf for the soil and 500 pcf for the rock; as well as a coefficient of friction of 0.40 may be used. Lateral capacity is based on the assumption that backfill adjacent to foundations is properly compacted.
54. A grade beam, meeting the same depth and reinforcing criteria as the continuous footings will be cast across each vehicle opening in the barn.
55. Bedrock exposed in footing and grade beam excavations will be lightly moistened to approximately optimum moisture and no desiccation cracks will be present prior to concrete placement.

Drilled Cast-in-Place Caissons

56. Drilled, cast-in-place caissons will be used to support all areas of the residence where the bedrock is sufficiently deep that footings are no longer viable. These areas are believed to be mainly the seaward areas of the main level of the primary residence.
57. The caissons will have a minimum diameter of 18 inches and will extend a minimum depth of 4 feet into bedrock. They will not be constructed closer than three diameters (clear span) to each other without approval from the soils engineer.
58. An allowable skin friction value of 800 psf in compression or 600 psf in tension will be assumed for the bedrock; no friction capacity in the overlying soils or end bearing capacity will be used in the design.
59. Lateral loads on caissons may be resisted by friction and by passive resistance of the soil and bedrock. In design of caissons to resist short-term loads, a passive equivalent fluid pressure of 300 pcf for soil 500 pcf for bedrock may be applied across two caisson diameters. If lateral loads will be sustained, the passive values presented will be reduced by one-third, and will be applied across only one caisson diameter.
60. The caissons will be connected by grade beams so that the foundation acts as an integral unit. The grade beams will have a minimum depth of 21 inches below lowest adjacent grade and will be reinforced, at a minimum by two No. 4 rebar, one at the top and one at the bottom, or as required by the architect/engineer.

61. The soils and bedrock may not stand vertically during the caisson construction operations. Casing, drill fluid, or other means of keeping the holes open could be necessary.
62. Although no subsurface water was encountered in the test pits, depending on the location of the caissons and the weather conditions at and preceding the time of construction, subsurface water could be encountered during the caisson drilling operation. Therefore, caisson reinforcing will be designed to accommodate a minimum 5-inch diameter tremie pipe. Any water encountered will be removed from the hole prior to placing concrete, or the concrete will be tremied. Appendix H of the Earth Systems Pacific report (January 25, 2011) contains a description of the recommended tremie method.
63. As caissons will utilize skin friction for support, it is not necessary to thoroughly clean the bottoms of the excavations, although excessive loose debris and slough material will be removed using a clean out bucket or by other means. As stated earlier, use of end-bearing capacity is not recommended.
64. Concrete used in caissons will be placed at a slump between 4 and 6 inches in dry excavations and between 6 and 9 inches when placed under water.
65. The caissons will not deviate from a plumb line taken from the center of the caisson by more than 2 percent of the caisson length, from the top to the point of interest. Adequate caisson oversize may be assumed to provide the required tolerance.
66. Caisson excavations will be observed by the soils engineer during drilling operations. Special inspection will be provided during reinforcing steel and concrete placement.
67. The construction will be planned such that each caisson will be cast on the same day that it is drilled, as caisson excavation sidewalls can deteriorate rapidly over time and the deterioration can adversely affect frictional capacity. If caissons cannot be cast the day that they are drilled, the rotating auger will be raised and lowered the full depth of the excavation to re-establish frictional capacity on the day of the concrete pour.
68. Soils in grade beam excavations will be moistened to approximately optimum moisture and no desiccation cracks will be present prior to concrete placement.

Foundations, General

69. Allowable bearing capacity may be increased by one-third when transient loads such as wind or seismicity are included. Foundations may be designed using the following seismic parameters which are based, in part, on a latitude of 35.1784 degrees north, and a longitude of 120.7187 degrees west:

Site Class (CBC Table 1613.5.2)

C

Mapped Spectral Accelerations (Site Class B)

0.2 second period - S_s	1.50g
1.0 second period - S_1	0.551g

Design Response Spectral Acceleration (Site Class C)

0.2 second period - S_{DS}	0.999g
1.0 second period - S_{D1}	0.477g

Interior Slabs-on-Grade and Exterior Flatwork

70. Prior to completion of the design of slabs, a radon consultant will be retained to evaluate the potential for radon to adversely impact the project. The recommendations of the consultant will be incorporated in the design and construction process. Any radon mitigation recommendations that conflict with the geotechnical recommendations presented herein will be brought to the attention of the soils engineer to affect a solution prior to the completion of design.
71. Interior slabs-on-grade will have a minimum thickness of 4 full inches. Reinforcement size, placement, and dowels will be as directed by the architect/engineer; minimum slab and flatwork reinforcement will consist of No. 3 rebar placed at 24 inches on-center each way. At a minimum, the interior slabs-on-grade will be doweled to footings and grade beams with No. 3 dowels lapped to the slab rebar at 24 inches on-center.
72. Due to the current use of impermeable floor coverings, water-soluble flooring adhesives, and the speed at which buildings are now constructed, moisture vapor transmission through slabs is a much more common problem than in past years. Where moisture vapor transmitted from the underlying soil would be undesirable, the slabs will be protected from subsurface moisture vapor. A number of options for vapor protection are discussed below, however, the means of vapor protection, including the type and thickness of the vapor retarder, if specified, are left to the discretion of the architect/engineer.
73. Several recent studies, including those of American Concrete Institute (ACI) Committees 302 and 306, have concluded that excess water above the vapor retarder increases the potential for moisture damage to floor coverings and could increase the potential for mold growth or other microbial contamination. The studies also concluded that it is preferable to eliminate the typical sand layer beneath the slab and place the slab concrete in direct contact with a "Class A" vapor retarder, particularly during wet weather construction. However, placing the concrete directly on the vapor retarder requires special attention to using the proper vapor retarder (see discussion below), a very low water-cement ratio in the concrete mix, and special finishing and curing techniques.
74. Probably the next most effective option would be the use of vapor-inhibiting admixtures in the slab concrete mix and/or application of a sealer to the surface of the slab. This would also require special concrete mixes and placement procedures, depending upon the recommendations of the admixture or sealer manufacturer.

75. Another option that may be a reasonable compromise between effectiveness and cost considerations is the use of a subslab vapor retarder protected by a sand layer. If a "Class A" vapor retarder (see discussion below) is specified, the barrier can be placed directly on the prepared subgrade. The retarder will be covered with a minimum 2 inches of *clean* sand. If a less durable vapor retarder is specified (Class B or C), a minimum of 4 inches of clean sand will be provided on top of the prepared subgrade, and the retarder will be placed in the center of the clean sand layer. Clean sand is defined as a well or poorly graded sand (ASTM D 2487-06) of which less than 3 percent passes the No. 200 sieve. The clean sand layer, if utilized, is considered to be part of the nonexpansive layer recommended in the "Grading" section of this report to be placed below slabs-on-grade, not in addition to it.
76. Where specified, vapor retarders will conform to ASTM Standard E 1745-97/2004. This standard specifies properties for three performance classes, Class A, B and C. The appropriate class will be selected based on the sensitivity of floor coverings to moisture intrusion and the potential for damage to the vapor retarder during placement of slab reinforcement and concrete.
77. Regardless of the underslab vapor retarder selected, proper installation of the retarder is critical for optimum performance. All seams must be properly lapped, and all seams and utility penetrations properly sealed in accordance with the vapor retarder manufacturer's recommendations.
78. If sand is used between the vapor retarder and the slab, it will be moistened only as necessary to promote concrete curing; saturation of the sand will be avoided, as the excess moisture would be on top of the vapor retarder, potentially resulting in vapor transmission through the slab for months or years.
79. If sand is used as nonexpansive import beneath vehicular flatwork (see following paragraphs), the flatwork will be designed by the architect/engineer using a subgrade modulus (K_{30}) of 200 pci (psi/in). If a higher subgrade modulus is preferred, the flatwork may be designed using a subgrade modulus of 400 pci. In this case, the nonexpansive material will consist of a minimum 12-inch thick layer of Class 2 aggregate base.
80. In conventional construction, it is common to use 4 to 6 inches of sand beneath exterior pedestrian flatwork. Due to the expansion potential of the soil on this site, there will be a risk of movement and damage to such flatwork if conventional measures are used. Heaving and cracking are likely to occur. This movement could be reduced by the placement of 12 to 18 inches of compacted, nonexpansive material beneath the flatwork.
81. Another measure that can be taken to reduce the risk of movement of flatwork due to expansive soils is to provide thickened edges or grade beams around the perimeters of the flatwork. The thickened edges or grade beams could be from 12 to 18 inches deep, with the deeper edges or grade beams providing better protection. At a minimum, the thickened edge or grade beam will be reinforced by two No. 4 rebar, one at the top and one at the bottom.

82. Flatwork will be constructed with frequent joints to allow articulation as flatwork moves in response to expansion and contraction of the soil. The expansive soil in the subgrade will be moistened to at least optimum moisture content and no desiccation cracks will be present prior to casting the flatwork.
83. Flatwork may be doweled to the foundation or may be allowed to "float free," at the discretion of the architect/engineer. At doorways and other areas where keeping the flatwork at a specific elevation is desired, the flatwork will be doweled to the foundation as recommended previously for interior slabs-on-grade.
84. To reduce shrinkage cracks in concrete slabs and flatwork, the concrete aggregates will be of appropriate size and proportion, the water/cement ratio will be low, the concrete will be properly placed and finished, contraction joints will be installed, and the concrete will be properly cured. This is particularly applicable to slabs that will be cast directly upon a vapor retarder and those that will be protected from transmission of vapor by use of admixtures or surface sealers. Concrete materials, placement, and curing specifications will be at the direction of the architect/engineer; ACI 302.1R-04 and ACI 302.2R-04 are suggested as resources for the architect/engineer in preparing such specifications.

Retaining Walls

85. Walls that are part of, or will be rigidly attached to, either of the residential structures will be founded in bedrock. Penetration into the bedrock, bearing capacities, etc. for these walls will be per the "Foundations" section of this report.
86. Site retaining walls may bear in soil that has been overexcavated and recompact per the "Grading" section, or in bedrock. Footings for site walls bearing in soil will penetrate to a minimum of 21 inches (not including any keyway) below the lowest grade within 5 feet of the wall. Where footings will bear in bedrock, the footing will penetrate bedrock a minimum of 6 inches, with a minimum overall depth of 21 inches. Footings will be horizontal, and may step to follow site grade or the slope of the bedrock, as appropriate. If a site retaining wall footing will transition from soil to bedrock, a construction joint will be placed in the wall and footing at the transition line.
87. Generally, site retaining wall footings will not bear in the backfill of any lower retaining wall; the upper wall's footing will be deepened to penetrate through the backfill and to bear in the underlying soil or bedrock, as appropriate. An exception would be where the lower wall is backfilled with *crushed* gravel. An upper retaining wall may bear a minimum of 18 inches into crushed gravel, provided that the gravel is placed in thin lifts and each lift is compacted with a vibrating plate compactor or other suitable means. The lower wall will be designed to accommodate the surcharge of the upper wall. The diagrams in Appendix I may be used to calculate such surcharges.
88. Design of retaining walls will be based on the following parameters:

Active equivalent fluid pressure (native soil backfill)	55 pcf
Active equivalent fluid pressure (imported sand or gravel backfill)	35 pcf

At rest equivalent fluid pressure (native soil backfill).....	70 pcf
At-rest equivalent fluid pressure (imported sand or gravel backfill)	50 pcf
Passive equivalent fluid pressure, soil.....	300 pcf
Passive equivalent fluid pressure, bedrock.....	500 pcf
Maximum toe pressure, soil.....	1,200 psf
Maximum toe pressure, bedrock	2,500 psf
Coefficient of sliding friction, soil.....	0.35
Coefficient of sliding friction, bedrock	0.40

89. No surcharges are taken into consideration in the above values. The maximum allowable toe pressures are *allowable* values; no factors of safety, load factors or other factors have been applied to the remaining values. With the exception of the maximum toe pressures, these values will require application of appropriate factors of safety, load factors, and/or factors as deemed appropriate by the architect/engineer.
90. If the equivalent fluid pressures for sand or gravel backfill are used in the design, sand or gravel backfill will be exclusively utilized above 1:1 plane from the base of the wall to 1 foot from the top of the backfill. The upper foot of backfill will be native soil.
91. The above pressures are applicable to a retained surface that is horizontal at the top of the wall. Walls having a retained surface that slopes upward from the top of the wall will be designed for an additional equivalent fluid pressure of 1 pcf for the active case and 1.5 pcf for the at-rest case, for every degree of slope inclination.
92. Based upon a PGA estimated to be 0.40g by the CBC and 0.29 for the DBE, and work by Atik and Sitar (2010), seismic loads on retaining walls will be insignificant and may be ignored for walls up to 12 feet in retained height. For walls over 12 feet in retained height that will primarily retain bedrock (such as the main retaining wall in the barn structure) seismic loads may also be ignored. If any walls over 12 feet in retained height will primarily retain colluvium or fill, the soils engineer will be consulted for design recommendations.
93. The active and at-rest pressures presented are for fully drained conditions; therefore all retaining walls will be drained with perforated pipe encased in a free-draining gravel blanket. Retaining wall drains can consist of perforated pipe encased in free-draining gravel. Where this type of system is used, the pipe will be placed perforations downward and will discharge in a nonerosive manner away from foundations and other improvements. The gravel zone will have a width of approximately 1 foot and will extend upward to 1 foot from the top of the wall backfill. The upper foot of backfill will consist of native soils or topsoil to reduce the flow of surface drainage into the wall drain system. To reduce infiltration of the soil into the drain gravel, a permeable synthetic filter fabric, conforming to Caltrans Section 88-1.03 for Underdrains, will be placed between the two.
94. Manufactured synthetic drains such as Miradrain or Enkadrain are acceptable alternatives to the use of gravel drains, provided that they are installed in accordance with the recommendations of the manufacturer. Where weep hole drainage can be

properly discharged, the perforated pipe may be omitted in lieu of weep holes on maximum 4-foot centers. A filter fabric as described above will be placed between the weep holes and the drain gravel.

95. Walls facing habitable areas or areas where moisture transmission through the wall would be undesirable will be *thoroughly* waterproofed in accordance with the requirements of the architect/engineer. At a minimum, the waterproofing will cover the retaining side of the wall and will extend a minimum of 2 feet across the top of the heel of the footing.
96. Retaining walls by their nature are flexible structures, and surface treatments on walls often crack. Where walls are to be plastered or will otherwise have a finish surface applied, the flexibility will be considered in determining the suitability of the surfacing material, spacing of horizontal and vertical joints, etc. The flexibility will also be considered where a retaining wall will abut or be connected to a rigid structure, and where the geometry of the wall is such that its flexibility will vary along its length.
97. It is assumed that site wall heights will not exceed 10 feet; walls that are part of a structure will not exceed 14 feet in height.

Drainage and Maintenance

98. Generally, a zone of irrigated landscaping will be established for at least 5 feet around the perimeter of the structures and exterior flatwork. If drought tolerant vegetation or xeroscaping is planned, or if this zone around the structures or flatwork is allowed to dry out for any other reason, the soils engineer will be contacted for modified recommendations. The landscaping and irrigation system will be maintained to keep the soils near structures and flatwork moist yet free of erosion.
99. Per Section 1804.3 of the CBC, unpaved ground surfaces will be *finish graded* to direct surface runoff away from foundations, slopes, flatwork, and other improvements at a minimum 5 percent grade for a minimum distance of 10 feet. The site will be similarly sloped to drain away from foundations, slopes, flatwork, and other improvements during construction. If this is not feasible due to the terrain, property lines, or other factors, swales with improved surfaces, area drains, or other drainage features will be provided to divert drainage away from these areas.
100. Collection or diversion swales (brow ditches) will be constructed above all cut and fill slopes, or grade will slope such that runoff will be directed away from such slopes. Where runoff will be collected and then disbursed onto the site, disbursing will occur well away from all improvements.
101. Finished asphalt and concrete pavement surfaces will be sloped to freely drain toward appropriate drainage facilities. Water will not be allowed to stand or pond on or adjacent to pavement as it could infiltrate into the aggregate base and subgrade, causing premature pavement deterioration.

102. Any raised planter boxes constructed adjacent to the structures will be installed with drains, and sealed sides and bottoms to prevent planter drainage from gaining access to subslab or subfloor areas. Drains will also be provided in all areas adjacent to foundations and flatwork that would not otherwise drain freely.
103. All eaves of the structures will be provided with roof gutters. Runoff from roof gutters, downspouts, area drains, weep holes, etc., will discharge to an appropriate outlet in a nonerosive manner away from foundations and other improvements in accordance with the requirements of the governing agencies. Erosion protection will be placed at drainage outlets unless discharge is to an asphalt or concrete surface.
104. Diversion swales, dispersion swales, brow ditches, retaining wall drains, etc. will be cleaned and repaired as necessary to maintain free-flowing conditions.
105. The on-site soils are erodible. Stabilization of surface soils, particularly those disturbed during construction, by vegetation or other means *during and following construction* is essential to protect the site from erosion damage. Care will be taken to establish and maintain vegetation. The landscaping will be installed to maintain the surface drainage recommended in the previous paragraphs.
106. To reduce the potential for disruption of drainage patterns and undermining of structures, fill areas, etc., all rodent activity will be aggressively controlled.

Observation and Testing

107. It must be recognized that the recommendations contained in this report are based, in part, on the work of others and a limited number of test pits excavated at the site and rely on continuity of the subsurface conditions encountered.
108. Unless otherwise stated, the terms "compacted" and "recompacted" refer to soils placed in level lifts not exceeding 8 inches in loose thickness and compacted to a minimum of 90 percent of maximum dry density.
109. Unless otherwise stated, "moisture conditioning" refers to the moistening or drying of soils to optimum moisture content or just above, prior to application of compactive effort.
110. The standard tests used to define maximum dry density and field density will be ASTM D 1557-09 and ASTM D 6938-08a, respectively, or other methods acceptable to the soils engineer and jurisdiction.
111. At a minimum, the soils engineer will be retained to provide:
 - Review of grading, retaining wall, and foundation plans and details, and the recommendations of the radon consultant as they near completion
 - Professional observation during grading

- Oversight of compaction testing during grading and backfill
 - Oversight of soil and caisson special inspection during grading
112. As per the recommendations of the project geologist, Richard Gorman (CEG) with Earth Systems Pacific, special inspection of grading and caisson construction will be provided as per Section 1704.7 and Table 1704.7 of the CBC; the special inspector will be under the direction of the soils engineer. At this time, it is Earth Systems opinion that, there are no operations that are sufficiently critical as to warrant *continuous* special inspection of grading; periodic special inspection of grading and caisson construction will suffice, subject to approval by the building official. The following will be inspected by the special inspector:
- Stripping and clearing of vegetation
 - Verification of overexcavation to the correct depth
 - Keying, benching and back drains
 - Scarification, moisture conditioning and recompaction of the bottoms of the overexcavation areas
 - Utility trench backfill
 - Retaining wall backfill
 - Fill quality, placement, moisture conditioning, and compaction, including nonexpansive material
 - Foundation excavations (including caisson excavations)
 - Placement of rebar and concrete in caissons
113. A program of quality control will be developed prior to the beginning of the project. The contractor or project manager will determine any additional inspection items required by the architect/engineer or the governing jurisdiction.
114. Locations and frequency of compaction tests will be as per the recommendation of the soils engineer at the time of construction. The recommended test location and frequency may be subject to modification by the soils engineer, based upon soil and moisture conditions encountered, size and type of equipment used by the contractor, the general trend of the results of compaction tests, or other factors.
115. A preconstruction conference among the owner, the County, the soils engineer, the soil special inspector, the architect/engineer, and contractors is recommended to discuss planned construction procedures and quality control requirements.
116. The soils engineer will be notified at least 48 hours prior to beginning construction operations. If Earth Systems Pacific is not retained to provide construction observation and testing services, it shall not be responsible for the interpretation of the information by others or any consequences arising there from.
117. A letter from the project geologist shall be submitted **prior to final inspection** outlining how all the geologic conditions of the referenced geologic investigations (see reference section of the Mitigated Negative Declaration) have been complied with.

**Conditions to be completed prior to occupancy or final building inspection
/establishment of the use**

118. Upon completion of all monitoring/mitigation activities, and prior to occupancy or final inspection (whichever occurs first), the consulting archaeologist shall submit a report to the Environmental Coordinator summarizing all monitoring/mitigation activities and confirming that all recommended mitigation measures have been met. If the analysis included in the Phase III program is not complete by the time final inspection or occupancy will occur, the applicant shall provide to the Environmental Coordinator, proof of obligation to complete the required analysis.
119. **Prior to final building inspection**, the applicant shall record a notice against the property notifying any subsequent purchaser that failure to meet the requirements of 23.08.169 (2) (occupancy of primary and secondary units) will subject the second unit to abatement by the county pursuant to Chapter 23.10 of the Coastal Zone Land Use Ordinance.
120. Landscaping in accordance with the approved landscaping plan shall be installed or bonded for before final building inspection. If bonded for, landscaping shall be installed within 60 days after final building. All landscaping shall be maintained in a viable condition in perpetuity.
121. **Prior to occupancy or final inspection**, which ever occurs first, the applicant shall obtain final inspection and approval from CDF of all required fire/life safety measures.
122. **Prior to occupancy of any structure associated with this approval**, the applicant shall contact the Department of Planning and Building to have the site inspected for compliance with the conditions of this approval.
123. **Prior to final inspection** the applicant shall record an open space easement over the portions of the property outside the building envelope pursuant to section 23.04.210 c(6) of the Coastal Zone Land Use Ordinance.

On-going conditions of approval (valid for the life of the project)***Developmental Burning***

124. As of February 25, 2000, the APCD prohibits developmental burning of vegetative material within San Luis Obispo County. However, under certain circumstances where no technically feasible alternatives are available, limited developmental burning under restrictions may be allowed. Any such exception must complete the following prior to any burning: APCD approval; payment of fee to APCD based on the size of the project; and issuance of a burn permit by the APCD and the local fire department authority. As a part of APCD approval, the applicant shall furnish them with the study of technical feasibility (which includes costs and other constraints) at the time of application. For any questions regarding these requirements, Karen Brooks of APCD's Enforcement Division may be contacted (805/781-5912).
125. The owner of the site shall agree to occupy one unit on the site as his/her primary residence.

126. This land use permit is valid for a period of 24 months from its effective date unless time extensions are granted pursuant to Land Use Ordinance Section 23.02.050 or the land use permit is considered vested. This land use permit is considered to be vested once a construction permit has been issued and substantial site work has been completed. Substantial site work is defined by Land Use Ordinance Section 23.02.042 as site work progressed beyond grading and completion of structural foundations; and construction is occurring above grade.
127. All conditions of this approval shall be strictly adhered to, within the time frames specified, and in an on-going manner for the life of the project. Failure to comply with these conditions of approval may result in an immediate enforcement action by the Department of Planning and Building. If it is determined that violation(s) of these conditions of approval have occurred, or are occurring, this approval may be revoked pursuant to Section 23.10.160 of the Land Use Ordinance.



CAL FIRE – SAN LUIS OBISPO

FIRE SAFETY PLAN



Date: June 8, 2011

Project Numbers: PMT2009-00095	Project Location: 37.06 acre site off Cave Landing
Project City: Avila Beach	Cross Street:
Owner Name: Robert W. Howard	Owner Address: 9 Red Rock Lane
City, State, Zip: Laguna Niguel, CA 92877	Owner Phone(s):
Agent Name: David Watson	Agent Address: P.O. Box 385
City, State, Zip: Pismo Beach, CA 93448-0385	Agent Phone(s): 701-8728
Project Notes: Minor use permit to construct new single family residence and secondary residence. Fire access road or driveway may NOT exceed 20% slope grades. A "will-serve" letter from the community water service provider must be submitted.	

The following **checked** items are required to be completed prior to final inspection of this project. When you have completed each item checked, initial and date that they are completed. When all items checked are completed please call for a fire department final inspection, (805) 543-4244, extension #2220. Inspections will be completed on the following Tuesday for South County areas and Thursday for North County areas. Please have your County issued permit card on site and visible.

This project is located approximately 5 minutes from the closest Cal Fire/San Luis Obispo County Fire Station. The project is located in State Responsibility Area for wildland fires. It is designated as a **Very High** Fire Severity Zone. This project is required to comply with all fire safety rules and regulations including the California Fire Code, the Public Resources Code and any standards referenced therein.

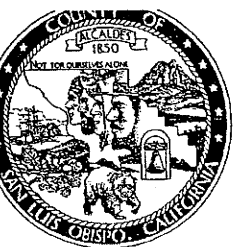
The following standards are required:	Done
<input checked="" type="checkbox"/> 30-foot building setback from property line required for parcels 1 acre in size or larger **Note: All setbacks are subject to County Planning Department approval.	
<input checked="" type="checkbox"/> A fire sprinkler system is required for this project per local Fire Code.	
<input checked="" type="checkbox"/> Fire alarm bell must be installed and working at final inspection.	
<input checked="" type="checkbox"/> Spare sprinkler heads (2 of each type) & a sprinkler wrench shall be included in red box mounted in garage or near riser.	
<input checked="" type="checkbox"/> A water storage tank is required that gravity feeds a residential fire connection	
<input checked="" type="checkbox"/> 9000 gallons of minimum water storage is required for fire protection ** Note: If a residential sprinkler system is installed, the water storage capacity shall be calculated by an approved Fire Protection Engineer (FPE).	
<input checked="" type="checkbox"/> Automatic Fill, Sight Gauge & Venting System required	
<input checked="" type="checkbox"/> Minimum 4-inch plumbing: Schedule 40 PVC or Iron Pipe	
<input checked="" type="checkbox"/> System gravity drain required	
<input checked="" type="checkbox"/> Fire connection shall be located on the approach to the structure(s)	
<input checked="" type="checkbox"/> Fire connection must be located not less than 50 feet & no more than 150 feet from the structure	
<input checked="" type="checkbox"/> Fire connection must be located 10-12 feet from the edge of the driveway/road & 24-36" above <u>finished</u> grade	
<input checked="" type="checkbox"/> Fire connection outlet valve must be a 2-1/2" brass National Standard male thread with brass or plastic cap. The outlet must face toward the driveway at a 90° angle.	
<input checked="" type="checkbox"/> If fire connection has less than 20 psi, then the word "DRAFT" will be clearly and permanently marked on the fire connection	
<input checked="" type="checkbox"/> Must maintain a 3 foot clear space around the circumference of the connection at all times	
<input checked="" type="checkbox"/> Blue dot reflector must be located near fire connection, visible to approaching vehicles	
<input checked="" type="checkbox"/> A fire hydrant is required that can deliver 1000 gallons per minute for 2 hours.	
<input checked="" type="checkbox"/> Must submit a completed CDF Community Water System Verification Form	
<input checked="" type="checkbox"/> Must have two 2 1/2" outlets and one 4" outlet with National Standard threads	
<input checked="" type="checkbox"/> Must be located within 8 feet of the roadway	
<input checked="" type="checkbox"/> Place a blue dot road reflector on roadway, just off center, on the side of the hydrant	
<input checked="" type="checkbox"/> Hydrant must be located within 250 feet of the residence.	
<input checked="" type="checkbox"/> Must maintain a 3 foot clear space around the circumference of the hydrant at all times	
<input checked="" type="checkbox"/> A 20-foot wide access road is required	

<input checked="" type="checkbox"/>	All weather surface capable of supporting 20 tons	
<input checked="" type="checkbox"/>	10 feet of fuel modification is required on both sides of road	
<input checked="" type="checkbox"/>	Must provide an unobstructed vertical clearance of not less than 13'6"	
<input checked="" type="checkbox"/>	Where road exceeds a 12% grade, it must be a nonskid surface	
<input checked="" type="checkbox"/>	If road exceeds a 16% grade, it must be certified by an engineer	
<input checked="" type="checkbox"/>	Road must be named & posted using the County standard signage	
<input checked="" type="checkbox"/>	Driveway must be 16 feet wide	
<input checked="" type="checkbox"/>	All weather surface capable of supporting 20 tons	
<input checked="" type="checkbox"/>	Where driveway exceeds a 12% grade, it must be a nonskid surface	
<input checked="" type="checkbox"/>	If driveway exceeds a 16% grade, it must be certified by an engineer	
<input checked="" type="checkbox"/>	10 feet of fuel modification is required on both sides of the driveway	
<input checked="" type="checkbox"/>	Must provide an unobstructed vertical clearance of not less than 13'6"	
<input checked="" type="checkbox"/>	Driveways exceeding 300 feet require a fire engine turnaround within 50 feet of the residence/structure	
<input checked="" type="checkbox"/>	Driveways exceeding 800 feet require a turnout(s) at midpoint and no more than 400 feet apart (Exception: 16' wide driveways)	
<input type="checkbox"/>	Bridge is required to support a fire engine load weight of 20 tons	
<input type="checkbox"/>	Bridge must have a sign indicating load & vertical clearance limits at entrances	
<input type="checkbox"/>	One-lane bridge: minimum 10', turnouts at both ends, one-way signs, clear visibility	
<input checked="" type="checkbox"/>	Gate entrance shall be 2 feet wider than width of traffic lane & located 30 feet from roadway.	
<input checked="" type="checkbox"/>	Center line of lane turning radius must be at least 25 feet	
<input checked="" type="checkbox"/>	Electric gates shall be maintained <u>operational at all times</u> and shall provide Fire Department emergency access via a "Knox" switch. A Knox application must be requested from the Prevention Bureau. Manual gates may be secured by a padlock.	
<input checked="" type="checkbox"/>	100 feet of vegetation clearance is required for defensible space	
<input checked="" type="checkbox"/>	Maintain a fire clearance of 30 feet around all buildings & structures	
<input checked="" type="checkbox"/>	Within the area of 30'-100' from structures, additional fire reduction measures shall be required.	
<input checked="" type="checkbox"/>	Remove limbs located within 10 feet of chimney & trim dead/dying limbs that overhang the roof. Leaves, needles, or dead growth shall be removed from the roof	
<input checked="" type="checkbox"/>	Minimum separation from buildings & property lines for LPG above ground tanks is: 10 feet for 125-500 gallon container; 25 feet for 501-2,000 gallon container	
<input checked="" type="checkbox"/>	Maintain a minimum vegetation clearance of 10 feet around LPG tanks or containers	
<input checked="" type="checkbox"/>	A Class A non-combustible roof is required that meets all requirements of Chapter 7A of the 2007 California Building Code.	
<input checked="" type="checkbox"/>	This project must meet all requirements of Chapter 7A of the 2007 California Building Code for Fire-Resistance-Rated Construction. Please contact the SLO County Planning & Building Dept. for more information at (805) 781-5600.	
<input checked="" type="checkbox"/>	Each residence requires separate address numbers, assigned by the SLO County Planning Dept. Please contact (805) 781-5157 for more information.	
<input checked="" type="checkbox"/>	Highly visible permanent address numbers shall be placed at the driveway entrance <u>and</u> on directional signs at each T or Y intersection (minimum 6" letter/number height, 1/2 inch stroke). Reflectorized numbers are highly recommended!	
<input checked="" type="checkbox"/>	Highly visible address numbers shall be placed on the residence(s). (Minimum 6" letter/number height with 1/2 inch stroke).	
<input checked="" type="checkbox"/>	Smoke detectors are required in all sleeping areas & in hallways leading to sleeping areas.	
Comments: Fire access road and driveway may not exceed 20% grade.		

When all of the fire safety requirements have been completed, please call the Fire Prevention Bureau at (805) 543-4244, extension #2220 to arrange for your final inspection. Visit our website at www.calfireslo.org for more information.

Please note: Any changes made to this project shall cancel the Fire Safety Plan and require new plans to be submitted to CAL FIRE for review and the issuance of a new fire plan. If this project is not completed within the time allotted by the Building Permit, it will be required to meet all applicable fire codes in effect at the time a new permit is issued and before final inspection of the structure. Any future change of occupancy will also require compliance with all codes in effect at that time.

Tina Rose
Fire Inspector

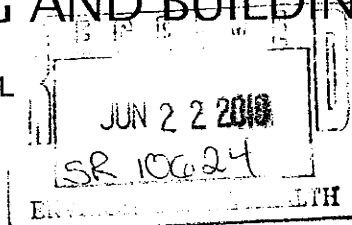


3-35

3
SAN LUIS OBISPO COUNTY

DEPARTMENT OF PLANNING AND BUILDING

THIS IS A NEW PROJECT REFERRAL



DATE: 6-18-2010

TO: Env. Health

FROM: Ryan Hostetter, Coastal Team

PROJECT DESCRIPTION: DRC2009-00095 HOWARD- MUP to construct a new SFR and secondary residence, on a 37.06 acre site located off Cave Landing Rd. in Avila Beach. APN: 076-231-063 and 065.

Return this letter with your comments attached no later than: 14 days from receipt of this referral.
By 7-9-2010 please.

PART 1 - IS THE ATTACHED INFORMATION ADEQUATE TO COMPLETE YOUR REVIEW?

- ☐ YES (Please go on to PART II.)
☐ NO (Call me ASAP to discuss what else you need. We have only 10 days in which we must obtain comments from outside agencies.)

PART II - ARE THERE SIGNIFICANT CONCERNS, PROBLEMS OR IMPACTS IN YOUR AREA OF REVIEW?

- ☐ YES (Please describe impacts, along with recommended mitigation measures to reduce the impacts to less-than-significant levels, and attach to this letter)
☐ NO (Please go on to PART III)

PART III - INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reasons for recommending denial.

IF YOU HAVE "NO COMMENT," PLEASE SO INDICATE, OR CALL.

Septic system to be designed & installation certified by a registered civil engineer due to slope.

7/8/10
Date[Signature]
NameX5551
Phone

COUNTY GOVERNMENT CENTER • SAN LUIS OBISPO • CALIFORNIA 93408 • (805)781-5600

EMAIL: planning@co.slo.ca.us • FAX: (805) 781-1242 • WEBSITE: <http://www.sloplanning.org>



3-36

4261

GDM 3

SAN LUIS OBISPO COUNTY

DEPARTMENT OF PLANNING AND BUILDING

THIS IS A NEW PROJECT REFERRAL

RECEIVED

DATE: 6-18-2010

FR TO: _____

PW

JUN 22 2010

FROM: Ryan Hostetter, Coastal Team

COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF PUBLIC WORKS

PROJECT DESCRIPTION: DRC2009-00095 HOWARD- MUP to construct a new SFR and secondary residence, on a 37.06 acre site located off Cave Landing Rd. in Avila Beach. APN: 076-231-063 and 065.

Return this letter with your comments attached no later than: 14 days from receipt of this referral.
By 7-9-2010 please.

PART 1 - IS THE ATTACHED INFORMATION ADEQUATE TO COMPLETE YOUR REVIEW?

- ☒ YES
☐ NO

(Please go on to PART II.)

(Call me ASAP to discuss what else you need. We have only 10 days in which we must obtain comments from outside agencies.)

PART II - ARE THERE SIGNIFICANT CONCERNS, PROBLEMS OR IMPACTS IN YOUR AREA OF REVIEW?

- ☒ YES
☐ NO

(Please describe impacts, along with recommended mitigation measures to reduce the impacts to less-than-significant levels, and attach to this letter)

(Please go on to PART III)

PART III - INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reasons for recommending denial.

IF YOU HAVE "NO COMMENT," PLEASE SO INDICATE, OR CALL.

Road Facs, Drainage, Sedimentation & erosion control plans
required with building permits (encroachment permit
for driveway approach also).

Date

Name

Phone



RE: avila project
 Madeline Cavalieri to: rhostetter
 Cc: "Jonathan Bishop"

08/04/2010 11:00 AM

Hi Ryan,

Thank you for sending the project referral for the application for new residential development on Cave Landing Road in Avila Beach (APNs 076-231-063, -065). We note that the proposed project is for a new residence and secondary residence outside of the urban services line (USL), and that it would be served by a public water supply. You have asked us about the appropriateness of allowing a public water supply to be used for the proposed project given that it is located outside of the USL when this is not allowed by the LCP (LCP Public Works Policy 1 states that new development outside of the USL must be served by private, on-site water). Based on this LCP requirement, the project is required to use an on-site source as opposed to the public water supply. Thus, to be LCP consistent in this regard, the proposed project would need to be modified so that it is served by private, on-site water. Alternatively, the County could propose an LCP amendment to move the USL so that it includes this site. Such an LCP amendment would need to be evaluated for consistency with the Coastal Act and the LCP, and certified by the Commission. It is unclear at this time what analysis might be forwarded by the County if it were to choose this route, and uncertain as to what decision might ultimately be appropriate consistent with the Coastal Act and the LCP. In the meantime, absent certification of such an amendment, the LCP requires that a private, on-site water source be used in this case.

With respect to other potential issues applicable to the proposed project, unfortunately we have not had an opportunity to review other aspects of the project application at this time. However, we do note that the project site is located within a sensitive resource area designated by the LCP and that the project may raise significant issues related to visual and biological resources.

I hope that this proves helpful. We look forward to coordinating with you on this project in the future. Please let me or Jonathan know if you have any questions.

Madeline

Madeline Cavalieri
 Coastal Planner
 California Coastal Commission
 725 Front Street, Suite 300
 Santa Cruz, CA 95060
 (831) 427-4863
mcavalieri@coastal.ca.gov
www.coastal.ca.gov

-----Original Message-----

From: rhostetter@co.slo.ca.us [mailto:rhostetter@co.slo.ca.us]
 Sent: Thursday, July 29, 2010 4:34 PM
 To: Madeline Cavalieri

Subject: Re: avila project

Referral:

(See attached file: ref info.pdf)

Thank You,

Ryan Hostetter, LEED AP
County of San Luis Obispo
Current Planning and Permitting
(805) 788-2351

From: "Madeline Cavalieri" <mcavalieri@coastal.ca.gov>

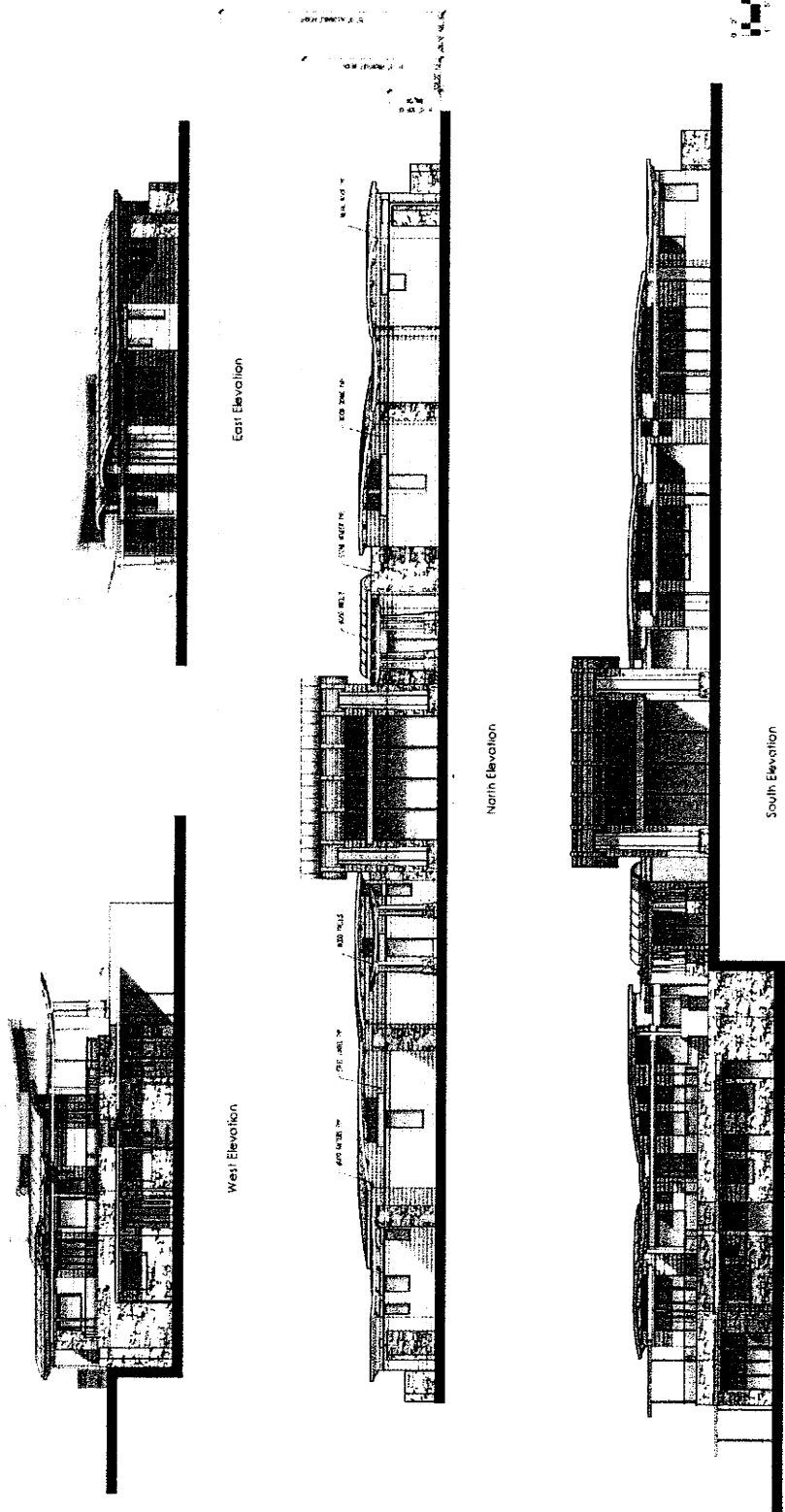
To: <rhostetter@co.slo.ca.us>

Date: 07/29/2010 04:31 PM

Subject: avila project

Madeline Cavalieri
Coastal Planner
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060
(831) 427-4863
mcavalieri@coastal.ca.gov
www.coastal.ca.gov

[Scanned @co.slo.ca.us]



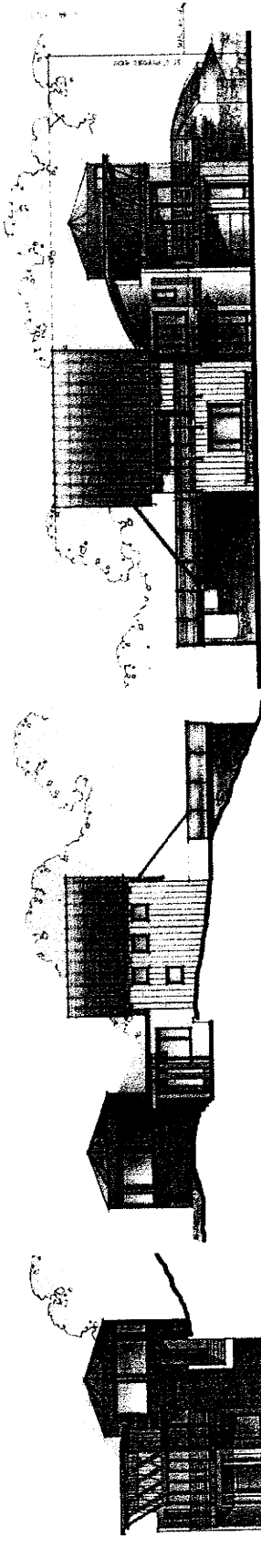
PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy

EXHIBIT

Elevations

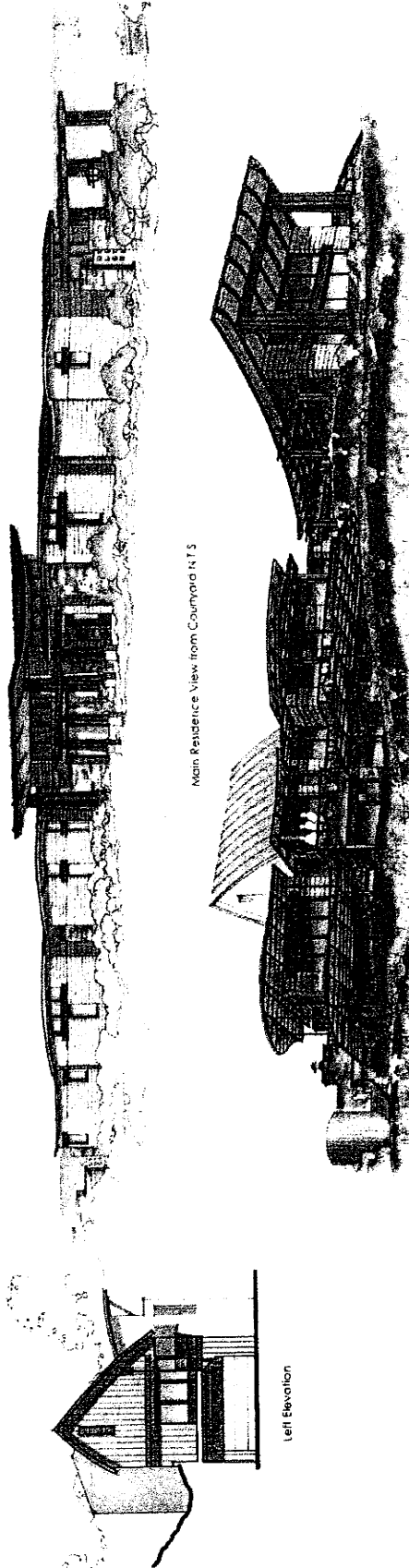




Barn From Courtyard

Rear Elevation

Right Elevation



Main Residence View from Courtyard N.T.S.

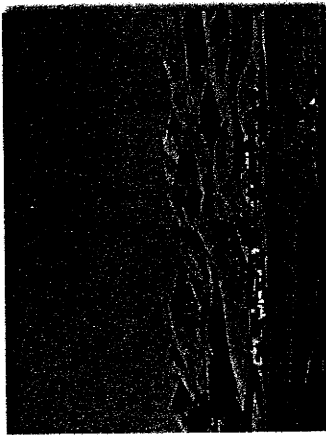
Main Residence View from Gate N.T.S.

Left Elevation

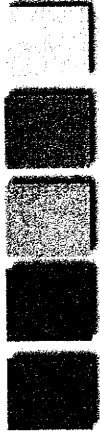
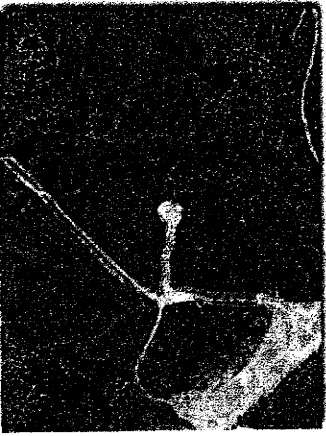
EXHIBIT
Elevations & Sketches



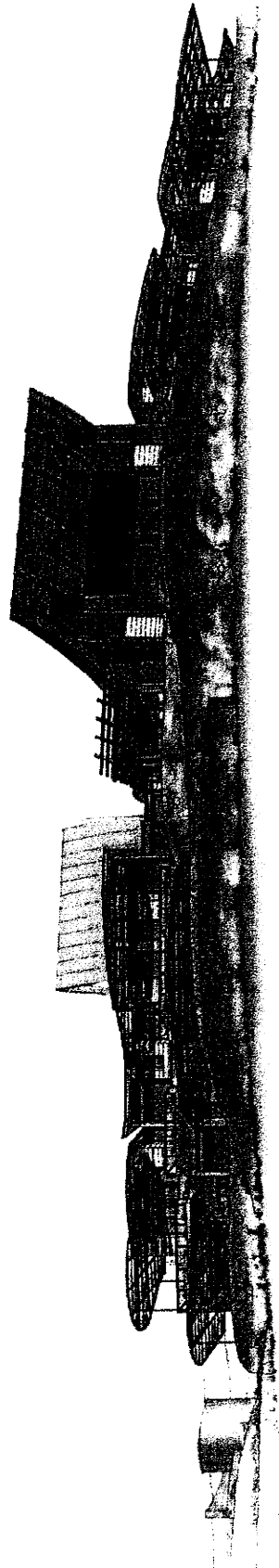
PROJECT
Conditional Use Permit
DRC2009-00095 / McCarthy



(Case Study of Talley Vineyards in Attoya Grande, CA)



Colors extracted from the project site



Main Residence View from Parking Lot N.T.S.

PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy

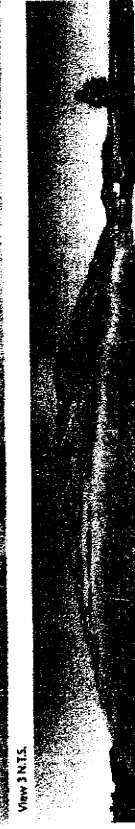
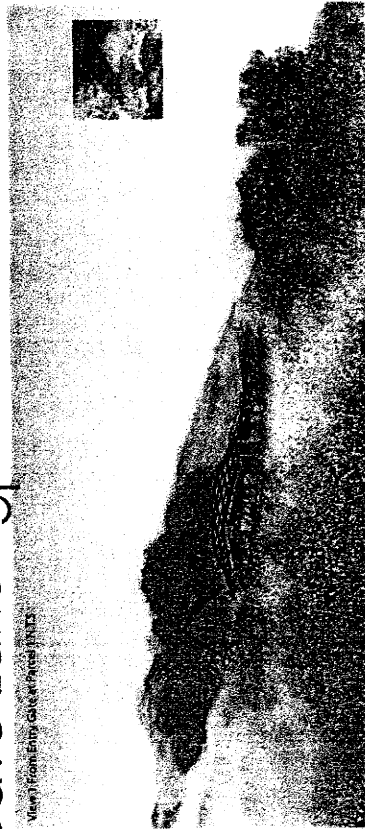
EXHIBIT

Colors & Materials



Cave Landing Ranch

Views From Parcels 1, 2, and 3



LEONARD GRANT, ARCHITECT

PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy

EXHIBIT

Views



NEGATIVE DECLARATION & NOTICE OF DETERMINATION

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING
976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

Promoting the Wise Use of Land • Helping to Build Great Communities

FOR OFFICIAL USE ONLY ()

ENVIRONMENTAL DETERMINATION NO. ED10-059

DATE: June 16, 2011

PROJECT/ENTITLEMENT: McCarthy Development Plan and Coastal Development Permit (DRC2009-00095)

APPLICANT NAME: Rob and Judi McCarthy
ADDRESS: 1800 19th St, Bakersfield, CA 93301
CONTACT PERSON: Dave Watson, AICP

Telephone: 805-704-8728

PROPOSED USES/INTENT: Request by Rob and Judi McCarthy for a Development Plan/Coastal Development Permit to allow for the construction of a 5,500 square foot single family residence, and a 1,000 square foot secondary residence to be located above a proposed detached 1,000 square foot garage/workshop. Proposed site improvements include: improvements to an existing access road/driveway off of Cave Landing Road which involves paving and retaining walls, site preparation for building pads, roads and septic systems which includes approximately 9,368 cu yards of grading (both cut and fill), a 10,000 gallon water tank for fire suppression, and landscaping around the residence. In addition, site improvements also include extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site and associated grading for the residence to receive water service by County Service Area 12. The project will result in total area of disturbance of approximately 35,575 sq. ft., on a 37.06 acre parcel.

LOCATION: The project is located on the north side of Cave Landing Road in Avila Beach, approximately 2500 feet south of the intersection of Cave Landing Road and Avila Beach Drive, within the San Luis Bay (Coastal) planning area.

LEAD AGENCY: County of San Luis Obispo
Dept of Planning & Building
976 Osos Street, Rm. 200
San Luis Obispo, CA 93408-2040

Website: <http://www.sloplanning.org>

OTHER POTENTIAL PERMITTING AGENCIES: California Coastal Commission

STATE CLEARINGHOUSE REVIEW: YES ☒ NO ☐

ADDITIONAL INFORMATION: Additional information pertaining to this environmental determination may be obtained by contacting the above Lead Agency address or (805) 781-5600.

COUNTY "REQUEST FOR REVIEW" PERIOD ENDS AT4:30 p.m. on June 30, 2011

30-DAY PUBLIC REVIEW PERIOD begins at the time of public notification

Notice of Determination

State Clearinghouse No. _____

This is to advise that the San Luis Obispo County _____ as ☒ **Lead Agency**
☐ **Responsible Agency** approved/denied the above described project on _____, and has made the following determinations regarding the above described project:

The project will not have a significant effect on the environment. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. Mitigation measures and monitoring were made a condition of the approval of the project. A Statement of Overriding Considerations was not adopted for this project. Findings were made pursuant to the provisions of CEQA.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at the 'Lead Agency' address above.

Ryan Hostetter

County of San Luis Obispo

Signature	Project Manager Name	Date	Public Agency
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Initial Study Summary – Environmental Checklist

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING

976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

Promoting the Wise Use of Land • Helping to Build Great Communities

(ver 3.3) Using Form

Project Title & No. (Howard) Development Plan /Coastal Development Permit ED010-059
(DRC2009-00095)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for at least one of the environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

<input type="checkbox"/> Aesthetics	<input checked="" type="checkbox"/> Geology and Soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Agricultural Resources	<input type="checkbox"/> Hazards/Hazardous Materials	<input checked="" type="checkbox"/> Transportation/Circulation
<input checked="" type="checkbox"/> Air Quality	<input type="checkbox"/> Noise	<input type="checkbox"/> Wastewater
<input checked="" type="checkbox"/> Biological Resources	<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Water
<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Public Services/Utilities	<input type="checkbox"/> Land Use

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the Environmental Coordinator finds that:

- ☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Prepared by (Print) Ryan Hostetter Signature Ryan Hostetter Date 6-9-11

John McKenzie Ellen Carroll,
Environmental Coordinator 6/9/11

Project Environmental Analysis

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The Environmental Division uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Environmental Division, Rm. 200, County Government Center, San Luis Obispo, CA, 93408-2040 or call (805) 781-5600.

A. PROJECT

DESCRIPTION: Request by Rob and Judi McCarthy for a Development Plan/Coastal Development Permit to allow for the construction of a 5,500 square foot single family residence, and a 1,000 square foot secondary residence to be located above a proposed detached 1,000 square foot garage/workshop. Proposed site improvements include: improvements to an existing access road/driveway off of Cave Landing Road which involves paving and retaining walls, site preparation for building pads, roads and septic systems which includes approximately 9,368 cu yards of grading (both cut and fill), a 10,000 gallon water tank for fire suppression, and landscaping around the residence. In addition, site improvements also include extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site and associated grading for the residence to receive water service by County Service Area 12. The project will result in total area of disturbance of approximately 35,575 sq. ft., on a 37.06 acre parcel. The project is located on the north side of Cave Landing Road in Avila Beach, within the San Luis Bay (Coastal) planning area.

ASSESSOR PARCEL NUMBER(S): 076-231-063

Latitude: 35degrees 10 ' 46.8 " N **Longitude:** 120degrees 43 ' 1.3 " W **SUPERVISORIAL DISTRICT #** 3

B. EXISTING SETTING

PLANNING AREA: San Luis Bay(Coastal), Avila Beach

LAND USE CATEGORY: Residential Rural

COMBINING DESIGNATION(S): Flood Hazard , Sensitive Resource Area, Geologic Study Area, Archaeologically Sensitive Area

EXISTING USES: Undeveloped

TOPOGRAPHY: Nearly level to vey steeply sloping

VEGETATION: Grasses , oak woodland

PARCEL SIZE: 37.06 acres

SURROUNDING LAND USE CATEGORIES AND USES:

<i>North:</i> Residential Rural, Open Space; undeveloped	<i>East:</i> Rural Lands; undeveloped
<i>South:</i> Residential Rural; undeveloped, Pirates Cove parking and trail	<i>West:</i> Open Space; undeveloped

C. ENVIRONMENTAL ANALYSIS

During the Initial Study process, several issues were identified as having potentially significant environmental effects (see following Initial Study). Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.

**COUNTY OF SAN LUIS OBISPO
INITIAL STUDY CHECKLIST**

1.	AESTHETICS - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Create an aesthetically incompatible site open to public view?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<i>Introduce a use within a scenic view open to public view?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<i>Change the visual character of an area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<i>Create glare or night lighting, which may affect surrounding areas?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<i>Impact unique geological or physical features?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	<i>Other: _____</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project is located at the top of Cave Landing Road (north side) which is a dead end road (to cars, however foot or bike traffic can continue through to Shell Beach) just outside the town of Avila Beach east of the (formerly Unocal) Avila Tank Farm property. The elevation of the project site sits at approximately 350 feet which is well above the town of Avila Beach, and the project site slopes up from Cave Landing Road to the top of the ridge on the north side of the project site (ocean is on the south side in this location). The property is visible from Avila Beach Drive and the town of Avila Beach at some elevations/locations as it includes part of the ridgeline separating the beach with Avila Valley (coastal side of Sycamore Mineral Springs). This project site is outside the urban reserve line of Avila Beach and totals approximately 37 acres. The County has acquired adjacent properties to the east and south for beach and trail access.

The proposed building site location is an existing bench which once contained a water tank approximately midway in the property between the road and top of the ridge. This bench is not at the top of the ridge and is not visible from the town of Avila Beach as it is blocked by the Avila Tank Farm property. However the building site is visible from portions of the golf course in Avila, locations on the pier and at the Cal Poly pier and Avila Beach Drive outside the downtown portions of Avila. Visual simulations were submitted for the project from these vantage points that demonstrate that the project is visible from these locations.

Impact. The house design is relatively low profile and the proposed garage/workshop with secondary residence is located behind the house (as viewed from Cave Landing). The garage/workshop with secondary dwelling unit is proposed to look like a two story barn with a height of 33 feet (maximum allowed height per the ordinance is 35 feet as measured from average natural grade) and is proposed to be partially built into/against the hillside behind the proposed house. The project is designed to fit

on an existing bench to limit grading and also partially be constructed into the hillside which will eliminate visual impacts to the downtown community of Avila Beach, and limit impacts to views from the piers. The location of the structures on the existing bench is at an elevation of approximately 350 feet, which is 300 feet below the top of the ridgeline. This elevation allows the development to be hidden by the tank farm property from the downtown Avila Beach areas. As you move farther out, however there are some views of the site from the piers in Avila.

The structures are designed to blend into the hillside with neutral colors and natural materials for construction such as gold/beige tone rock work, natural wood beams, and earth tone colors with earth tone roof colors to match the hill during the summer and fall months. The rooflines of the project are designed to mimic the form of the ridgeline as to create a natural curving roofline which is proposed to blend into the terrain more than a traditional hip or standard roof. Because of the lower elevation of this building site (approximately 300 feet below the ridge), and the proposed design of the structures, and the proposed darker and neutral colors, the project will not create significant visual impacts. This project will not silhouette on the ridge.

Mitigation/Conclusion. Because the proposed design of the project and location on the site do not include significant visual impacts, no mitigation measures are necessary.

2. AGRICULTURAL RESOURCES

- Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Convert prime agricultural land to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Impair agricultural use of other property or result in conversion to other uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with existing zoning or Williamson Act program?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. Project Elements. The following area-specific elements relate to the property's importance for agricultural production:

Land Use Category: Residential Rural

Historic/Existing Commercial Crops: None

State Classification: Not prime farmland

In Agricultural Preserve? No

Under Williamson Act contract? No

The soil type(s) and characteristics on the subject property include:

Diablo and Cibo clays (15 - 30 % slope).

Diablo. This moderately sloping clayey soil is considered very poorly drained. The soil has moderate erodibility and high shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, slow percolation. The soil is considered Class IV without irrigation and Class is not rated when irrigated.

Cibo. This moderately sloping clayey soil is considered very poorly drained. The soil has moderate erodibility and high shrink-swell characteristics, as well as having potential septic

system constraints due to: steep slopes, shallow depth to bedrock, slow percolation. The soil is considered Class IV without irrigation and Class is not rated when irrigated.

Lopez very shaly clay loam (30 - 75% slope). This steeply to very steeply sloping, shallow gravelly fine loamy soil is considered very poorly drained. The soil has low erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: shallow depth to bedrock. The soil is considered Class VII without irrigation and Class is not rated when irrigated.

Nacimiento- silty clay loam (30 - 50 % slope). This steeply sloping fine loamy soil is considered not well drained. The soil has moderate erodibility and moderate shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock, slow percolation. The soil is considered Class VI without irrigation and Class is not rated when irrigated.

Impact. The project is located in a predominantly non-agricultural area with no agricultural activities occurring on the property or immediate vicinity. No significant impacts to agricultural resources are anticipated.

Mitigation/Conclusion. No mitigation measures are necessary.

3. AIR QUALITY - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <i>Expose any sensitive receptor to substantial air pollutant concentrations?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create or subject individuals to objectionable odors?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Be inconsistent with the District's Clean Air Plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The County's LUO (Sec. 22.10.030/23.060.080) includes air quality provisions to include review by the Air Pollution Control District (APCD), as well as reduce odors. APCD has developed the 2009 CEQA Air Quality Handbook to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. To evaluate long-term emissions, cumulative effects, and establish countywide programs to reach acceptable air quality levels, a Clean Air Plan has been adopted (prepared by APCD). The project is not within close proximity of the following facilities: heavily traveled freeways (>100,000 vehicles/day), dry cleaners, or gas stations.

Wind Erodibility - The Natural Resource Conservation Service has rated most soils for potential loss due to wind erosion. Major factors affecting this erodibility potential include vegetation cover, climate,

soil erodibility and certain soil characteristics (e.g., particle roughness). The rating system used by NRCS ranges between 1 and 8, where 1 is the most erosive and 8 is the least erosive. In some cases the soil is given an "unclassified" rating. The project proposes to disturb soils that have been given a wind erodibility rating of 4 and 8, which is considered Moderate to high.

Naturally Occurring Asbestos (NOA). Asbestos can occur naturally in certain rock formations, such as those that include serpentinite or ultramafic rock. The State Air Resources Board considers asbestos a toxic air contaminant. If asbestos is present within the soil underlying the project site, future grading and site disturbance activities would release the asbestos into the air, resulting in a potentially significant air quality impact.

This project site contains shallow bedrock, areas of fill, crushed siltstone and shallow siltstone with claystone bedrock. Based on a site specific geologic investigation of NOA, the potential for naturally occurring asbestos to be encountered at the project site is very low to nil (Earth Systems Pacific January 25, 2011).

Impact. As proposed, the project will result in the disturbance of approximately 35,575 square feet. This will result in the creation of construction dust, as well as short- and long-term vehicle emissions. Based on Table 1-1 of the CEQA Air Quality Handbook, the project will result in less than 10 lbs./day of pollutants, which is below thresholds warranting any mitigation.

Greenhouse Gas Emissions

The California Air Resources Board (CARB), the California Environmental Protection Agency, and other governmental agencies with jurisdiction are in the process of developing guidelines and thresholds to address a project's cumulative contribution to greenhouse gas (GHG). Over the last few years, a series of related legislative acts have been made relating to this issue.

There are seven greenhouse gases, as follows, and are in order of their global warming potential: Carbon dioxide, Methane, Nitrous oxide, Chlorofluorocarbons, Hydrofluorocarbons, Perfluorocarbons, and Sulfur hexafluoride.

Project GHG Impacts/Conclusion - As an interim effort until such time CARB formalizes a process for development to follow, the following is a qualitative discussion of the project's impacts, as well as measures to reduce the project's GHG production. The proposed development will result in an increase of human activity, including increased use of vehicles and electricity, which will generate small increased amounts of carbon dioxide, nitrous oxides, and hydrofluorocarbons.

Although not originally intended to reduce greenhouse gas emissions, California Code of Regulations Title 24 (Energy Efficiency Standards for Residential and Nonresidential Buildings) were first established in 1978 to reduce California's energy consumption. The standards are updated periodically with the latest amendments in October 2005. The current standards require homes to use half the energy they used only a decade ago. Energy efficient buildings require less electricity; electricity production by fossil fuels results in greenhouse gas emissions (namely CO₂, methane, nitrous oxide). The project is subject to these Title 24 energy efficiency requirements resulting in decreased greenhouse gas emissions.

In addition, the project is subject to a number of standard and post-1990 measures that will reduce GHG emissions as follows:

- The project proposes the planting of trees (carbon dioxide reduction);
- Per the county's LUO landscape requirements, the project includes high water efficiency measures (which reduce electricity needs to pump water);
- The Uniform Plumbing Code (UPC) requires low-flow fixtures, such as the 1.6 gpf toilet (which reduce electricity needs to pump water);

- The project is within a garbage service area which includes a recycling program (recycling results in reduced energy needs from materials that use recycled products);
- At least 50% of construction wastes are required to be recycled;

Based on initial APCD thresholds of 7,000 metric tons of GHG air pollutants, the project's cumulative contribution to GHG emissions is below this amount, and therefore considered insignificant. At such time that more detailed GHG guidelines and/or thresholds are established by the ongoing CARB statewide process for GHG, additional mitigation may be appropriate.

Mitigation/Conclusion. The project is consistent with the general level of development anticipated and projected in the Clean Air Plan. Short term air quality impacts are expected to occur during project construction, and grading. Mitigation measures are proposed to reduce those temporary impacts to a less than significant level. Those measures include but are not limited to testing and receiving an exemption from the Air Pollution Control District for naturally occurring asbestos, prohibition of developmental burning of material, and dust mitigation during construction. For a full list of these measures see the mitigation summary table at the end of this report.

4. BIOLOGICAL RESOURCES - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Result in a loss of unique or special status species or their habitats?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <i>Reduce the extent, diversity or quality of native or other important vegetation?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Impact wetland or riparian habitat?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Introduce barriers to movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project is within the following combining designation(s), which identifies this general area as biologically sensitive: Sensitive Resource Area (SRA) and Coastal Zone

Reference materials including the Natural Diversity Database (NDDDB) were consulted and the following habitats or biological resources were identified as having been found, or could occur in the project area:

On-site Vegetation: [non-native grasslands and coast live oak forest]

Name and distance from blue line creek(s): An unnamed blue line tributary to San Luis Creek is 780 feet south of the property.

Habitat(s): Coast Live Oak forest

[Site's tree canopy coverage: Approximately 76-100%.]

The Natural Diversity Database (or other biological references) identified the following species potentially existing within approximately one mile of the proposed project:

Black-flowered figwort (*Scrophularia atrata*) List 1B

Hoover's bentgrass (*Agrostis hooveri*) List 1B

Pismo clarkia (*Clarkia speciosa* ssp. *immaculate*) FE, SR, List 1B

San Luis Obispo owl's-clover (*Castilleja densiflora* ssp. *obispoensis*) see Obispo Indian paintbrush.

Obispo indian paintbrush (*Castilleja densiflora* ssp. *obispoensis*) List 1B

Wells's manzanita (*Arctostaphylos wellsii*) List 1B

California red-legged frog (*Rana aurora draytonii*) FT

Tidewater goby (*Eucyclogobius newberryi*) FE, CSC

Western snowy plover (*Charadrius alexandrinus nivosus*) FT, CSC

A biological resources assessment was completed for the project in May of 2010 by Brooke Langle of Terra Verde Environmental Inc. The results of the surveys indicated that no "sensitive plant or wildlife species were observed on the property during surveys in 2009 and 2010. Many of the species identified in the NDDDB are associated with San Luis Creek or beaches including: California red-legged frog, steelhead, tidewater goby and snowy plover. These habitats, while they exist in the larger regional setting of the project, are not found on the project site and are located a substantial distance from the project site.

Impact. The biological resources assessment identified that nesting birds may be impacted by the project if present during clearing and grading.

Mitigation/Conclusion. No significant impacts to vegetation are expected to occur, and no mitigation measures are necessary. Potential impacts to identified wildlife or nesting birds as identified in the biological assessment, however are proposed to be mitigated which reduces impacts to a level of insignificance. Mitigation includes:

To protect bird and raptor species protected by the Migratory Bird Treaty Act and Fish and Game code, the applicant shall avoid vegetation clearing and earth disturbance during the

typical nesting season (March 1 – August 15). If avoiding construction during this season is not feasible, a qualified biologist shall survey the area one week prior to activity beginning on site. If nesting birds are located, they shall be avoided until they have successfully fledged. A buffer zone of 50 feet will be placed around all non-sensitive bird species and all activity will remain outside of that buffer until the applicant's biologist has determined that the young have fledged. High visibility exclusion fencing will be placed at the buffer zone to ensure no work occurs within this zone. If special status bird species are located, no work will begin until an appropriate buffer is determined by consultation with the County and/or the local California Department of Fish and Game biologist."

5. CULTURAL RESOURCES -
Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Disturb pre-historic resources?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <i>Disturb historic resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Disturb paleontological resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project is located in an area historically occupied by the Obispeno Chumash. No historic structures are present and no paleontological resources are known to exist in the area.

A cultural resources investigation was conducted that included the subject property (Gibson's Archaeological Consulting, February 5, 2003). The survey identified archeological resources on the subject property including a well-defined concentration of shellfish fragments in an area about 20 meters by 40 meters. The cultural site is located adjacent to the proposed residence, within the proposed landscaped area.

Impact. Construction activities including heavy equipment operation could impact the cultural site located on the subject property. In addition, minor site improvements such as landscaping and retaining walls are proposed in the area of the cultural resources and could impact those resources through disturbance.

Mitigation/Conclusion. CEQA requires that archaeological sites that cannot be preserved in place shall be mitigated through the excavation and analysis of the "scientifically consequential information from or about the resource" (Sec. 15026.4 C). Although archaeological sites should first be avoided, or put in a conservation easement, they could also be capped to preserve the resource or go through a data recovery process as a final resort if avoidance or capping is infeasible. In the case avoidance is not possible, and capping the site with fill would result in impacts to other sensitive resources including sensitive geologic conditions, or some impacts would still result to the cultural resources from portions of the project that cannot be placed in the fill (e.g. drainage or utilities) Phase III data recovery would be required

Sub surface improvements or landscaping (such as gutters, utilities, septic, pipes, ditches, terraces or planters) shall be redesigned to avoid the known resources as outlined in the submitted archaeological investigation (Gibson February 5, 2003). If avoidance is infeasible, A Phase III mitigation program with monitoring will be required prior to the construction of the structure. The Phase III study will include but not be limited to extracting the archaeological remains (or a representative sample depending on the significance and number of different materials found), cataloging, and dating the samples. If any human remains are found all work will stop, and if any

intact burial sites are found the structure shall be redesigned to avoid the burial site(s). Improvements (including landscaping) within the identified areas containing cultural materials shall be limited to surface work only, and construction plans shall be submitted which follow this requirement. A monitoring program is also required to be implemented for any ground disturbing activities. See the attached in the Mitigation Summary Table at the end of this report for specific mitigation measures that reduce impacts to cultural resources to a less than significant level.

6. GEOLOGY AND SOILS - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <i>Be within a California Geological Survey "Alquist-Priolo" Earthquake Fault Zone"?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) <i>Change rates of soil absorption, or amount or direction of surface runoff?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) <i>Include structures located on expansive soils?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) <i>Involve activities within the 100-year flood zone?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) <i>Be inconsistent with the goals and policies of the County's Safety Element relating to Geologic and Seismic Hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) <i>Preclude the future extraction of valuable mineral resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting

GEOLOGY - The following relates to the project's geologic aspects or conditions:

Topography: Steeply sloping

Within County's Geologic Study Area?: Yes

Landslide Risk Potential: High

Liquefaction Potential: Low

Nearby potentially active faults?: Yes Distance? runs through the lower tip of the property

Area known to contain serpentine or ultramafic rock or soils?: Potentially

Shrink/Swell potential of soil: Low to high

Other notable geologic features? None

The project is within the Geologic Study area designation, and is subject to the preparation of a geological report per the County's Coastal Zone Land Use Ordinance CZLUO section 23.07.084(c) to evaluate the area's geological stability. Multiple geologic investigations have occurred on the property for the proposed project. These include:

1. Soils Engineering and Geologic Hazards Report, McCarthy Residence, Parcel 2, Cave Landing Road, Avila Beach Area of San Luis Obispo County, California, File No. SL-16231-SB, Doc. No. 1101-084.SER, prepared by Earth Systems Pacific, dated January 25, 2011.
2. Engineering Geologist Transfer of Responsibility Form, APN 076-231-063 & 065, File No. DRC2009-00095, Executed by Mr. Richard T. Gorman, CEG 1325 of Earth Systems Pacific, dated October 22, 2010.
3. Review of Geologic Hazards Report, McCarthy Residence (APN 076-231-063), Parcel 2, COAL 96-036, Cave Landing Road, Pirates Cove Area of San Luis Obispo County, California, Doc. No. 1103-107.REV, prepared by Landset Engineers, Inc., dated March 11, 2011.
4. Report of Percolation Testing, McCarthy Residence, Parcel 2, Cave Landing Road, Avila Beach Area of San Luis Obispo County, California, File No. SL-16231-SB, Doc. No. 1104-030.RPT, prepared by Earth Systems Pacific, dated April 11, 2011.
5. Response to County Comments, McCarthy Residence, Parcel 2, Cave Landing Road, Avila Beach Area of San Luis Obispo County, California, File No. SL-16231-SB, Doc. No. 1104-032.LTR, prepared by Earth Systems Pacific, dated April 12, 2011.

These reports include review of geologic information by the contract County Geologist (Landset Engineers, Inc./Paparello).

DRAINAGE – The following relates to the project's drainage aspects:

Within the 100-year Flood Hazard designation? No

Closest creek? San Luis Creek Distance? Approximately 2000 feet to the north-west

Soil drainage characteristics: Not well drained to very poorly drained

For areas where drainage is identified as a potential issue, the Land Use Ordinance (CZLUO Sec. 23.05.042) includes a provision to prepare a drainage plan to minimize potential drainage impacts. When required, this plan would need to address measures such as: constructing on-site retention or detention basins, or installing surface water flow dissipaters. This plan would also need to show that the increased surface runoff would have no more impacts than that caused by historic flows.

SEDIMENTATION AND EROSION – Soil type, amount of disturbance and slopes are key aspects to analyzing potential sedimentation and erosion issues. The project's soil types and descriptions are listed in the previous Agriculture section under "Setting". As described in the NRCS Soil Survey, the project's soil erodibility is as follows:

Soil erodibility: Low to moderate

When highly erosive conditions exist, a sedimentation and erosion control plan is required (CZLUO Sec. 23.05.036) to minimize these impacts. When required, the plan is prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. Projects involving more than one acre of disturbance are subject to the preparation of a Storm Water Pollution Prevention Plan (SWPPP), which focuses on controlling storm water runoff. The Regional Water Quality Control Board is the local extension who monitors this program.

LANDSLIDE HAZARDS - The project site contains known mapped landslides, however the design of the project has included avoidance and setbacks from these known landslide areas. Slope instability may result from natural processes, such as the erosion of the toe of a slope by a stream, or by ground shaking caused by an earthquake. Slopes can also be modified artificially by grading, or by the addition of water or structures to a slope. Development on a slope can substantially increase the frequency and extent of potential slope failures. Steep, unstable slopes in weak soil/bedrock units that have a record of previous slope failure typically characterize areas susceptible to landslides. There are numerous factors that effect the stability of a slope, including: slope height and steepness, material composition, material strength, structural geologic relationships, ground water level, and level of seismic shaking.

Landslides occur when a portion of a hillside becomes too weak to support its own weight. Some landslides move slowly and cause damage gradually, whereas others move so rapidly that they can destroy property and take lives suddenly and unexpectedly. Gravity is the force driving landslide movement. Factors that allow the force of gravity to overcome the resistance of earth material to landslide movement include: saturation by water, steepening of slopes caused by erosion or construction, freeze/thaw cycles, earthquake shaking, and volcanic eruptions.

Landslides are generally classified into slides, falls and flows. Slides move as large bodies by slipping along one or more failure surfaces. Falls of rock or soil originate on cliff faces or steep slopes. Flows are landslides that behave like fluids. Mudflows involve wet mud and debris, and earthflows involve wet, claylike material.

Areas that are generally prone to landslide hazards include: previous landslide locations, the bases of steep slopes, the bases of drainage channels, and developed hillsides where leach-field septic systems are used. Areas that are typically considered safe from landslides include areas that have not moved in the past; relatively flat-lying areas away from sudden changes in slope; and areas at the top or along ridges, set back from the tops of slopes.

Site characteristics as outlined in the Earth Systems soils engineering and geologic hazards report are suitable for the proposed project design. Items specifically discussed include landslides, faulting, groundwater, proposed leach field area, utility extensions, seismicity, hazards such as flooding and erosion, naturally occurring asbestos, and radon. The site contains shallow bedrock, areas of fill, crushed siltstone and shallow siltstone with claystone bedrock. Faults do exist within this area (San Miguelito and Hosgri), but are not anticipated to negatively impact this project design. The soils do not create liquefaction issues, and the site is not within a tsunami inundation zone. The site design avoids mapped landslide areas, and mitigation measures are proposed to ensure the septic design is appropriately designed due to the specific soil and slope conditions. No subsurface water was present during examination of test pits on site.

Impact. As proposed, the project will result in the disturbance of approximately 35,575 square feet (total). Geologic investigations have been conducted to evaluate known on site hazards such as: landslides, the design of the proposed project including utilities and septic system locations, and specific mitigation measures for development which reduce geologic impacts to a level of insignificance. Despite the location of large landslides in the area, the project is not located in an existing landslide area. The report (Earth Systems January 25, 2011) stated "the site is suitable, from a geotechnical engineering and geologic standpoint for the proposed residence." However, the

project site contains steep slopes and the presence of significant landslides in the area indicate a potential for slope instability if appropriate measures are not undertaken.

The geologic investigation included discussion regarding naturally occurring asbestos (NOA) and determined that the likelihood of NOA presence is "low to nil" because "the site is underlain predominantly by shallow siltstone and claystone bedrock. Asbestos occurs naturally in certain, known asbestos-bearing rock formations such as serpentinite or ultramafic rock. As siltstone and claystone at the site are not asbestos-bearing geologic units, the potential for naturally-occurring asbestos to affect the project is very low to nil." (Geosolutions Jan 25, 2011)

Mitigation/Conclusion. Based on the conclusions and recommendations of the geologic investigations, the project is proposed to be mitigated for geologic impacts. Mitigation measures include requirements for site preparation, grading, trenching, foundations, retaining walls, drainage and maintenance. A list of the specific measures is at the end of this report. With implementation of these measures the project impacts to geology and soils is insignificant.

7. HAZARDS & HAZARDOUS MATERIALS - Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Result in a risk of explosion or release of hazardous substances (e.g. oil, pesticides, chemicals, radiation) or exposure of people to hazardous substances?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Interfere with an emergency response or evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose people to safety risk associated with airport flight pattern?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Increase fire hazard risk or expose people or structures to high fire hazard conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create any other health hazard or potential hazard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project is not located in an area of known hazardous material contamination. The project is not within a high severity risk area for fire. The project is not within the Airport Review area.

With regards to potential fire hazards, the subject project is within the High to Very High Fire Hazard Severity Zone(s). Based on the County's fire response time map, it will take approximately 5-10 minutes to respond to a call regarding fire or life safety. Refer to the Public Services section for further discussion on Fire Safety impacts.

Impact. The project does not propose the use of hazardous materials. The project does not present a significant fire safety risk. The project is not expected to conflict with any regional evacuation plan. Additionally, a Fire Safety plan was prepared by Cal Fire dated June 8, 2011. Cal Fire was involved in on-site initial design meetings to ensure fire safety concerns are incorporated into the preliminary

design of the project. The project includes water storage for fire suppression, paved access, and turn-around area for safety equipment as a part of the design. Additional fire code requirements are incorporated through building code requirements and are also outlined in the June 8th letter from Cal Fire (attached).

Mitigation/Conclusion. No significant impacts as a result of hazards or hazardous materials are anticipated, and no mitigation measures are necessary.

8. NOISE - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Expose people to noise levels that exceed the County Noise Element thresholds?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Generate increases in the ambient noise levels for adjoining areas?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Expose people to severe noise or vibration?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project is not within close proximity of loud noise sources, and will not conflict with any sensitive noise receptors (e.g., residences). Based on the Noise Element's projected future noise generation from known stationary and vehicle-generated noise sources, the project is within an acceptable threshold area.

Impact. The project is not expected to generate loud noises, nor conflict with the surrounding uses.

Mitigation/Conclusion. No significant noise impacts are anticipated, and no mitigation measures are necessary.

9. POPULATION/HOUSING - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Displace existing housing or people, requiring construction of replacement housing elsewhere?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create the need for substantial new housing in the area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Use substantial amount of fuel or energy?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

9. POPULATION/HOUSING -*Will the project:*Potentially
SignificantImpact can
& will be
mitigatedInsignificant
ImpactNot
Applicablee) *Other:* _____☐☐☐☐

Setting In its efforts to provide for affordable housing, the county currently administers the Home Investment Partnerships (HOME) Program and the Community Development Block Grant (CDBG) program, which provides limited financing to projects relating to affordable housing throughout the county. The County's Inclusionary Housing Ordinance requires provision of new affordable housing in conjunction with both residential and nonresidential development and subdivisions.

Impact. The project will not result in a need for a significant amount of new housing, and will not displace existing housing.

Mitigation/Conclusion. No significant population and housing impacts are anticipated. The project will mitigate its cumulative impact to the shortage of affordable housing stock by providing affordable housing unit(s) either on-site and/or by payment of the in-lieu fee (residential projects), or housing impact fee (commercial projects). No mitigation measures are necessary.

10. PUBLIC SERVICES/UTILITIES -*Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:*Potentially
SignificantImpact can
& will be
mitigatedInsignificant
ImpactNot
Applicablea) *Fire protection?*☐☒☐☐b) *Police protection (e.g., Sheriff, CHP)?*☐☒☐☐c) *Schools?*☐☒☐☐d) *Roads?*☐☒☐☐e) *Solid Wastes?*☐☒☐☐f) *Other public facilities?*☐☐☐☐g) *Other:* _____☐☐☐☐

Setting. The project area is served by the following public services/facilities:

Police: County Sheriff

Location: San Luis Obispo (Kansas Ave.) (Approximately 7 miles to the north)

Fire: Cal Fire (formerly CDF)

Hazard Severity: High to Very High Response Time: 5-10 minutes

Location: Approximately 0.8 miles to the north

School District: San Luis Coastal Unified School District.

Impact. No significant project-specific impacts to utilities or public services were identified. This

project, along with others in the area, will have a cumulative effect on police and fire protection, and schools. The project's direct and cumulative impacts are within the general assumptions of allowed use for the subject property that was used to estimate the fees in place.

Mitigation/Conclusion. Regarding cumulative effects, public facility (county) and school (State Government Code 65995 et seq.) fee programs have been adopted to address this impact, and will reduce the cumulative impacts to less than significant levels.

11. RECREATION - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Increase the use or demand for parks or other recreation opportunities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Affect the access to trails, parks or other recreation opportunities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Other</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The County's Parks and Recreation Element does not show that a potential trail goes through the proposed project. The project is not proposed in a location that will affect any trail, park, recreational resource, coastal access, and/or Natural Area. The project site is located adjacent to County properties which are currently providing public access to the beach (at Pirates Cove). Improvements to these County properties are being discussed, however this proposed project is uphill and inland of these public access properties and will not impact any future plans for access to the beach or a future coastal trail location as they are separated by Cave Landing Road which provides unobstructed access to the beach.

Impact. The proposed project will not create a significant need for additional park, Natural Area, and/or recreational resources.

Mitigation/Conclusion. No significant recreation impacts are anticipated, and no mitigation measures are necessary.

12. TRANSPORTATION/ CIRCULATION - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Increase vehicle trips to local or areawide circulation system?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <i>Reduce existing "Levels of Service" on public roadway(s)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Provide for adequate emergency access?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Result in inadequate parking capacity?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

12. TRANSPORTATION/ CIRCULATION - Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
f) Result in inadequate internal traffic circulation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., pedestrian access, bus turnouts, bicycle racks, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Result in a change in air traffic patterns that may result in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. Future development will access onto the following public road(s): Cave Landing Road and Avila Beach Drive, which are both county maintained roads. The identified roadways are operating at acceptable levels. Referrals were sent to Public Works. The project is subject to the Avila Fee Area, which addresses cumulative impacts to county roads in the area by funding areawide road improvements. No significant project specific traffic-related concerns were identified.

Impact. The proposed project is estimated to generate about 10 trips per day, based on the Institute of Traffic Engineer's manual of one unit. This small amount of additional traffic will not result in a significant change to the existing road service or traffic safety levels, but it will contribute to areawide cumulative impacts.

Mitigation/Conclusion. No significant project specific traffic impacts were identified, and no mitigation measures are necessary beyond payment of the traffic fee to address cumulative areawide impacts.

13. WASTEWATER - Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Change the quality of surface or ground water (e.g., nitrogen-loading, day-lighting)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Adversely affect community wastewater service provider?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. Regulations and guidelines on proper wastewater system design and criteria are found

within the County's Plumbing Code (hereafter CPC; see Chapter 7 of the Building and Construction Ordinance [Title 19]), the "Water Quality Control Plan, Central Coast Basin" (Regional Water Quality Control Board [RWQCB] hereafter referred to as the "Basin Plan"), and the California Plumbing Code. These regulations include specific requirements for both on-site and community wastewater systems. These regulations are applied to all new wastewater systems.

For on-site septic systems, there are several key factors to consider for a system to operate successfully, including the following:

- ✓ Sufficient land area (refer to County's Land Use Ordinance or Plumbing Code) – depending on water source, parcel size minimums will range from one acre to 2.5 acres;
- ✓ The soil's ability to percolate or "filter" effluent before reaching groundwater supplies (30 to 120 minutes per inch is ideal);
- ✓ The soil's depth (there needs to be adequate separation from bottom of leach line to bedrock [at least 10 feet] or high groundwater [5 feet to 50 feet depending on perc rates]);
- ✓ The soil's slope on which the system is placed (surface areas too steep creates potential for daylighting of effluent);
- ✓ Potential for surface flooding (e.g., within 100-year flood hazard area);
- ✓ Distance from existing or proposed wells (between 100 and 250 feet depending on circumstances);
- ✓ Distance from creeks and water bodies (100-foot minimum).

To assure a successful system can meet existing regulation criteria, proper conditions are critical. Above-ground conditions are typically straight-forward and most easily addressed. Below ground criteria may require additional analysis or engineering when one or more factors exist:

- ✓ the ability of the soil to "filter" effluent is either too fast (percolation rate is faster or less than 30 minutes per inch and has "poor filtering" characteristics) or is too slow (slower or more than 120 minutes per inch);
- ✓ the topography on which a system is placed is steep enough to potentially allow "daylighting" of effluent downslope; or
- ✓ the separation between the bottom of the leach line to bedrock or high groundwater is inadequate.

Based on Natural Resource Conservation Service (NRCS) Soil Survey map, the soil type(s) for the project is provided in the listed in the previous Agricultural Resource section. The main limitation(s) of this soil for wastewater effluent include: **steep slopes and depth to bedrock**

--**steep slopes**, where portions of the soil unit contain slopes steep enough to result in potential daylighting of wastewater effluent. In this case, the proposed leach lines are located on slopes of approximately 15%-20%. This is because the entire site includes steep slopes and areas where there are mapped landslides. The proposed leach line location was chosen based on site inspections by project engineers, geologists and County staff. This specific location is the most feasible because it is located in an area that is geologically stable, is relatively flat compared to the rest of the property, and is within relatively close proximity to the residence which limits the amount of trenching necessary. The project engineer also evaluated the proposed septic location and determined the site is suitable (Earth Systems April 12, 2011).

--**shallow depth to bedrock**, which is an indication that there may not be sufficient soil depth to provide adequate soil filtering of effluent before reaching bedrock. Once effluent reaches bedrock, the chances increase for the effluent to infiltrate cracks that could lead directly to

groundwater source or surrounding wells without adequate filtering, or allow for daylighting of effluent where bedrock is exposed to the earth's surface. In this case, based on soil boring information, it is expected that there will be sufficient separation between leach line and bedrock to provide for adequate filtering of effluent, and) are anticipated to be able to meet Basin Plan/CPC requirements. Based on review by Earth Systems (in their April 12, 2011 report) "The proposed leach field will be located on a hillside that has a slope angle that is just below 20 percent...Cross Section D-D indicates that effluent from the leach field would not daylight out of the natural slope face for a horizontal distance of over 100 feet. Subsurface explorations indicate the site is underlain by weathered and fractured, soft claystone bedrock of the Obispo Formation. The claystone bedrocks overlain by a sandy lean clay colluvium. Based on the topography in and downslope of the proposed leach field area and the absence of shallow groundwater and any cemented or impermeable bedrock layers within the upper fifteen feet of the ground surface, it is our opinion that the proposed leach field area is geologically suitable for its intended use."

Impacts/Mitigation. Based on the following project conditions or design features, wastewater impacts are considered less than significant:

- ✓ The project has sufficient land area per the County's Land Use Ordinance to support an on-site system;
- ✓ The soil's percolation rate is between 30 to 120 minutes per inch;
- ✓ There is adequate soil separation between the bottom of the leach line to bedrock or high groundwater;
- ✓ The soil's slope is approximately 20% and proposes an engineered system;
- ✓ The leach lines are outside of the 100-year flood hazard area;
- ✓ The leach lines are at least 100 feet from creeks and water bodies.

Based on the above discussion and information provided, the site appears to be able to design an on-site system that will meet CPC/Basin Plan requirements. Additionally the septic system location was evaluated in the geologic review and was determined to be a suitable location as proposed (Earth Systems April 12, 2011)

Prior to building permit issuance and/or final inspection of the wastewater system, the applicant will need to show to the county compliance with the County Plumbing Code/ Central Coast Basin Plan, including any above-discussed information relating to potential constraints. Therefore, based on the project being able to comply with these regulations, potential groundwater quality impacts are considered less than significant.

14. WATER - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Violate any water quality standards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, temperature, dissolved oxygen, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

14. WATER - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
d) <i>Change the quantity or movement of available surface or ground water?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Adversely affect community water service provider?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project proposes to use County Service Area No.12 as its water source.

While the project site is outside the Avila Beach Urban Services Area, the site is located within the County Service Area 12 boundaries. This issue was discussed at a Planning Commission hearing when the land owner and applicant brought forward a "Planning Director Determination" regarding the use of community water for this property while the property is outside the urban services boundaries. The Planning Commission determined that the property can, in this case, use community water from CSA 12 because it is within the CSA boundaries (DTM2010-00001)

The topography of the project is moderately sloping to steeply sloping. The closest creek (San Luis Obispo Creek) from the proposed development is approximately 2000 feet away. As described in the NRCS Soil Survey, the soil surface is considered to have moderate to high erodibility.

Projects involving more than one acre of disturbance are subject to preparing a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion. When work is done in the rainy season, the County Ordinance requires that temporary sedimentation and erosion control measures be installed during the rainy season.

Impact. On water use, based on the project description, as shown below, a reasonable "worst case" indoor water usage would likely be about 0.270 acre feet/year (AFY) Source: "City of Santa Barbara Water Demand Factor & Conservation Study "User Guide" (Aug., 1989)

The nearest creek (San Luis Obispo Creek) is approximately 2000 feet from the proposed project. The topography of the site is moderately sloping to steeply sloping. Standard drainage and erosion control measures will be required for the proposed project and will provide sufficient measures to adequately protect surface water quality. No additional measures are considered necessary and potential water quality impacts are either insignificant or will be reduced to less than significant levels through existing ordinance requirements.

Mitigation/Conclusion. Since no potentially significant water quantity or quality impacts were identified, no specific measures above standard requirements have been determined necessary. Standard drainage and erosion control measures will be required for the proposed project and will provide sufficient measures to adequately protect surface water quality.

15. LAND USE - Will the project:	Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
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15. LAND USE - Will the project:		Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
a)	Be potentially inconsistent with land use, policy/regulation (e.g., general plan [county land use element and ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Be potentially inconsistent with any habitat or community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Be potentially incompatible with surrounding land uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting/Impact. Surrounding uses are identified on Page 2 of the Initial Study. The proposed project was reviewed for consistency with policy and/or regulatory documents relating to the environment and appropriate land use (e.g., County Land Use Ordinance, Local Coastal Plan, etc.). Referrals were sent to outside agencies to review for policy consistencies (e.g., CAL FIRE for Fire Code, APCD for Clean Air Plan, etc.). The project was found to be consistent with these documents (refer also to Exhibit A on reference documents used).

The project site is within a Sensitive Resource Area for cultural resources and geologic hazards. Specific measures relating to these sensitive resources have been reviewed and are proposed as mitigation measures for the project (refer to cultural resources and geology and soils sections of this report).

The project is not within or adjacent to a Habitat Conservation Plan area. The project is consistent or compatible with the surrounding uses as summarized on page 2 of this Initial Study.

Mitigation/Conclusion. No inconsistencies were identified and therefore no additional measures above what will already be required was determined necessary.

16. MANDATORY FINDINGS OF SIGNIFICANCE - Will the project:		Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
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- a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of

California history or prehistory?

☐☒☐☐

- b) Have impacts that are individually limited, but cumulatively considerable?
 ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)

☐☒☐☐☐☐☒☐

For further information on CEQA or the county's environmental review process, please visit the County's web site at "www.sloplanning.org" under "Environmental Information", or the California Environmental Resources Evaluation System at: http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines for information about the California Environmental Quality Act.

Exhibit A - Initial Study References and Agency Contacts

The County Planning or Environmental Divisions have contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with an ☒) and when a response was made, it is either attached or in the application file:

<u>Contacted</u>	<u>Agency</u>	<u>Response</u>
<input checked="" type="checkbox"/>	County Public Works Department	Attached
<input checked="" type="checkbox"/>	County Environmental Health Division	Attached
<input type="checkbox"/>	County Agricultural Commissioner's Office	Not Applicable
<input type="checkbox"/>	County Airport Manager	Not Applicable
<input type="checkbox"/>	Airport Land Use Commission	Not Applicable
<input checked="" type="checkbox"/>	Air Pollution Control District	None
<input type="checkbox"/>	County Sheriff's Department	Not Applicable
<input checked="" type="checkbox"/>	Regional Water Quality Control Board	None
<input checked="" type="checkbox"/>	CA Coastal Commission	Attached
<input type="checkbox"/>	CA Department of Fish and Game	Not Applicable
<input checked="" type="checkbox"/>	CA Department of Forestry (Cal Fire)	Attached
<input type="checkbox"/>	CA Department of Transportation	Not Applicable
<input checked="" type="checkbox"/>	Avila Community Service District	None
<input type="checkbox"/>	Other _____	Not Applicable
<input type="checkbox"/>	Other _____	Not Applicable

** "No comment" or "No concerns"-type responses are usually not attached

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

<input checked="" type="checkbox"/> Project File for the Subject Application	<input checked="" type="checkbox"/> San Luis Bay(Coastal) Area Plan and Update EIR
<u>County documents</u>	<input type="checkbox"/> Circulation Study
<input type="checkbox"/> Airport Land Use Plans	<u>Other documents</u>
<input checked="" type="checkbox"/> Annual Resource Summary Report	<input checked="" type="checkbox"/> Archaeological Resources Map
<input type="checkbox"/> Building and Construction Ordinance	<input checked="" type="checkbox"/> Area of Critical Concerns Map
<input checked="" type="checkbox"/> Coastal Policies	<input checked="" type="checkbox"/> Areas of Special Biological Importance Map
<input checked="" type="checkbox"/> Framework for Planning (Coastal & Inland)	<input checked="" type="checkbox"/> California Natural Species Diversity Database
<input checked="" type="checkbox"/> General Plan (Inland & Coastal), including all maps & elements; more pertinent elements considered include:	<input checked="" type="checkbox"/> Clean Air Plan
<input checked="" type="checkbox"/> Agriculture & Open Space Element	<input checked="" type="checkbox"/> Fire Hazard Severity Map
<input checked="" type="checkbox"/> Energy Element	<input checked="" type="checkbox"/> Flood Hazard Maps
<input checked="" type="checkbox"/> Environment Plan (Conservation, Historic and Esthetic Elements)	<input checked="" type="checkbox"/> Natural Resources Conservation Service Soil Survey for SLO County
<input checked="" type="checkbox"/> Housing Element	<input checked="" type="checkbox"/> Regional Transportation Plan
<input checked="" type="checkbox"/> Noise Element	<input checked="" type="checkbox"/> Uniform Fire Code
<input type="checkbox"/> Parks & Recreation Element	<input checked="" type="checkbox"/> Water Quality Control Plan (Central Coast Basin - Region 3)
<input checked="" type="checkbox"/> Safety Element	<input checked="" type="checkbox"/> GIS mapping layers (e.g., habitat, streams, contours, etc.)
<input checked="" type="checkbox"/> Land Use Ordinance	<input type="checkbox"/> Other _____
<input type="checkbox"/> Real Property Division Ordinance	
<input type="checkbox"/> Trails Plan	
<input type="checkbox"/> Solid Waste Management Plan	

In addition, the following project specific information and/or reference materials have been considered as a part of the Initial Study:

1. Soils Engineering and Geologic Hazards Report, McCarthy Residence, Parcel 2, Cave Landing Road, Avila Beach Area of San Luis Obispo County, California, File No. SL-16231-SB, Doc. No. 1101-084.SER, prepared by Earth Systems Pacific, dated January 25, 2011.
2. Engineering Geologist Transfer of Responsibility Form, APN 076-231-063 & 065, File No. DRC2009-00095, Executed by Mr. Richard T. Gorman, CEG 1325 of Earth Systems Pacific, dated October 22, 2010.
3. Review of Geologic Hazards Report, McCarthy Residence (APN 076-231-063), Parcel 2, COAL 96-036, Cave Landing Road, Pirates Cove Area of San Luis Obispo County, California, Doc. No. 1103-107.REV, prepared by Landset Engineers, Inc., dated March 11, 2011.
4. Report of Percolation Testing, McCarthy Residence, Parcel 2, Cave Landing Road, Avila Beach Area of San Luis Obispo County, California, File No. SL-16231-SB, Doc. No. 1104-030.RPT, prepared by Earth Systems Pacific, dated April 11, 2011.
5. Response to County Comments, McCarthy Residence, Parcel 2, Cave Landing Road, Avila Beach Area of San Luis Obispo County, California, File No. SL-16231-SB, Doc. No. 1104-032.LTR, prepared by Earth Systems Pacific, dated April 12, 2011.
6. Biological Resources Assessment, prepared by Brooke Langle, biologist, of Terra Verde Environmental, May 2010
7. Preliminary Hydrologic and Hydraulic Analysis, prepared by Susan Roberts certified engineer of Cannon and Associates
8. Phase 2 Archaeological Subsurface Testing, Prepared by RO Gibson and JA Parsons of Gibsons Archaeological Consulting, February 5, 2003

Exhibit B - Mitigation Summary Table

Air Quality*Dust Control Measures*

AQ-1 *Fugitive PM10 Mitigation Measures* (All required PM10 measures shall be shown on applicable grading or construction plans. In addition, the developer shall designate personnel to insure compliance and monitor the effectiveness of the required dust control measures (as conditions dictate, monitor duties may be necessary on weekends and holidays to insure compliance); the name and telephone number of the designated monitor(s) shall be provided to the APCD **prior to construction/ grading permit issuance**)

- A. Reduce the amount of the disturbed area where possible;
- B. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (nonpotable) water should be used whenever possible;
- C. All dirt stock-pile areas should be sprayed daily as needed;
- D. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;
- E. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast-germinating native grass seed and watered until vegetation is established;
- F. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
- G. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- H. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
- I. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114.
- J. Install Wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site, and
- K. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.

Natural-Occurring Asbestos

AQ-2 "Naturally-occurring asbestos" has been identified by the State Air Resources Board as a toxic air contaminant. Serpentine and ultramafic rocks are very common in the state and may contain naturally occurring asbestos. Under the State Air Resources Board Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, **prior to construction permit issuance**, a geologic investigation will be

prepared and then submitted to the county to determine the presence of naturally-occurring asbestos. If naturally occurring asbestos is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM before grading begins. These requirements may include, but are not limited to, 1) preparation of an "Asbestos Dust Mitigation Plan", which must be approved by APCD before grading begins; 2) an "Asbestos Health and Safety Program", as determined necessary by APCD. (For any questions regarding these requirements, contact Karen Brooks (APCD) at (805) 781-5912 or go to <http://www.slocleanair.org/business/asbestos.asp>). **Prior to final inspection or occupancy**, whichever occurs first, if naturally-occurring asbestos is encountered, the applicant shall provide verification from APCD that the above measures have been incorporated into the project.

Wood-Burning Devices

AQ-4 Only the following types of wood burning devices shall be allowed (based on District Rule 504): a) EPA-Certified Phase II wood burning devices; b) catalytic wood burning devices emitting less than or equal to 4.1 grams per hour of particulate matter, as verified by a nationally-recognized testing lab; c) non catalytic wood burning devices which emit less than or equal to 7.5 grams per hour of particulate matter, as verified by a nationally-recognized testing lab; d) pellet-fueled woodheaters; or e) dedicated gas-fired fireplaces. **Prior to construction permit issuance**, such devices shall be shown on all applicable plans, and installed as approved by the county.

Portable Equipment

AQ-5 Prior to issuance of construction permits, the applicant shall provide evidence they have contacted APCD on any proposed portable equipment requiring APCD or CARB registration, such as: 50-hp portable generators, IC engines, unconfined abrasive blasting operations, concrete batch plants, rock and pavement crushing, tub grinders, trammel screens, etc. Should any of these types of equipment be used during construction activities California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit may be required.

Developmental Burning

AQ-6 As of February 25, 2000, the APCD prohibits developmental burning of vegetative material within San Luis Obispo County. However, under certain circumstances where no technically feasible alternatives are available, limited developmental burning under restrictions may be allowed. Any such exception must complete the following prior to any burning: APCD approval; payment of fee to APCD based on the size of the project; and issuance of a burn permit by the APCD and the local fire department authority. As a part of APCD approval, the applicant shall furnish them with the study of technical feasibility (which includes costs and other constraints) at the time of application. For any questions regarding these requirements, Karen Brooks of APCD's Enforcement Division may be contacted (805/781-5912).

Biological Resources

BR-1 To protect bird and raptor species protected by the Migratory Bird Treaty Act and Fish and Game code, the applicant shall avoid vegetation clearing and earth disturbance during the typical nesting season (March 1 – August 15). If avoiding construction during this season is not feasible, a qualified biologist shall survey the area one week prior to activity beginning on site. If nesting birds are located, they shall be avoided until they have successfully fledged. A buffer zone of 50 feet will be placed around all non-sensitive bird species and all activity will remain outside of that buffer until the applicant's biologist has determined that the young have fledged. High visibility exclusion fencing will be placed at the buffer zone to ensure no work

occurs within this zone. If special status bird species are located, no work will begin until an appropriate buffer is determined by consultation with the County and/or the local California Department of Fish and Game biologist.

Cultural Resources

CR-1 Prior to issuance of a construction permit, the applicant shall submit a monitoring plan, prepared by a subsurface-qualified archaeologist, for the review and approval by the Environmental Coordinator. The monitoring plan shall include at a minimum:

- A. List of personnel involved in the monitoring activities;
- B. Description of how the monitoring shall occur;
- C. Description of frequency of monitoring (e.g. full-time, part time, spot checking);
- D. Description of what resources are expected to be encountered;
- E. Description of circumstances that would result in the halting of work at the project site (e.g. What is considered "significant" archaeological resources?);
- F. Description of procedures for halting work on the site and notification procedures
- G. Description of monitoring reporting procedures

CR-2 During all ground disturbing construction activities, the applicant shall retain a qualified archaeologist (approved by the Environmental Coordinator) and Native American to monitor all earth disturbing activities, per the approved monitoring plan. If any significant archaeological resources or human remains are found during monitoring, work shall stop within the immediate vicinity (precise area to be determined by the archaeologist in the field) of the resource until such time as the resource can be evaluated by an archaeologist and any other appropriate individuals, and procedures required by County and State law can be implemented. If intact burials are found, the applicant shall re-design the structure to avoid impacting the intact burials consistent with the recommendations of the on-site archaeologist, Native American Monitor, designated Most Likely Descendent, and the State Native American Heritage Commission.

CR-3 Upon completion of all monitoring/mitigation activities, and prior to occupancy or final inspection (whichever occurs first), the consulting archaeologist shall submit a report to the Environmental Coordinator summarizing all monitoring/mitigation activities and confirming that all recommended mitigation measures have been met. If the analysis included in the Phase III program is not complete by the time final inspection or occupancy will occur, the applicant shall provide to the Environmental Coordinator, proof of obligation to complete the required analysis.

CR-4 Improvements (including landscaping) shall be located outside of the identified areas containing cultural materials or shall be limited to surface work only to the maximum extent feasible, Improvements (including landscaping) shown within the identified areas potentially containing cultural materials will be designed to be placed in fill material to the extent feasible,

or in cases where excavation into native materials is unavoidable, shall follow the Phase III protocol below. The Phase III study will include but not be limited to the following:

1. Prior to issuance of a construction permit, the applicant shall submit to the Environmental Coordinator (and possibly subject to peer review) for review and approval, a detailed research design for a Phase III (data recovery) archaeological investigation. The Phase III program shall be prepared by a subsurface qualified archaeologist approved by the Environmental Coordinator. The consulting archaeologist responsible for the Phase III program shall be provided with a copy of the previous archaeological investigations (Parker). The Phase III program shall include at least the following:
 - A. standard archaeological data recovery practices;
 - B. recommendation of sample size adequate to mitigate for impacts to archaeological site, including basis and justification of the recommended sample size. Sample size should be between 2-10% of the volume of disturbed area. If a lesser sample size is recommended, supporting information shall be presented that justifies the smaller sample size.
 - C. identification of location of sample sites/test units;
 - D. detailed description of sampling techniques and material recovery procedures (e.g. how sample is to be excavated, how the material will be screened, screen size, how material will be collected);
 - E. disposition of collected materials;
 - F. proposed analysis of results of data recovery and collected materials, including timeline of final analysis results;
 - G. list of personnel involved in sampling and analysis.

Once approved, these measures shall be shown on all applicable plans and implemented during construction.

2. Prior to issuance of a construction permit the applicant shall submit to the Environmental Coordinator, a letter from the consulting archaeologist indicating that all necessary field work as identified in the Phase III program has been completed.

Geology and Soils

The following measures shall be shown on construction plans and verified by a qualified professional:

Site Preparation

- GS-1 The ground surface in the grading area will be prepared for construction by *removing all existing fill*, vegetation, large roots, debris, and other deleterious materials. Existing utility lines that will not remain in service will be either removed or properly abandoned. The appropriate method of utility abandonment will depend upon the type and depth of the utility. Recommendations for abandonment can be made as necessary.

- GS-2 Voids created by the removal of materials or utilities will be called to the attention of the soils engineer. No fill will be placed unless the underlying soil has been observed by the soils engineer or engineering geologist.

Grading

- GS-3 Where fill will be placed on existing ground that slopes steeper than 10 percent, the surface will be cut into level benches that penetrate entirely into rock or firm colluvial soil, as directed by the soils engineer or engineering geologist during construction. The benches will be 10 to 15 feet wide, depending upon the site conditions during construction, and angled 2 to 3 percent back into the slope. Benches will be planned at vertical intervals of 3 to 5 feet.
- GS-4 Where fill will be placed on ground that slopes steeper than 20 percent, a keyway will be constructed at the toe of the fill. The keyway will be 10 to 15 feet wide, depending upon the site conditions during construction, angled 2 to 3 percent back into the slope, and will penetrate a minimum of 3 feet into firm colluvial soil or bedrock, as directed by the soils engineer or engineering geologist.
- GS-5 Soil exposed in the bottoms of keyways and benches will be scarified a minimum of 12 inches, moisture conditioned, and recompacted to a minimum of 90 percent of maximum dry density. In situ bedrock exposed in benches and keyways need not be scarified or compacted.
- GS-6 Back drains will be planned for keyways and on benches, unless otherwise directed by the soils engineer or engineering geologist during construction. Typical bench and keyway, and back drain details are included in Appendix F of the Soils Engineering and Geologic Hazards Report by Earth Systems Pacific, dated January 25, 2011.
- GS-7 In building areas, grading will allow for the placement of a minimum of 18 inches of imported nonexpansive material. The soil surface upon which the import material will be placed will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompacted. A minimum of 18 inches of nonexpansive imported material will then be moisture conditioned and placed throughout the building areas.
- GS-8 Within the building areas, the upper 18 inches of fill material will consist exclusively of imported nonexpansive materials. Nonexpansive materials are defined as belonging in the GM, GC, SP, SW, SC and SM categories per ASTM D 2487-06, and that have an expansion index of 10 or less (ASTM D 4829-08a). Proposed imported nonexpansive materials will be reviewed by the soils engineer before being brought to the site, and on an intermittent basis during placement. The subslab sand layer described in the "Slabs-on-Grade and Exterior Flatwork" section of this report (if utilized), is considered to be part of the minimum 18 inches of imported nonexpansive material, not in addition to it.
- GS-9 The subfloor areas below any raised wood floors will be graded to a low point or a series of low points, and drainage inlets will be provided at the low points, to direct any accumulated water to an appropriate outlet. As an alternative to drainage inlets in the subfloor areas, gravel intercept drains can be provided at all low areas, to collect and discharge accumulated water.

The gravel drains will be a minimum of 12 inches wide and 12 inches deep, wrapped with geotextile filter fabric, and drained with a rigid perforated PVC pipe. They will discharge, in a nonerosive manner, to appropriate discharge points.

- GS-10 Beyond the building areas, surfaces to receive fill or surface improvements will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact.
- GS-11 The on-site soils, crushed siltstone or claystone, and appropriate imported soils, once cleared of any vegetation and deleterious materials and thoroughly mixed to a reasonably uniform consistency, may be used as fill up to 18 inches below slab areas and to finish grade or subgrade beyond slab areas.
- GS-12 The soils and bedrock in the tank foundation area will be overexcavated to a minimum depth of 3 feet below pad grade. The resultant surface will be scarified to a depth of 1 foot, moisture conditioned, and recompact. Fill soils will be moisture conditioned, placed, and compacted in accordance with the recommendations presented below. The upper foot of material in the tank foundation area will consist exclusively of Class 2 base, crushed gravel, or other material as specified by the tank manufacturer. These are general recommendations and may be subject to revision depending upon site constraints or the tank manufacturer's recommendations.
- GS-13 In site retaining wall foundation areas, the soil will be removed to bottom-of-footing elevation (not including any keyway). The resulting surface will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact. Alternately, 1 foot of material may be removed from the foundation area, and the exposed surface moisture conditioned and recompact. The previously removed material will then be put back in the excavation as properly placed and compacted fill material as described in this section.
- GS-14 All materials used as fill will be cleaned of all debris, and any rocks larger than 3 inches in diameter. If fill material includes rocks, the rocks will be placed in a sufficient soil matrix to ensure that voids caused by nesting of the rocks will not occur and that the fill can be properly compacted.
- GS-15 All fill will be placed with moisture contents at optimum moisture content or just above. Moisture contents well in excess of optimum will be avoided, as unstable conditions could result and mitigating measures (as noted in the following paragraph) could be needed.
- GS-16 Depending on *in situ* soil moisture content at the time of construction, there is a potential for the site soils to become unstable during grading. Unstable soils are difficult to properly compact and are unsuitable for the placement of additional lifts of fill. Methods to correct instability include scarification and aeration of the soils in place, or the placement of gravel layers or geotextiles. The appropriate method to be utilized will depend on the conditions observed at the time of construction.

GS-17 In general, all fill will be placed in maximum lifts of 8 inches in loose thickness and compacted to a minimum of 90 percent of the maximum dry density. The upper 12 inches of subgrade and all aggregate base in areas to be paved with asphalt concrete or Portland cement concrete will be compacted to a minimum of 95 percent of maximum dry density.

GS-18 Aggregate base and subgrade will be firm and unyielding when proofrolled by heavy rubber-tired equipment prior to paving.

GS-19 Unretained fill slopes will not exceed a 2:1 (horizontal to vertical) slope ratio. Likewise, unretained cut slopes will not exceed a 2:1 slope ratio, unless reviewed on an individual basis by the soils engineer or engineering geologist.

GS-20 The recommended soil moisture content will be maintained throughout construction, and during the life of the residence. Failure to maintain the soil moisture content can result in desiccation cracks and disturbance, which are an indication of degradation of soil compaction. If desiccation cracks are allowed to develop, or if soils desiccate near improvements such as foundations, curbs, flatwork, etc., damage to those improvements may result. Soils that have cracked due to desiccation or are otherwise disturbed will be removed, moisture conditioned, and recompacted. To reduce the potential for disruption of drainage patterns, rodent activity will be aggressively controlled.

GS-21 Any recommendations of the radon consultant that involve a grading solution will be reviewed by the soils engineer and/or the engineering geologist prior to being implemented.

Utility Trenches

GS-22 Unless otherwise recommended, utility trenches adjacent to footings or grade beams will not be excavated within the zone of foundation influence, as shown in Typical Detail A in Appendix G of the Earth Systems Pacific report (January 25, 2011).

GS-23 Utilities that must pass beneath a footing or grade beam will be placed with properly compacted utility trench backfill and the foundation will be designed to span the trench.

GS-24 A select, noncorrosive, granular, easily compacted material will be used as bedding and shading immediately around utilities. The site soil, crushed bedrock, or imported nonexpansive soil may be used for trench backfill above the select material. At a minimum, the final 18 inches of trench backfill below all slabs-on-grade will consist of imported nonexpansive material per the "Grading" section of this report.

GS-25 In general, trench backfill will be compacted to a minimum of 90 percent of maximum dry density. In areas to be paved (or that will support vehicular flatwork), a minimum of 95 percent of maximum dry density will be maintained for all trenches in the upper 12 inches of subgrade and in all aggregate base. A minimum of 85 percent of maximum dry density will generally be

sufficient where trench backfill is located in landscaped or other unimproved areas where settlement would not be detrimental.

GS-26 Trench backfill will be placed in level lifts not exceeding 6 inches in loose thickness and compacted to the minimums noted above. Trench backfill will be moisture conditioned to optimum moisture content or just above prior to application of compactive effort.

GS-27 Where on or off-site utility trenches will slope steeper than 20 percent, sand-cement slurry or lean concrete plugs (seepage collars) will be placed in the trenches at maximum 150-foot intervals. The plugs will extend a minimum of 2 feet below the bottom of the trench and will be cut a minimum of 2 feet into the sides of the trench. The top of the plug will be a minimum of 1 foot above the top of utility.

GS-28 A gravel pocket drain will be constructed upgradient of each clay or slurry plug. Each drain will consist of a minimum of 1 cubic foot of free-draining gravel per foot of trench width. The drain gravel will be wrapped in a permeable synthetic filter fabric conforming to Caltrans Standard 88-1.03 for underdrains. A solid rigid PVC pipe will extend from the gravel drain at a minimum 1 percent slope to an appropriate discharge point.

GS-29 In Cave Landing Road, flexible pipe, sleeves, and/or connections will be used in the water line from Station 109+00 to Station 116+25 in an effort to reduce the potential for damage to the line in the event that the landslide in this area activates. Similar measures may be used in the dry utilities at the discretion of the architect/engineer.

GS-30 For compaction of trench backfill soils by jetting or flooding to be successful, a free drainage path must be provided that will allow the water to dissipate very rapidly without causing erosion within the trench. Consequently, compaction of trench backfill by jetting or flooding is not recommended except under extraordinary circumstances. However, to aid in *encasing* utility conduits, particularly corrugated drain pipes, and multiple, closely-spaced conduits in a single trench, jetting or flooding may be useful. Flooding or jetting will only be attempted with extreme caution, and any jetting operation will be subject to review by the soils engineer.

GS-31 The recommendations of this section are minimums only, and may be superseded by the architect/engineer based upon soil corrosivity or the requirements of pipe manufacturers, utility companies or the governing jurisdiction. Soil corrosivity test results and recommendations for mitigation of soil corrosivity are included in Appendix D for use by the architect/engineer in specifying corrosion protection measures.

Foundations

Footings Bearing in Rock

GS-32 The lower level of the main residence, the northerly region of the main residence, and the barn may all be founded on footings that bear in the siltstone bedrock. In these areas, continuous and spread (pad) footings bearing a minimum of 12 inches into the bedrock may be used. Other dimensions will be per the CBC or the specification of the architect/engineer.

- GS-33 The footing excavations will be level and stepped as necessary to follow any slope of the bedrock surface.
- GS-34 Continuous footings will be reinforced, at a minimum, by two No. 4 rebar, one at the top and one at the bottom, or as required by the architect/engineer. Spread footings will be reinforced in accordance with the requirements of the architect/engineer.
- GS-35 Footings will be designed using maximum allowable bearing capacities of 1,800 psf dead load and 2,700 psf dead plus live loads. Using these criteria, maximum settlement and differential settlement are expected to be on the order of 3/8-inch and 1/4-inch in 25 feet, respectively.
- GS-36 In design of footings to resist lateral loads, a passive equivalent fluid pressure of 300 pcf for the soil and 500 pcf for the rock; as well as a coefficient of friction of 0.40 may be used. Lateral capacity is based on the assumption that backfill adjacent to foundations is properly compacted.
- GS-37 A grade beam, meeting the same depth and reinforcing criteria as the continuous footings will be cast across each vehicle opening in the barn.
- GS-38 Bedrock exposed in footing and grade beam excavations will be lightly moistened to approximately optimum moisture and no desiccation cracks will be present prior to concrete placement.

Drilled Cast-in-Place Caissons

- GS-39 Drilled, cast-in-place caissons will be used to support all areas of the residence where the bedrock is sufficiently deep that footings are no longer viable. These areas are believed to be mainly the seaward areas of the main level of the primary residence.
- GS-40 The caissons will have a minimum diameter of 18 inches and will extend a minimum depth of 4 feet into bedrock. They will not be constructed closer than three diameters (clear span) to each other without approval from the soils engineer.
- GS-41 An allowable skin friction value of 800 psf in compression or 600 psf in tension will be assumed for the bedrock; no friction capacity in the overlying soils or end bearing capacity will be used in the design.
- GS-42 Lateral loads on caissons may be resisted by friction and by passive resistance of the soil and bedrock. In design of caissons to resist short-term loads, a passive equivalent fluid pressure of 300 pcf for soil 500 pcf for bedrock may be applied across two caisson diameters. If lateral loads will be sustained, the passive values presented will be reduced by one-third, and will be applied across only one caisson diameter.

- GS-43 The caissons will be connected by grade beams so that the foundation acts as an integral unit. The grade beams will have a minimum depth of 21 inches below lowest adjacent grade and will be reinforced, at a minimum by two No. 4 rebar, one at the top and one at the bottom, or as required by the architect/engineer.
- GS-44 The soils and bedrock may not stand vertically during the caisson construction operations. Casing, drill fluid, or other means of keeping the holes open could be necessary.
- GS-45 Although no subsurface water was encountered in the test pits, depending on the location of the caissons and the weather conditions at and preceding the time of construction, subsurface water could be encountered during the caisson drilling operation. Therefore, caisson reinforcing will be designed to accommodate a minimum 5-inch diameter tremie pipe. Any water encountered will be removed from the hole prior to placing concrete, or the concrete will be tremied. Appendix H of the Earth Systems Pacific report (January 25, 2011) contains a description of the recommended tremie method.
- GS-46 As caissons will utilize skin friction for support, it is not necessary to thoroughly clean the bottoms of the excavations, although excessive loose debris and slough material will be removed using a clean out bucket or by other means. As stated earlier, use of end-bearing capacity is not recommended.
- GS-47 Concrete used in caissons will be placed at a slump between 4 and 6 inches in dry excavations and between 6 and 9 inches when placed under water.
- GS-48 The caissons will not deviate from a plumb line taken from the center of the caisson by more than 2 percent of the caisson length, from the top to the point of interest. Adequate caisson oversize may be assumed to provide the required tolerance.
- GS-49 Caisson excavations will be observed by the soils engineer during drilling operations. Special inspection will be provided during reinforcing steel and concrete placement.
- GS-50 The construction will be planned such that each caisson will be cast on the same day that it is drilled, as caisson excavation sidewalls can deteriorate rapidly over time and the deterioration can adversely affect frictional capacity. If caissons cannot be cast the day that they are drilled, the rotating auger will be raised and lowered the full depth of the excavation to re-establish frictional capacity on the day of the concrete pour.
- GS-51 Soils in grade beam excavations will be moistened to approximately optimum moisture and no desiccation cracks will be present prior to concrete placement.

Foundations, General

- GS-52 Allowable bearing capacity may be increased by one-third when transient loads such as wind or seismicity are included. Foundations may be designed using the following seismic

parameters which are based, in part, on a latitude of 35.1784 degrees north, and a longitude of 120.7187 degrees west:

Site Class (CBC Table 1613.5.2)	C
Mapped Spectral Accelerations (Site Class B)	
0.2 second period - S_s	1.50g
1.0 second period - S_1	0.551g
Design Response Spectral Acceleration (Site Class C)	
0.2 second period - S_{DS}	0.999g
1.0 second period - S_{D1}	0.477g

Interior Slabs-on-Grade and Exterior Flatwork

- GS-53 Prior to completion of the design of slabs, a radon consultant will be retained to evaluate the potential for radon to adversely impact the project. The recommendations of the consultant will be incorporated in the design and construction process. Any radon mitigation recommendations that conflict with the geotechnical recommendations presented herein will be brought to the attention of the soils engineer to affect a solution prior to the completion of design.
- GS-54 Interior slabs-on-grade will have a minimum thickness of 4 full inches. Reinforcement size, placement, and dowels will be as directed by the architect/engineer; minimum slab and flatwork reinforcement will consist of No. 3 rebar placed at 24 inches on-center each way. At a minimum, the interior slabs-on-grade will be doweled to footings and grade beams with No. 3 dowels lapped to the slab rebar at 24 inches on-center.
- GS-55 Due to the current use of impermeable floor coverings, water-soluble flooring adhesives, and the speed at which buildings are now constructed, moisture vapor transmission through slabs is a much more common problem than in past years. Where moisture vapor transmitted from the underlying soil would be undesirable, the slabs will be protected from subsurface moisture vapor. A number of options for vapor protection are discussed below, however, the means of vapor protection, including the type and thickness of the vapor retarder, if specified, are left to the discretion of the architect/engineer.
- GS-56 Several recent studies, including those of American Concrete Institute (ACI) Committees 302 and 306, have concluded that excess water above the vapor retarder increases the potential for moisture damage to floor coverings and could increase the potential for mold growth or other microbial contamination. The studies also concluded that it is preferable to eliminate the typical sand layer beneath the slab and place the slab concrete in direct contact with a "Class A" vapor retarder, particularly during wet weather construction. However, placing the concrete directly on the vapor retarder requires special attention to using the proper vapor retarder (see discussion below), a very low water-cement ratio in the concrete mix, and special finishing and curing techniques.
- GS-57 Probably the next most effective option would be the use of vapor-inhibiting admixtures in the slab concrete mix and/or application of a sealer to the surface of the slab. This would also

require special concrete mixes and placement procedures, depending upon the recommendations of the admixture or sealer manufacturer.

- GS-58 Another option that may be a reasonable compromise between effectiveness and cost considerations is the use of a subslab vapor retarder protected by a sand layer. If a "Class A" vapor retarder (see discussion below) is specified, the barrier can be placed directly on the prepared subgrade. The retarder will be covered with a minimum 2 inches of *clean* sand. If a less durable vapor retarder is specified (Class B or C), a minimum of 4 inches of clean sand will be provided on top of the prepared subgrade, and the retarder will be placed in the center of the clean sand layer. Clean sand is defined as a well or poorly graded sand (ASTM D 2487-06) of which less than 3 percent passes the No. 200 sieve. The clean sand layer, if utilized, is considered to be part of the nonexpansive layer recommended in the "Grading" section of this report to be placed below slabs-on-grade, not in addition to it.
- GS-59 Where specified, vapor retarders will conform to ASTM Standard E 1745-97/2004. This standard specifies properties for three performance classes, Class A, B and C. The appropriate class will be selected based on the sensitivity of floor coverings to moisture intrusion and the potential for damage to the vapor retarder during placement of slab reinforcement and concrete.
- GS-60 Regardless of the underslab vapor retarder selected, proper installation of the retarder is critical for optimum performance. All seams must be properly lapped, and all seams and utility penetrations properly sealed in accordance with the vapor retarder manufacturer's recommendations.
- GS-61 If sand is used between the vapor retarder and the slab, it will be moistened only as necessary to promote concrete curing; saturation of the sand will be avoided, as the excess moisture would be on top of the vapor retarder, potentially resulting in vapor transmission through the slab for months or years.
- GS-62 If sand is used as nonexpansive import beneath vehicular flatwork (see following paragraphs), the flatwork will be designed by the architect/engineer using a subgrade modulus (K_{30}) of 200 pci (psi/in). If a higher subgrade modulus is preferred, the flatwork may be designed using a subgrade modulus of 400 pci. In this case, the nonexpansive material will consist of a minimum 12-inch thick layer of Class 2 aggregate base.
- GS-63 In conventional construction, it is common to use 4 to 6 inches of sand beneath exterior pedestrian flatwork. Due to the expansion potential of the soil on this site, there will be a risk of movement and damage to such flatwork if conventional measures are used. Heaving and cracking are likely to occur. This movement could be reduced by the placement of 12 to 18 inches of compacted, nonexpansive material beneath the flatwork.
- GS-64 Another measure that can be taken to reduce the risk of movement of flatwork due to expansive soils is to provide thickened edges or grade beams around the perimeters of the flatwork. The thickened edges or grade beams could be from 12 to 18 inches deep, with the deeper edges or grade beams providing better protection. At a minimum, the thickened edge or grade beam will be reinforced by two No. 4 rebar, one at the top and one at the bottom.

GS-65 Flatwork will be constructed with frequent joints to allow articulation as flatwork moves in response to expansion and contraction of the soil. The expansive soil in the subgrade will be moistened to at least optimum moisture content and no desiccation cracks will be present prior to casting the flatwork.

GS-66 Flatwork may be doweled to the foundation or may be allowed to "float free," at the discretion of the architect/engineer. At doorways and other areas where keeping the flatwork at a specific elevation is desired, the flatwork will be doweled to the foundation as recommended previously for interior slabs-on-grade.

GS-67 To reduce shrinkage cracks in concrete slabs and flatwork, the concrete aggregates will be of appropriate size and proportion, the water/cement ratio will be low, the concrete will be properly placed and finished, contraction joints will be installed, and the concrete will be properly cured. This is particularly applicable to slabs that will be cast directly upon a vapor retarder and those that will be protected from transmission of vapor by use of admixtures or surface sealers. Concrete materials, placement, and curing specifications will be at the direction of the architect/engineer; ACI 302.1R-04 and ACI 302.2R-04 are suggested as resources for the architect/engineer in preparing such specifications.

Retaining Walls

GS-68 Walls that are part of, or will be rigidly attached to, either of the residential structures will be founded in bedrock. Penetration into the bedrock, bearing capacities, etc. for these walls will be per the "Foundations" section of this report.

GS-69 Site retaining walls may bear in soil that has been overexcavated and recompactd per the "Grading" section, or in bedrock. Footings for site walls bearing in soil will penetrate to a minimum of 21 inches (not including any keyway) below the lowest grade within 5 feet of the wall. Where footings will bear in bedrock, the footing will penetrate bedrock a minimum of 6 inches, with a minimum overall depth of 21 inches. Footings will be horizontal, and may step to follow site grade or the slope of the bedrock, as appropriate. If a site retaining wall footing will transition from soil to bedrock, a construction joint will be placed in the wall and footing at the transition line.

GS-70 Generally, site retaining wall footings will not bear in the backfill of any lower retaining wall; the upper wall's footing will be deepened to penetrate through the backfill and to bear in the underlying soil or bedrock, as appropriate. An exception would be where the lower wall is backfilled with *crushed* gravel. An upper retaining wall may bear a minimum of 18 inches into crushed gravel, provided that the gravel is placed in thin lifts and each lift is compacted with a vibrating plate compactor or other suitable means. The lower wall will be designed to accommodate the surcharge of the upper wall. The diagrams in Appendix I may be used to calculate such surcharges.

GS-71 Design of retaining walls will be based on the following parameters:

Active equivalent fluid pressure (native soil backfill).....55 pcf

Active equivalent fluid pressure (imported sand or gravel backfill)	35 pcf
At rest equivalent fluid pressure (native soil backfill)	70 pcf
At-rest equivalent fluid pressure (imported sand or gravel backfill)	50 pcf
Passive equivalent fluid pressure, soil	300 pcf
Passive equivalent fluid pressure, bedrock	500 pcf
Maximum toe pressure, soil	1,200 psf
Maximum toe pressure, bedrock	2,500 psf
Coefficient of sliding friction, soil	0.35
Coefficient of sliding friction, bedrock	0.40

GS-72 No surcharges are taken into consideration in the above values. The maximum allowable toe pressures are *allowable* values; no factors of safety, load factors or other factors have been applied to the remaining values. With the exception of the maximum toe pressures, these values will require application of appropriate factors of safety, load factors, and/or factors as deemed appropriate by the architect/engineer.

GS-73 If the equivalent fluid pressures for sand or gravel backfill are used in the design, sand or gravel backfill will be exclusively utilized above 1:1 plane from the base of the wall to 1 foot from the top of the backfill. The upper foot of backfill will be native soil.

GS-74 The above pressures are applicable to a retained surface that is horizontal at the top of the wall. Walls having a retained surface that slopes upward from the top of the wall will be designed for an additional equivalent fluid pressure of 1 pcf for the active case and 1.5 pcf for the at-rest case, for every degree of slope inclination.

GS-75 Based upon a PGA estimated to be 0.40g by the CBC and 0.29 for the DBE, and work by Atik and Sitar (2010), seismic loads on retaining walls will be insignificant and may be ignored for walls up to 12 feet in retained height. For walls over 12 feet in retained height that will primarily retain bedrock (such as the main retaining wall in the barn structure) seismic loads may also be ignored. If any walls over 12 feet in retained height will primarily retain colluvium or fill, the soils engineer will be consulted for design recommendations.

GS-76 The active and at-rest pressures presented are for fully drained conditions; therefore all retaining walls will be drained with perforated pipe encased in a free-draining gravel blanket. Retaining wall drains can consist of perforated pipe encased in free-draining gravel. Where this type of system is used, the pipe will be placed perforations downward and will discharge in a nonerosive manner away from foundations and other improvements. The gravel zone will have a width of approximately 1 foot and will extend upward to 1 foot from the top of the wall backfill. The upper foot of backfill will consist of native soils or topsoil to reduce the flow of surface drainage into the wall drain system. To reduce infiltration of the soil into the drain gravel, a permeable synthetic filter fabric, conforming to Caltrans Section 88-1.03 for Underdrains, will be placed between the two.

- GS-77 Manufactured synthetic drains such as Miradrain or Enkadrain are acceptable alternatives to the use of gravel drains, provided that they are installed in accordance with the recommendations of the manufacturer. Where weep hole drainage can be properly discharged, the perforated pipe may be omitted in lieu of weep holes on maximum 4-foot centers. A filter fabric as described above will be placed between the weep holes and the drain gravel.
- GS-78 Walls facing habitable areas or areas where moisture transmission through the wall would be undesirable will be *thoroughly* waterproofed in accordance with the requirements of the architect/engineer. At a minimum, the waterproofing will cover the retaining side of the wall and will extend a minimum of 2 feet across the top of the heel of the footing.
- GS-79 Retaining walls by their nature are flexible structures, and surface treatments on walls often crack. Where walls are to be plastered or will otherwise have a finish surface applied, the flexibility will be considered in determining the suitability of the surfacing material, spacing of horizontal and vertical joints, etc. The flexibility will also be considered where a retaining wall will abut or be connected to a rigid structure, and where the geometry of the wall is such that its flexibility will vary along its length.
- GS-80 It is assumed that site wall heights will not exceed 10 feet; walls that are part of a structure will not exceed 14 feet in height.

Drainage and Maintenance

- Considering the expansive soils on the site, the goal of finish grading, landscaping, and finish improvements will be to maintain the soils near the foundations at as uniform a moisture content as practicable. This will entail providing proper surface drainage so that runoff flows freely away from foundations and does not stand or pond near improvements. Maintaining uniform moisture near foundations will also entail protecting soils from prolonged drying that would result in desiccation and soil shrinkage.
- GS-81 Generally, a zone of irrigated landscaping will be established for at least 5 feet around the perimeter of the structures and exterior flatwork. If drought tolerant vegetation or xeroscaping is planned, or if this zone around the structures or flatwork is allowed to dry out for any other reason, the soils engineer will be contacted for modified recommendations. The landscaping and irrigation system will be maintained to keep the soils near structures and flatwork moist yet free of erosion.
- GS-82 Per Section 1804.3 of the CBC, unpaved ground surfaces will be *finish graded* to direct surface runoff away from foundations, slopes, flatwork, and other improvements at a minimum 5 percent grade for a minimum distance of 10 feet. The site will be similarly sloped to drain away from foundations, slopes, flatwork, and other improvements during construction. If this is not feasible due to the terrain, property lines, or other factors, swales with improved surfaces, area drains, or other drainage features will be provided to divert drainage away from these areas.

GS-83 Collection or diversion swales (brow ditches) will be constructed above all cut and fill slopes, or grade will slope such that runoff will be directed away from such slopes. Where runoff will be collected and then disbursed onto the site, disbursing will occur well away from all improvements.

GS-84 Finished asphalt and concrete pavement surfaces will be sloped to freely drain toward appropriate drainage facilities. Water will not be allowed to stand or pond on or adjacent to pavement as it could infiltrate into the aggregate base and subgrade, causing premature pavement deterioration.

GS-85 Any raised planter boxes constructed adjacent to the structures will be installed with drains, and sealed sides and bottoms to prevent planter drainage from gaining access to subslab or subfloor areas. Drains will also be provided in all areas adjacent to foundations and flatwork that would not otherwise drain freely.

GS-86 All eaves of the structures will be provided with roof gutters. Runoff from roof gutters, downspouts, area drains, weep holes, etc., will discharge to an appropriate outlet in a nonerosive manner away from foundations and other improvements in accordance with the requirements of the governing agencies. Erosion protection will be placed at drainage outlets unless discharge is to an asphalt or concrete surface.

GS-87 Diversion swales, dispersion swales, brow ditches, retaining wall drains, etc. will be cleaned and repaired as necessary to maintain free-flowing conditions.

GS-88 The on-site soils are erodible. Stabilization of surface soils, particularly those disturbed during construction, by vegetation or other means *during and following construction* is essential to protect the site from erosion damage. Care will be taken to establish and maintain vegetation. The landscaping will be installed to maintain the surface drainage recommended in the previous paragraphs.

GS-89 To reduce the potential for disruption of drainage patterns and undermining of structures, fill areas, etc., all rodent activity will be aggressively controlled.

Observation and Testing

GS-90 It must be recognized that the recommendations contained in this report are based, in part, on the work of others and a limited number of test pits excavated at the site and rely on continuity of the subsurface conditions encountered.

GS-91 Unless otherwise stated, the terms "compacted" and "recompacted" refer to soils placed in level lifts not exceeding 8 inches in loose thickness and compacted to a minimum of 90 percent of maximum dry density.

GS-92 Unless otherwise stated, "moisture conditioning" refers to the moistening or drying of soils to optimum moisture content or just above, prior to application of compactive effort.

GS-93 The standard tests used to define maximum dry density and field density will be ASTM D 1557-09 and ASTM D 6938-08a, respectively, or other methods acceptable to the soils engineer and jurisdiction.

GS-94 At a minimum, the soils engineer will be retained to provide:

- Review of grading, retaining wall, and foundation plans and details, and the recommendations of the radon consultant as they near completion
- Professional observation during grading
- Oversight of compaction testing during grading and backfill
- Oversight of soil and caisson special inspection during grading

GS-95 As per the recommendations of the project geologist, Richard Gorman (CEG) with Earth Systems Pacific, special inspection of grading and caisson construction will be provided as per Section 1704.7 and Table 1704.7 of the CBC; the special inspector will be under the direction of the soils engineer. At this time, it is Earth Systems opinion that, there are no operations that are sufficiently critical as to warrant *continuous* special inspection of grading; periodic special inspection of grading and caisson construction will suffice, subject to approval by the building official. The following will be inspected by the special inspector:

- Stripping and clearing of vegetation
- Verification of overexcavation to the correct depth
- Keying, benching and back drains
- Scarification, moisture conditioning and recompaction of the bottoms of the overexcavation areas
- Utility trench backfill
- Retaining wall backfill
- Fill quality, placement, moisture conditioning, and compaction, including nonexpansive material
- Foundation excavations (including caisson excavations)
- Placement of rebar and concrete in caissons

GS-96 A program of quality control will be developed prior to the beginning of the project. The contractor or project manager will determine any additional inspection items required by the architect/engineer or the governing jurisdiction.

GS-97 Locations and frequency of compaction tests will be as per the recommendation of the soils engineer at the time of construction. The recommended test location and frequency may be subject to modification by the soils engineer, based upon soil and moisture conditions encountered, size and type of equipment used by the contractor, the general trend of the results of compaction tests, or other factors.

- GS-98 A preconstruction conference among the owner, the County, the soils engineer, the soil special inspector, the architect/engineer, and contractors is recommended to discuss planned construction procedures and quality control requirements.
- GS-99 The soils engineer will be notified at least 48 hours prior to beginning construction operations. If Earth Systems Pacific is not retained to provide construction observation and testing services, it shall not be responsible for the interpretation of the information by others or any consequences arising there from.
- GS-100 A letter from the project geologist shall be submitted **prior to final inspection** outlining how all the geologic conditions of the referenced geologic investigations (see reference section of the Mitigated Negative Declaration) have been complied with.

DATE: June 2, 2011

**DEVELOPER'S STATEMENT FOR MCCARTHY DEVELOPMENT PLAN / COASTAL
DEVELOPMENT PERMIT DRC2009-00095
ED10-059**

The applicant agrees to incorporate the following measures into the project. These measures become a part of the project description and therefore become a part of the record of action upon which the environmental determination is based. All development activity must occur in strict compliance with the following mitigation measures. These measures shall be perpetual and run with the land. These measures are binding on all successors in interest of the subject property.

Note: The items contained in the boxes labeled "Monitoring" describe the County procedures to be used to ensure compliance with the mitigation measures.

Project Description: Request by Rob and Judi McCarthy for a Development Plan/Coastal Development Permit to allow for the construction of a 5,500 square foot single family residence, and a 1,000 square foot secondary residence to be located above a proposed detached 1,000 square foot garage/workshop. Proposed site improvements include: improvements to an existing access road/driveway off of Cave Landing Road which involves paving and retaining walls, site preparation for building pads, roads and septic systems which includes approximately 9,368 cu yards of grading (both cut and fill), a 10,000 gallon water tank for fire suppression, and landscaping around the residence. In addition, site improvements also include extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site and associated grading for the residence to receive water service by County Service Area 12. The project will result in total area of disturbance of approximately 35,575 sq. ft., on a 37.06 acre parcel. The project is located on the north side of Cave Landing Road in Avila Beach, within the San Luis Bay (Coastal) planning area.

Air Quality

Dust Control Measures

AQ-1 Fugitive PM10 Mitigation Measures (All required PM10 measures shall be shown on applicable grading or construction plans. In addition, the developer shall designate personnel to insure compliance and monitor the effectiveness of the required dust control measures (as conditions dictate, monitor duties may be necessary on weekends and holidays to insure compliance); the name and telephone number of the designated monitor(s) shall be provided to the APCD prior to construction/ grading permit issuance)

- A. Reduce the amount of the disturbed area where possible;
- B. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (nonpotable) water should be used whenever possible;
- C. All dirt stock-pile areas should be sprayed daily as needed;
- D. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;
- E. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast-

germinating native grass seed and watered until vegetation is established;

- F. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
- G. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- H. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
- I. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114.
- J. Install Wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site, and
- K. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.

Natural-Occurring Asbestos

AQ-2 "Naturally-occurring asbestos" has been identified by the State Air Resources Board as a toxic air contaminant. Serpentine and ultramafic rocks are very common in the state and may contain naturally occurring asbestos. Under the State Air Resources Board Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, **prior to construction permit issuance**, a geologic investigation will be prepared and then submitted to the county to determine the presence of naturally-occurring asbestos. If naturally occurring asbestos is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM before grading begins. These requirements may include, but are not limited to, 1) preparation of an "Asbestos Dust Mitigation Plan", which must be approved by APCD before grading begins; 2) an "Asbestos Health and Safety Program", as determined necessary by APCD. (For any questions regarding these requirements, contact Karen Brooks (APCD) at (805) 781-5912 or go to <http://www.slocleanair.org/business/asbestos.asp>). **Prior to final inspection or occupancy**, whichever occurs first, if naturally-occurring asbestos is encountered, the applicant shall provide verification from APCD that the above measures have been incorporated into the project.

Wood-Burning Devices

AQ-4 Only the following types of wood burning devices shall be allowed (based on District Rule 504): a) EPA-Certified Phase II wood burning devices; b) catalytic wood burning devices emitting less than or equal to 4.1 grams per hour of particulate matter, as verified by a nationally-recognized testing lab; c) non catalytic wood burning devices which emit less than or equal to 7.5 grams per hour of particulate matter, as verified by a nationally-recognized testing lab; d) pellet-fueled woodheaters; or e) dedicated gas-fired fireplaces. **Prior to construction permit issuance**, such devices shall be shown on all applicable plans, and installed as approved by the county.

Portable Equipment

AQ-5 Prior to issuance of construction permits, the applicant shall provide evidence they have contacted APCD on any proposed portable equipment requiring APCD or CARB registration, such as: 50-hp portable generators, IC engines, unconfined abrasive blasting operations, concrete batch plants, rock and pavement crushing, tub grinders,

trammel screens, etc. Should any of these types of equipment be used during construction activities California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit may be required.

Developmental Burning

- AQ-6 As of February 25, 2000, the APCD prohibits developmental burning of vegetative material within San Luis Obispo County. However, under certain circumstances where no technically feasible alternatives are available, limited developmental burning under restrictions may be allowed. Any such exception must complete the following prior to any burning: APCD approval; payment of fee to APCD based on the size of the project; and issuance of a burn permit by the APCD and the local fire department authority. As a part of APCD approval, the applicant shall furnish them with the study of technical feasibility (which includes costs and other constraints) at the time of application. For any questions regarding these requirements, Karen Brooks of APCD's Enforcement Division may be contacted (805/781-5912).

Monitoring: Requirements shall be shown on all construction documents for review and approval by the Department of Planning and Building prior to issuance of permits.

Biological Resources

- BR-1 To protect bird and raptor species protected by the Migratory Bird Treaty Act and Fish and Game code, the applicant shall avoid vegetation clearing and earth disturbance during the typical nesting season (March 1 – August 15). If avoiding construction during this season is not feasible, a qualified biologist shall survey the area one week prior to activity beginning on site. If nesting birds are located, they shall be avoided until they have successfully fledged. A buffer zone of 50 feet will be placed around all non-sensitive bird species and all activity will remain outside of that buffer until the applicant's biologist has determined that the young have fledged. High visibility exclusion fencing will be placed at the buffer zone to ensure no work occurs within this zone. If special status bird species are located, no work will begin until an appropriate buffer is determined by consultation with the County and/or the local California Department of Fish and Game biologist.

Monitoring: Requirements shall be shown on all construction documents for review and approval by the Department of Planning and Building prior to issuance of permits. If construction occurs during March 1- August 15 the survey required shall be submitted for review and approval by the Environmental Coordinator, and recommendations implemented.

Cultural Resources

- CR-1 Prior to issuance of a construction permit, the applicant shall submit a monitoring plan, prepared by a subsurface-qualified archaeologist, for the review and approval by the Environmental Coordinator. The monitoring plan shall include at a minimum:
- A. List of personnel involved in the monitoring activities;

- B. Description of how the monitoring shall occur;
- C. Description of frequency of monitoring (e.g. full-time, part time, spot checking);
- D. Description of what resources are expected to be encountered;
- E. Description of circumstances that would result in the halting of work at the project site (e.g. What is considered "significant" archaeological resources?);
- F. Description of procedures for halting work on the site and notification procedures
- G. Description of monitoring reporting procedures

CR-2 During all ground disturbing construction activities, the applicant shall retain a qualified archaeologist (approved by the Environmental Coordinator) and Native American to monitor all earth disturbing activities, per the approved monitoring plan. If any significant archaeological resources or human remains are found during monitoring, work shall stop within the immediate vicinity (precise area to be determined by the archaeologist in the field) of the resource until such time as the resource can be evaluated by an archaeologist and any other appropriate individuals, and procedures required by County and State law can be implemented. If intact burials are found, the applicant shall re-design the structure to avoid impacting the intact burials consistent with the recommendations of the on-site archaeologist, Native American Monitor, designated Most Likely Descendent, and the State Native American Heritage Commission.

CR-3 Upon completion of all monitoring/mitigation activities, and prior to occupancy or final inspection (whichever occurs first), the consulting archaeologist shall submit a report to the Environmental Coordinator summarizing all monitoring/mitigation activities and confirming that all recommended mitigation measures have been met. If the analysis included in the Phase III program is not complete by the time final inspection or occupancy will occur, the applicant shall provide to the Environmental Coordinator, proof of obligation to complete the required analysis.

CR-4 Improvements (including landscaping) shall be located outside of the identified areas containing cultural materials or shall be limited to surface work only to the maximum extent feasible. Improvements (including landscaping) shown within the identified areas potentially containing cultural materials will be designed to be placed in fill material to the extent feasible, or in cases where excavation into native materials is unavoidable, shall follow the Phase III protocol below. The Phase III study will include but not be limited to the following:

1. Prior to issuance of a construction permit, the applicant shall submit to the Environmental Coordinator (and possibly subject to peer review) for review and approval, a detailed research design for a Phase III (data recovery) archaeological investigation. The Phase III program shall be prepared by a subsurface qualified archaeologist approved by the Environmental Coordinator. The consulting archaeologist responsible for the Phase III program shall be provided with a copy of the previous

archaeological investigations (Parker). The Phase III program shall include at least the following:

- A. standard archaeological data recovery practices;
- B. recommendation of sample size adequate to mitigate for impacts to archaeological site, including basis and justification of the recommended sample size. Sample size should be between 2-10% of the volume of disturbed area. If a lesser sample size is recommended, supporting information shall be presented that justifies the smaller sample size.
- C. identification of location of sample sites/test units;
- D. detailed description of sampling techniques and material recovery procedures (e.g. how sample is to be excavated, how the material will be screened, screen size, how material will be collected);
- E. disposition of collected materials;
- F. proposed analysis of results of data recovery and collected materials, including timeline of final analysis results;
- G. list of personnel involved in sampling and analysis.

Once approved, these measures shall be shown on all applicable plans and implemented during construction.

2. Prior to issuance of a construction permit the applicant shall submit to the Environmental Coordinator, a letter from the consulting archaeologist indicating that all necessary field work as identified in the Phase III program has been completed.

Monitoring: Requirements shall be shown on all construction documents for review and approval by the Department of Planning and Building prior to issuance of permits. Monitoring reports and Phase III program (if necessary) shall be submitted to the Environmental Coordinator for review and approval. Submittal of a letter from the project archaeologist post construction shall also be submitting detailing how these requirements have been complied with during construction.

Geology and Soils

The following measures shall be shown on construction plans and verified by a qualified professional:

Site Preparation

- GS-1 The ground surface in the grading area will be prepared for construction by *removing all existing fill*, vegetation, large roots, debris, and other deleterious materials. Existing utility lines that will not remain in service will be either removed or properly abandoned. The appropriate method of utility abandonment will depend upon the type and depth of the utility. Recommendations for abandonment can be made as necessary.

- GS-2 Voids created by the removal of materials or utilities will be called to the attention of the soils engineer. No fill will be placed unless the underlying soil has been observed by the soils engineer or engineering geologist.

Grading

- GS-3 Where fill will be placed on existing ground that slopes steeper than 10 percent, the surface will be cut into level benches that penetrate entirely into rock or firm colluvial soil, as directed by the soils engineer or engineering geologist during construction. The benches will be 10 to 15 feet wide, depending upon the site conditions during construction, and angled 2 to 3 percent back into the slope. Benches will be planned at vertical intervals of 3 to 5 feet.
- GS-4 Where fill will be placed on ground that slopes steeper than 20 percent, a keyway will be constructed at the toe of the fill. The keyway will be 10 to 15 feet wide, depending upon the site conditions during construction, angled 2 to 3 percent back into the slope, and will penetrate a minimum of 3 feet into firm colluvial soil or bedrock, as directed by the soils engineer or engineering geologist.
- GS-5 Soil exposed in the bottoms of keyways and benches will be scarified a minimum of 12 inches, moisture conditioned, and recompact to a minimum of 90 percent of maximum dry density. In situ bedrock exposed in benches and keyways need not be scarified or compacted.
- GS-6 Back drains will be planned for keyways and on benches, unless otherwise directed by the soils engineer or engineering geologist during construction. Typical bench and keyway, and back drain details are included in Appendix F of the Soils Engineering and Geologic Hazards Report by Earth Systems Pacific, dated January 25, 2011.
- GS-7 In building areas, grading will allow for the placement of a minimum of 18 inches of imported nonexpansive material. The soil surface upon which the import material will be placed will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact. A minimum of 18 inches of nonexpansive imported material will then be moisture conditioned and placed throughout the building areas.
- GS-8 Within the building areas, the upper 18 inches of fill material will consist exclusively of imported nonexpansive materials. Nonexpansive materials are defined as belonging in the GM, GC, SP, SW, SC and SM categories per ASTM D 2487-06, and that have an expansion index of 10 or less (ASTM D 4829-08a). Proposed imported nonexpansive materials will be reviewed by the soils engineer before being brought to the site, and on an intermittent basis during placement. The subslab sand layer described in the "Slabs-on-Grade and Exterior Flatwork" section of this report (if utilized), is considered to be part of the minimum 18 inches of imported nonexpansive material, not in addition to it.
- GS-9 The subfloor areas below any raised wood floors will be graded to a low point or a series of low points, and drainage inlets will be provided at the low points, to direct any

accumulated water to an appropriate outlet. As an alternative to drainage inlets in the subfloor areas, gravel intercept drains can be provided at all low areas, to collect and discharge accumulated water. The gravel drains will be a minimum of 12 inches wide and 12 inches deep, wrapped with geotextile filter fabric, and drained with a rigid perforated PVC pipe. They will discharge, in a nonerosive manner, to appropriate discharge points.

- GS-10 Beyond the building areas, surfaces to receive fill or surface improvements will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact.
- GS-11 The on-site soils, crushed siltstone or claystone, and appropriate imported soils, once cleared of any vegetation and deleterious materials and thoroughly mixed to a reasonably uniform consistency, may be used as fill up to 18 inches below slab areas and to finish grade or subgrade beyond slab areas.
- GS-12 The soils and bedrock in the tank foundation area will be overexcavated to a minimum depth of 3 feet below pad grade. The resultant surface will be scarified to a depth of 1 foot, moisture conditioned, and recompact. Fill soils will be moisture conditioned, placed, and compacted in accordance with the recommendations presented below. The upper foot of material in the tank foundation area will consist exclusively of Class 2 base, crushed gravel, or other material as specified by the tank manufacturer. These are general recommendations and may be subject to revision depending upon site constraints or the tank manufacturer's recommendations.
- GS-13 In site retaining wall foundation areas, the soil will be removed to bottom-of-footing elevation (not including any keyway). The resulting surface will be scarified to a minimum depth of 1 foot, moisture conditioned to optimum moisture content or just above, and recompact. Alternately, 1 foot of material may be removed from the foundation area, and the exposed surface moisture conditioned and recompact. The previously removed material will then be put back in the excavation as properly placed and compacted fill material as described in this section.
- GS-14 All materials used as fill will be cleaned of all debris, and any rocks larger than 3 inches in diameter. If fill material includes rocks, the rocks will be placed in a sufficient soil matrix to ensure that voids caused by nesting of the rocks will not occur and that the fill can be properly compacted.
- GS-15 All fill will be placed with moisture contents at optimum moisture content or just above. Moisture contents well in excess of optimum will be avoided, as unstable conditions could result and mitigating measures (as noted in the following paragraph) could be needed.
- GS-16 Depending on *in situ* soil moisture content at the time of construction, there is a potential for the site soils to become unstable during grading. Unstable soils are difficult to properly compact and are unsuitable for the placement of additional lifts of fill. Methods to correct instability include scarification and aeration of the soils in place, or the

placement of gravel layers or geotextiles. The appropriate method to be utilized will depend on the conditions observed at the time of construction.

GS-17 In general, all fill will be placed in maximum lifts of 8 inches in loose thickness and compacted to a minimum of 90 percent of the maximum dry density. The upper 12 inches of subgrade and all aggregate base in areas to be paved with asphalt concrete or Portland cement concrete will be compacted to a minimum of 95 percent of maximum dry density.

GS-18 Aggregate base and subgrade will be firm and unyielding when proofrolled by heavy rubber-tired equipment prior to paving.

GS-19 Unretained fill slopes will not exceed a 2:1 (horizontal to vertical) slope ratio. Likewise, unretained cut slopes will not exceed a 2:1 slope ratio, unless reviewed on an individual basis by the soils engineer or engineering geologist.

GS-20 The recommended soil moisture content will be maintained throughout construction, and during the life of the residence. Failure to maintain the soil moisture content can result in desiccation cracks and disturbance, which are an indication of degradation of soil compaction. If desiccation cracks are allowed to develop, or if soils desiccate near improvements such as foundations, curbs, flatwork, etc., damage to those improvements may result. Soils that have cracked due to desiccation or are otherwise disturbed will be removed, moisture conditioned, and recompact. To reduce the potential for disruption of drainage patterns, rodent activity will be aggressively controlled.

GS-21 Any recommendations of the radon consultant that involve a grading solution will be reviewed by the soils engineer and/or the engineering geologist prior to being implemented.

Utility Trenches

GS-22 Unless otherwise recommended, utility trenches adjacent to footings or grade beams will not be excavated within the zone of foundation influence, as shown in Typical Detail A in Appendix G of the Earth Systems Pacific report (January 25, 2011).

GS-23 Utilities that must pass beneath a footing or grade beam will be placed with properly compacted utility trench backfill and the foundation will be designed to span the trench.

GS-24 A select, noncorrosive, granular, easily compacted material will be used as bedding and shading immediately around utilities. The site soil, crushed bedrock, or imported nonexpansive soil may be used for trench backfill above the select material. At a minimum, the final 18 inches of trench backfill below all slabs-on-grade will consist of imported nonexpansive material per the "Grading" section of this report.

GS-25 In general, trench backfill will be compacted to a minimum of 90 percent of maximum dry density. In areas to be paved (or that will support vehicular flatwork), a minimum of 95

percent of maximum dry density will be maintained for all trenches in the upper 12 inches of subgrade and in all aggregate base. A minimum of 85 percent of maximum dry density will generally be sufficient where trench backfill is located in landscaped or other unimproved areas where settlement would not be detrimental.

- GS-26 Trench backfill will be placed in level lifts not exceeding 6 inches in loose thickness and compacted to the minimums noted above. Trench backfill will be moisture conditioned to optimum moisture content or just above prior to application of compactive effort.
- GS-27 Where on or off-site utility trenches will slope steeper than 20 percent, sand-cement slurry or lean concrete plugs (seepage collars) will be placed in the trenches at maximum 150-foot intervals. The plugs will extend a minimum of 2 feet below the bottom of the trench and will be cut a minimum of 2 feet into the sides of the trench. The top of the plug will be a minimum of 1 foot above the top of utility.
- GS-28 A gravel pocket drain will be constructed upgradient of each clay or slurry plug. Each drain will consist of a minimum of 1 cubic foot of free-draining gravel per foot of trench width. The drain gravel will be wrapped in a permeable synthetic filter fabric conforming to Caltrans Standard 88-1.03 for underdrains. A solid rigid PVC pipe will extend from the gravel drain at a minimum 1 percent slope to an appropriate discharge point.
- GS-29 In Cave Landing Road, flexible pipe, sleeves, and/or connections will be used in the water line from Station 109+00 to Station 116+25 in an effort to reduce the potential for damage to the line in the event that the landslide in this area activates. Similar measures may be used in the dry utilities at the discretion of the architect/engineer.
- GS-30 For compaction of trench backfill soils by jetting or flooding to be successful, a free drainage path must be provided that will allow the water to dissipate very rapidly without causing erosion within the trench. Consequently, compaction of trench backfill by jetting or flooding is not recommended except under extraordinary circumstances. However, to aid in *encasing* utility conduits, particularly corrugated drain pipes, and multiple, closely-spaced conduits in a single trench, jetting or flooding may be useful. Flooding or jetting will only be attempted with extreme caution, and any jetting operation will be subject to review by the soils engineer.
- GS-31 The recommendations of this section are minimums only, and may be superseded by the architect/engineer based upon soil corrosivity or the requirements of pipe manufacturers, utility companies or the governing jurisdiction. Soil corrosivity test results and recommendations for mitigation of soil corrosivity are included in Appendix D for use by the architect/engineer in specifying corrosion protection measures.

Foundations

Footings Bearing in Rock

- GS-32 The lower level of the main residence, the northerly region of the main residence, and the barn may all be founded on footings that bear in the siltstone bedrock. In these areas, continuous and spread (pad) footings bearing a minimum of 12 inches into the

bedrock may be used. Other dimensions will be per the CBC or the specification of the architect/engineer.

GS-33 The footing excavations will be level and stepped as necessary to follow any slope of the bedrock surface.

GS-34 Continuous footings will be reinforced, at a minimum, by two No. 4 rebar, one at the top and one at the bottom, or as required by the architect/engineer. Spread footings will be reinforced in accordance with the requirements of the architect/engineer.

GS-35 Footings will be designed using maximum allowable bearing capacities of 1,800 psf dead load and 2,700 psf dead plus live loads. Using these criteria, maximum settlement and differential settlement are expected to be on the order of 3/8-inch and 1/4-inch in 25 feet, respectively.

GS-36 In design of footings to resist lateral loads, a passive equivalent fluid pressure of 300 pcf for the soil and 500 pcf for the rock; as well as a coefficient of friction of 0.40 may be used. Lateral capacity is based on the assumption that backfill adjacent to foundations is properly compacted.

GS-37 A grade beam, meeting the same depth and reinforcing criteria as the continuous footings will be cast across each vehicle opening in the barn.

GS-38 Bedrock exposed in footing and grade beam excavations will be lightly moistened to approximately optimum moisture and no desiccation cracks will be present prior to concrete placement.

Drilled Cast-in-Place Caissons

GS-39 Drilled, cast-in-place caissons will be used to support all areas of the residence where the bedrock is sufficiently deep that footings are no longer viable. These areas are believed to be mainly the seaward areas of the main level of the primary residence.

GS-40 The caissons will have a minimum diameter of 18 inches and will extend a minimum depth of 4 feet into bedrock. They will not be constructed closer than three diameters (clear span) to each other without approval from the soils engineer.

GS-41 An allowable skin friction value of 800 psf in compression or 600 psf in tension will be assumed for the bedrock; no friction capacity in the overlying soils or end bearing capacity will be used in the design.

GS-42 Lateral loads on caissons may be resisted by friction and by passive resistance of the soil and bedrock. In design of caissons to resist short-term loads, a passive equivalent fluid pressure of 300 pcf for soil 500 pcf for bedrock may be applied across two caisson

diameters. If lateral loads will be sustained, the passive values presented will be reduced by one-third, and will be applied across only one caisson diameter.

- GS-43 The caissons will be connected by grade beams so that the foundation acts as an integral unit. The grade beams will have a minimum depth of 21 inches below lowest adjacent grade and will be reinforced, at a minimum by two No. 4 rebar, one at the top and one at the bottom, or as required by the architect/engineer.

- GS-44 The soils and bedrock may not stand vertically during the caisson construction operations. Casing, drill fluid, or other means of keeping the holes open could be necessary.

- GS-45 Although no subsurface water was encountered in the test pits, depending on the location of the caissons and the weather conditions at and preceding the time of construction, subsurface water could be encountered during the caisson drilling operation. Therefore, caisson reinforcing will be designed to accommodate a minimum 5-inch diameter tremie pipe. Any water encountered will be removed from the hole prior to placing concrete, or the concrete will be tremied. Appendix H of the Earth Systems Pacific report (January 25, 2011) contains a description of the recommended tremie method.

- GS-46 As caissons will utilize skin friction for support, it is not necessary to thoroughly clean the bottoms of the excavations, although excessive loose debris and slough material will be removed using a clean out bucket or by other means. As stated earlier, use of end-bearing capacity is not recommended.

- GS-47 Concrete used in caissons will be placed at a slump between 4 and 6 inches in dry excavations and between 6 and 9 inches when placed under water.

- GS-48 The caissons will not deviate from a plumb line taken from the center of the caisson by more than 2 percent of the caisson length, from the top to the point of interest. Adequate caisson oversize may be assumed to provide the required tolerance.

- GS-49 Caisson excavations will be observed by the soils engineer during drilling operations. Special inspection will be provided during reinforcing steel and concrete placement.

- GS-50 The construction will be planned such that each caisson will be cast on the same day that it is drilled, as caisson excavation sidewalls can deteriorate rapidly over time and the deterioration can adversely affect frictional capacity. If caissons cannot be cast the day that they are drilled, the rotating auger will be raised and lowered the full depth of the excavation to re-establish frictional capacity on the day of the concrete pour.

- GS-51 Soils in grade beam excavations will be moistened to approximately optimum moisture and no desiccation cracks will be present prior to concrete placement.

Foundations, General

GS-52 Allowable bearing capacity may be increased by one-third when transient loads such as wind or seismicity are included. Foundations may be designed using the following seismic parameters which are based, in part, on a latitude of 35.1784 degrees north, and a longitude of 120.7187 degrees west:

Site Class (CBC Table 1613.5.2)	C
Mapped Spectral Accelerations (Site Class B)	
0.2 second period - S_s	1.50g
1.0 second period - S_1	0.551g
Design Response Spectral Acceleration (Site Class C)	
0.2 second period - S_{DS}	0.999g
1.0 second period - S_{D1}	0.477g

Interior Slabs-on-Grade and Exterior Flatwork

- GS-53 Prior to completion of the design of slabs, a radon consultant will be retained to evaluate the potential for radon to adversely impact the project. The recommendations of the consultant will be incorporated in the design and construction process. Any radon mitigation recommendations that conflict with the geotechnical recommendations presented herein will be brought to the attention of the soils engineer to affect a solution prior to the completion of design.
- GS-54 Interior slabs-on-grade will have a minimum thickness of 4 full inches. Reinforcement size, placement, and dowels will be as directed by the architect/engineer; minimum slab and flatwork reinforcement will consist of No. 3 rebar placed at 24 inches on-center each way. At a minimum, the interior slabs-on-grade will be doweled to footings and grade beams with No. 3 dowels lapped to the slab rebar at 24 inches on-center.
- GS-55 Due to the current use of impermeable floor coverings, water-soluble flooring adhesives, and the speed at which buildings are now constructed, moisture vapor transmission through slabs is a much more common problem than in past years. Where moisture vapor transmitted from the underlying soil would be undesirable, the slabs will be protected from subsurface moisture vapor. A number of options for vapor protection are discussed below, however, the means of vapor protection, including the type and thickness of the vapor retarder, if specified, are left to the discretion of the architect/engineer.
- GS-56 Several recent studies, including those of American Concrete Institute (ACI) Committees 302 and 306, have concluded that excess water above the vapor retarder increases the potential for moisture damage to floor coverings and could increase the potential for mold growth or other microbial contamination. The studies also concluded that it is preferable to eliminate the typical sand layer beneath the slab and place the slab concrete in direct contact with a "Class A" vapor retarder, particularly during wet weather construction. However, placing the concrete directly on the vapor retarder requires special attention to using the proper vapor retarder (see discussion below), a very low water-cement ratio in the concrete mix, and special finishing and curing techniques.

- GS-57 Probably the next most effective option would be the use of vapor-inhibiting admixtures in the slab concrete mix and/or application of a sealer to the surface of the slab. This would also require special concrete mixes and placement procedures, depending upon the recommendations of the admixture or sealer manufacturer.
- GS-58 Another option that may be a reasonable compromise between effectiveness and cost considerations is the use of a subslab vapor retarder protected by a sand layer. If a "Class A" vapor retarder (see discussion below) is specified, the barrier can be placed directly on the prepared subgrade. The retarder will be covered with a minimum 2 inches of *clean* sand. If a less durable vapor retarder is specified (Class B or C), a minimum of 4 inches of clean sand will be provided on top of the prepared subgrade, and the retarder will be placed in the center of the clean sand layer. Clean sand is defined as a well or poorly graded sand (ASTM D 2487-06) of which less than 3 percent passes the No. 200 sieve. The clean sand layer, if utilized, is considered to be part of the nonexpansive layer recommended in the "Grading" section of this report to be placed below slabs-on-grade, not in addition to it.
- GS-59 Where specified, vapor retarders will conform to ASTM Standard E 1745-97/2004. This standard specifies properties for three performance classes, Class A, B and C. The appropriate class will be selected based on the sensitivity of floor coverings to moisture intrusion and the potential for damage to the vapor retarder during placement of slab reinforcement and concrete.
- GS-60 Regardless of the underslab vapor retarder selected, proper installation of the retarder is critical for optimum performance. All seams must be properly lapped, and all seams and utility penetrations properly sealed in accordance with the vapor retarder manufacturer's recommendations.
- GS-61 If sand is used between the vapor retarder and the slab, it will be moistened only as necessary to promote concrete curing; saturation of the sand will be avoided, as the excess moisture would be on top of the vapor retarder, potentially resulting in vapor transmission through the slab for months or years.
- GS-62 If sand is used as nonexpansive import beneath vehicular flatwork (see following paragraphs), the flatwork will be designed by the architect/engineer using a subgrade modulus (K_{30}) of 200 pci (psi/in). If a higher subgrade modulus is preferred, the flatwork may be designed using a subgrade modulus of 400 pci. In this case, the nonexpansive material will consist of a minimum 12-inch thick layer of Class 2 aggregate base.
- GS-63 In conventional construction, it is common to use 4 to 6 inches of sand beneath exterior pedestrian flatwork. Due to the expansion potential of the soil on this site, there will be a risk of movement and damage to such flatwork if conventional measures are used. Heaving and cracking are likely to occur. This movement could be reduced by the placement of 12 to 18 inches of compacted, nonexpansive material beneath the flatwork.
- GS-64 Another measure that can be taken to reduce the risk of movement of flatwork due to expansive soils is to provide thickened edges or grade beams around the perimeters of

the flatwork. The thickened edges or grade beams could be from 12 to 18 inches deep, with the deeper edges or grade beams providing better protection. At a minimum, the thickened edge or grade beam will be reinforced by two No. 4 rebar, one at the top and one at the bottom.

GS-65 Flatwork will be constructed with frequent joints to allow articulation as flatwork moves in response to expansion and contraction of the soil. The expansive soil in the subgrade will be moistened to at least optimum moisture content and no desiccation cracks will be present prior to casting the flatwork.

GS-66 Flatwork may be doweled to the foundation or may be allowed to "float free," at the discretion of the architect/engineer. At doorways and other areas where keeping the flatwork at a specific elevation is desired, the flatwork will be doweled to the foundation as recommended previously for interior slabs-on-grade.

GS-67 To reduce shrinkage cracks in concrete slabs and flatwork, the concrete aggregates will be of appropriate size and proportion, the water/cement ratio will be low, the concrete will be properly placed and finished, contraction joints will be installed, and the concrete will be properly cured. This is particularly applicable to slabs that will be cast directly upon a vapor retarder and those that will be protected from transmission of vapor by use of admixtures or surface sealers. Concrete materials, placement, and curing specifications will be at the direction of the architect/engineer; ACI 302.1R-04 and ACI 302.2R-04 are suggested as resources for the architect/engineer in preparing such specifications.

Retaining Walls

GS-68 Walls that are part of, or will be rigidly attached to, either of the residential structures will be founded in bedrock. Penetration into the bedrock, bearing capacities, etc. for these walls will be per the "Foundations" section of this report.

GS-69 Site retaining walls may bear in soil that has been overexcavated and recompacted per the "Grading" section, or in bedrock. Footings for site walls bearing in soil will penetrate to a minimum of 21 inches (not including any keyway) below the lowest grade within 5 feet of the wall. Where footings will bear in bedrock, the footing will penetrate bedrock a minimum of 6 inches, with a minimum overall depth of 21 inches. Footings will be horizontal, and may step to follow site grade or the slope of the bedrock, as appropriate. If a site retaining wall footing will transition from soil to bedrock, a construction joint will be placed in the wall and footing at the transition line.

GS-70 Generally, site retaining wall footings will not bear in the backfill of any lower retaining wall; the upper wall's footing will be deepened to penetrate through the backfill and to bear in the underlying soil or bedrock, as appropriate. An exception would be where the lower wall is backfilled with *crushed* gravel. An upper retaining wall may bear a minimum of 18 inches into crushed gravel, provided that the gravel is placed in thin lifts and each lift is compacted with a vibrating plate compactor or other suitable means. The lower wall will be designed to accommodate the surcharge of the upper wall. The diagrams in Appendix I may be used to calculate such surcharges.

GS-71 Design of retaining walls will be based on the following parameters:

Active equivalent fluid pressure (native soil backfill)	55 pcf
Active equivalent fluid pressure (imported sand or gravel backfill)	35 pcf
At rest equivalent fluid pressure (native soil backfill)	70 pcf
At-rest equivalent fluid pressure (imported sand or gravel backfill)	50 pcf
Passive equivalent fluid pressure, soil	300 pcf
Passive equivalent fluid pressure, bedrock	500 pcf
Maximum toe pressure, soil	1,200 psf
Maximum toe pressure, bedrock	2,500 psf
Coefficient of sliding friction, soil	0.35
Coefficient of sliding friction, bedrock	0.40

GS-72 No surcharges are taken into consideration in the above values. The maximum allowable toe pressures are *allowable* values; no factors of safety, load factors or other factors have been applied to the remaining values. With the exception of the maximum toe pressures, these values will require application of appropriate factors of safety, load factors, and/or factors as deemed appropriate by the architect/engineer.

GS-73 If the equivalent fluid pressures for sand or gravel backfill are used in the design, sand or gravel backfill will be exclusively utilized above 1:1 plane from the base of the wall to 1 foot from the top of the backfill. The upper foot of backfill will be native soil.

GS-74 The above pressures are applicable to a retained surface that is horizontal at the top of the wall. Walls having a retained surface that slopes upward from the top of the wall will be designed for an additional equivalent fluid pressure of 1 pcf for the active case and 1.5 pcf for the at-rest case, for every degree of slope inclination.

GS-75 Based upon a PGA estimated to be 0.40g by the CBC and 0.29 for the DBE, and work by Atik and Sitar (2010), seismic loads on retaining walls will be insignificant and may be ignored for walls up to 12 feet in retained height. For walls over 12 feet in retained height that will primarily retain bedrock (such as the main retaining wall in the barn structure) seismic loads may also be ignored. If any walls over 12 feet in retained height will primarily retain colluvium or fill, the soils engineer will be consulted for design recommendations.

GS-76 The active and at-rest pressures presented are for fully drained conditions; therefore all retaining walls will be drained with perforated pipe encased in a free-draining gravel blanket. Retaining wall drains can consist of perforated pipe encased in free-draining gravel. Where this type of system is used, the pipe will be placed perforations downward and will discharge in a nonerosive manner away from foundations and other improvements. The gravel zone will have a width of approximately 1 foot and will extend upward to 1 foot from the top of the wall backfill. The upper foot of backfill will consist of native soils or topsoil to reduce the flow of surface drainage into the wall drain system.

To reduce infiltration of the soil into the drain gravel, a permeable synthetic filter fabric, conforming to Caltrans Section 88-1.03 for Underdrains, will be placed between the two.

- GS-77 Manufactured synthetic drains such as Miradrain or Enkadrain are acceptable alternatives to the use of gravel drains, provided that they are installed in accordance with the recommendations of the manufacturer. Where weep hole drainage can be properly discharged, the perforated pipe may be omitted in lieu of weep holes on maximum 4-foot centers. A filter fabric as described above will be placed between the weep holes and the drain gravel.
- GS-78 Walls facing habitable areas or areas where moisture transmission through the wall would be undesirable will be *thoroughly* waterproofed in accordance with the requirements of the architect/engineer. At a minimum, the waterproofing will cover the retaining side of the wall and will extend a minimum of 2 feet across the top of the heel of the footing.
- GS-79 Retaining walls by their nature are flexible structures, and surface treatments on walls often crack. Where walls are to be plastered or will otherwise have a finish surface applied, the flexibility will be considered in determining the suitability of the surfacing material, spacing of horizontal and vertical joints, etc. The flexibility will also be considered where a retaining wall will abut or be connected to a rigid structure, and where the geometry of the wall is such that its flexibility will vary along its length.
- GS-80 It is assumed that site wall heights will not exceed 10 feet; walls that are part of a structure will not exceed 14 feet in height.

Drainage and Maintenance

- Considering the expansive soils on the site, the goal of finish grading, landscaping, and finish improvements will be to maintain the soils near the foundations at as uniform a moisture content as practicable. This will entail providing proper surface drainage so that runoff flows freely away from foundations and does not stand or pond near improvements. Maintaining uniform moisture near foundations will also entail protecting soils from prolonged drying that would result in desiccation and soil shrinkage.
- GS-81 Generally, a zone of irrigated landscaping will be established for at least 5 feet around the perimeter of the structures and exterior flatwork. If drought tolerant vegetation or xeriscaping is planned, or if this zone around the structures or flatwork is allowed to dry out for any other reason, the soils engineer will be contacted for modified recommendations. The landscaping and irrigation system will be maintained to keep the soils near structures and flatwork moist yet free of erosion.
- GS-82 Per Section 1804.3 of the CBC, unpaved ground surfaces will be *finish graded* to direct surface runoff away from foundations, slopes, flatwork, and other improvements at a minimum 5 percent grade for a minimum distance of 10 feet. The site will be similarly sloped to drain away from foundations, slopes, flatwork, and other improvements during construction. If this is not feasible due to the terrain, property lines, or other factors,

swales with improved surfaces, area drains, or other drainage features will be provided to divert drainage away from these areas.

GS-83 Collection or diversion swales (brow ditches) will be constructed above all cut and fill slopes, or grade will slope such that runoff will be directed away from such slopes. Where runoff will be collected and then disbursed onto the site, disbursing will occur well away from all improvements.

GS-84 Finished asphalt and concrete pavement surfaces will be sloped to freely drain toward appropriate drainage facilities. Water will not be allowed to stand or pond on or adjacent to pavement as it could infiltrate into the aggregate base and subgrade, causing premature pavement deterioration.

GS-85 Any raised planter boxes constructed adjacent to the structures will be installed with drains, and sealed sides and bottoms to prevent planter drainage from gaining access to subslab or subfloor areas. Drains will also be provided in all areas adjacent to foundations and flatwork that would not otherwise drain freely.

GS-86 All eaves of the structures will be provided with roof gutters. Runoff from roof gutters, downspouts, area drains, weep holes, etc., will discharge to an appropriate outlet in a nonerosive manner away from foundations and other improvements in accordance with the requirements of the governing agencies. Erosion protection will be placed at drainage outlets unless discharge is to an asphalt or concrete surface.

GS-87 Diversion swales, dispersion swales, brow ditches, retaining wall drains, etc. will be cleaned and repaired as necessary to maintain free-flowing conditions.

GS-88 The on-site soils are erodible. Stabilization of surface soils, particularly those disturbed during construction, by vegetation or other means *during and following construction* is essential to protect the site from erosion damage. Care will be taken to establish and maintain vegetation. The landscaping will be installed to maintain the surface drainage recommended in the previous paragraphs.

GS-89 To reduce the potential for disruption of drainage patterns and undermining of structures, fill areas, etc., all rodent activity will be aggressively controlled.

Observation and Testing

GS-90 It must be recognized that the recommendations contained in this report are based, in part, on the work of others and a limited number of test pits excavated at the site and rely on continuity of the subsurface conditions encountered.

GS-91 Unless otherwise stated, the terms "compacted" and "recompacted" refer to soils placed in level lifts not exceeding 8 inches in loose thickness and compacted to a minimum of 90 percent of maximum dry density.

GS-92 Unless otherwise stated, "moisture conditioning" refers to the moistening or drying of soils to optimum moisture content or just above, prior to application of compactive effort.

GS-93 The standard tests used to define maximum dry density and field density will be ASTM D 1557-09 and ASTM D 6938-08a, respectively, or other methods acceptable to the soils engineer and jurisdiction.

GS-94 At a minimum, the soils engineer will be retained to provide:

- Review of grading, retaining wall, and foundation plans and details, and the recommendations of the radon consultant as they near completion
- Professional observation during grading
- Oversight of compaction testing during grading and backfill
- Oversight of soil and caisson special inspection during grading

GS-95 As per the recommendations of the project geologist, Richard Gorman (CEG) with Earth Systems Pacific, special inspection of grading and caisson construction will be provided as per Section 1704.7 and Table 1704.7 of the CBC; the special inspector will be under the direction of the soils engineer. At this time, it is Earth Systems opinion that, there are no operations that are sufficiently critical as to warrant *continuous* special inspection of grading; periodic special inspection of grading and caisson construction will suffice, subject to approval by the building official. The following will be inspected by the special inspector:

- Stripping and clearing of vegetation
- Verification of overexcavation to the correct depth
- Keying, benching and back drains
- Scarification, moisture conditioning and recompaction of the bottoms of the overexcavation areas
- Utility trench backfill
- Retaining wall backfill
- Fill quality, placement, moisture conditioning, and compaction, including nonexpansive material
- Foundation excavations (including caisson excavations)
- Placement of rebar and concrete in caissons

GS-96 A program of quality control will be developed prior to the beginning of the project. The contractor or project manager will determine any additional inspection items required by the architect/engineer or the governing jurisdiction.

GS-97 Locations and frequency of compaction tests will be as per the recommendation of the soils engineer at the time of construction. The recommended test location and frequency may be subject to modification by the soils engineer, based upon soil and

moisture conditions encountered, size and type of equipment used by the contractor, the general trend of the results of compaction tests, or other factors.

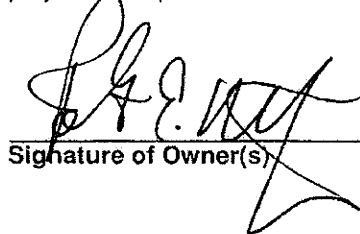
GS-98 A preconstruction conference among the owner, the County, the soils engineer, the soil special inspector, the architect/engineer, and contractors is recommended to discuss planned construction procedures and quality control requirements.

GS-99 The soils engineer will be notified at least 48 hours prior to beginning construction operations. If Earth Systems Pacific is not retained to provide construction observation and testing services, it shall not be responsible for the interpretation of the information by others or any consequences arising there from.

GS-100 A letter from the project geologist shall be submitted **prior to final inspection** outlining how all the geologic conditions of the referenced geologic investigations (see reference section of the Mitigated Negative Declaration) have been complied with.

Monitoring: Requirements shall be shown on all construction documents for review and approval by the Department of Planning and Building prior to issuance of permits. A letter from the project geologist shall be submitted prior to final inspection outlining how these requirements have been complied with during project construction.

The applicant understands that any changes made to the project description subsequent to this environmental determination must be reviewed by the Environmental Coordinator and may require a new environmental determination for the project. By signing this agreement, the owner(s) agrees to and accepts the incorporation of the above measures into the proposed project description.



Signature of Owner(s)

Robert E. McCarthy

Name (Print)

6/6/2011

Date



April 27, 2011

File No.: 0916-01

SLO Co. File No. DRC2009-00095

Mr. & Mrs. Rob and Judi McCarthy
C/o Watson Planning Consultants
P.O. Box 385
Pismo Beach, California 93448-0385

Attention: Mr. David Watson, AICP

Subject **Review of Response to County Comments**

Project: McCarthy Residence (APN 076-231-063)
Parcel 2, COAL 96-036
Cave Landing Road
Pirates Cove Area of San Luis Obispo County, California

- References:**
1. Soils Engineering and Geologic Hazards Report, McCarthy Residence, Parcel 2, Cave Landing Road, Avila Beach Area of San Luis Obispo County, California, File No. SL-16231-SB, Doc. No. 1101-084.SER, prepared by Earth Systems Pacific, dated January 25, 2011.
 2. Engineering Geologist Transfer of Responsibility Form, APN 076-231-063 & 065, File No. DRC2009-00095, Executed by Mr. Richard T. Gorman, CEG 1325 of Earth Systems Pacific, dated October 22, 2010.
 3. Review of Geologic Hazards Report, McCarthy Residence (APN 076-231-063), Parcel 2, COAL 96-036, Cave Landing Road, Pirates Cove Area of San Luis Obispo County, California, Doc. No. 1103-107.REV, prepared by Landset Engineers, Inc., dated March 11, 2011.
 4. Report of Percolation Testing, McCarthy Residence, Parcel 2, Cave Landing Road, Avila Beach Area of San Luis Obispo County, California, File No. SL-16231-SB, Doc. No. 1104-030.RPT, prepared by Earth Systems Pacific, dated April 11, 2011.
 5. Response to County Comments, McCarthy Residence, Parcel 2, Cave Landing Road, Avila Beach Area of San Luis Obispo County, California, File No. SL-16231-SB, Doc. No. 1104-032.LTR, prepared by Earth Systems Pacific, dated April 12, 2011.

Dear Mr. & Mrs. McCarthy:

The purpose of this letter is to summarize our review findings of the above referenced addendum reports (References 4 & 5). This firm previously prepared a preliminary review requesting

April 27, 2011

File No.: 0916-01
SLO Co. File No. DRC 2009-00095

additional site specific engineering geologic information and response to review comments (Reference 3).

The reports were reviewed for conformance with section 23.07.084 of the San Luis Obispo County Coastal Land Use Ordinance (CZLUO) and the San Luis Obispo County Guidelines for Engineering Geology Reports.

It is our opinion that the site geologic conditions are accurately modeled as represented. Our findings are congruent with the conclusions and recommendations of the documents prepared by Earth Systems Pacific dated January 25, 2011 & April 12, 2011.

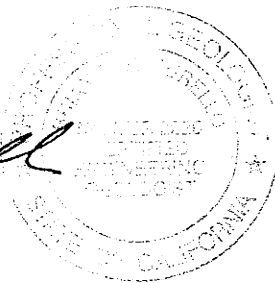
The recommendations summarized in the referenced documents (Reference 1) should be included as conditions of approval prior to the issuance of building permits. It is our opinion that the project engineering geologic constraints have been adequately characterized and appropriate mitigative measures have been included for CEQA and CZLUO compliance.

Please contact me at (831) 443-6970 or bpapurello@landseteng.com if you have questions regarding this matter.

Respectfully,
LandSet Engineers, Inc.



Brian Papurello, CEG 2226



Doc. No. 1104-109.REV

Copies: Addressee (2)
Ms. Ryan Hostetter, San Luis Obispo County Planning Department (1)
Mr. Richard T. Gorman, Earth Systems Pacific (1)
SLO County Geology files (1)

April 27, 2011

File No.: 0916-01

SLO Co. File No. DRC 2009-00095

SAN LUIS OBISPO COUNTY ENGINEERING GEOLOGY REPORT REVIEW FORM

The San Luis Obispo County Planning and Building Department uses the following checklist as part of reviewing engineering geology reports. Explanatory notes are appended and keyed to each numbered item.

Checklist item within consulting report	Adequately described: satisfactory	Additional data needed: unsatisfactory
1. Project Description	X	
2. SLO County Geological Study Area Map	X	
3. Site Location	X	
4. Regional Geologic Map	X	
5. Original engineering geologic map of site	X	
6. Aerial photograph interpretation	X	
7. Subsurface site geology	X	
8. Geologic cross sections	X	
9. Active faulting and coseismic deformation across the site	X	
10. Landslides	X	
11. Flooding, severe erosion, deposition	X	
12. On-site septic systems	X	
13. Hydrocollapse of alluvial fan soils	N/A	
14. Evaluation of historical seismicity and regional faults	X	
15. Characterize and classify geologic site class	X	
16. Probabilistic evaluation of earthquake ground motion	X	
17. Peak ground acceleration for MCE levels of ground motion	X	
18. Site coefficients F_a & F_v and spectral accelerations S_s , S_1 , S_{MS} , S_{M1} , S_{DS} & S_{D1}	X	
19. Geologic setting for liquefaction analysis	X	
20. Liquefaction methodology	N/A	
21. Bluff erosion	N/A	
22. Tsunami or seiche potential	X	
23. Expansive soil	X	
24. Naturally occurring asbestos	X	
25. Radon and other hazardous gasses	X	
26. Geologic constraints anticipated during grading operations	X	
27. Areas of cut and fill, preparation of the ground, and depth of removals	X	
28. Subdrainage plans for groundwater	N/A	
29. Final grading report and as-built map	N/A	
30. Summary sheet	X	
31. Age of report	X	
32. Engineering geology report signed by CEG	X	



CAL FIRE – SA³-121 IS OBISPO

FIRE SAFETY PLAN

Date: June 8, 2011



Project Numbers: PMT2009-00095	Project Location: 37.06 acre site off Cave Landing
Project City: Avila Beach	Cross Street:
Owner Name: Robert W. Howard	Owner Address: 9 Red Rock Lane
City, State, Zip: Laguna Niguel, CA 92877	Owner Phone(s):
Agent Name: David Watson	Agent Address: P.O. Box 385
City, State, Zip: Pismo Beach, CA 93448-0385	Agent Phone(s): 701-8728
Project Notes: Minor use permit to construct new single family residence and secondary residence. Fire access road or driveway may NOT exceed 20% slope grades. A "will-serve" letter from the community water service provider must be submitted.	

The following **checked** items are required to be completed prior to final inspection of this project. When you have completed each item checked, initial and date that they are completed. When all items checked are completed please call for a fire department final inspection, **(805) 543-4244, extension #2220**. Inspections will be completed on the following Tuesday for South County areas and Thursday for North County areas. Please have your County issued permit card on site and visible.

This project is located approximately 5 minutes from the closest Cal Fire/San Luis Obispo County Fire Station. The project is located in State Responsibility Area for wildland fires. It is designated as a **Very High** Fire Severity Zone. This project is required to comply with all fire safety rules and regulations including the California Fire Code, the Public Resources Code and any standards referenced therein.

The following standards are required:	Done
<input checked="" type="checkbox"/> 30-foot building setback from property line required for parcels 1 acre in size or larger **Note: All setbacks are subject to County Planning Department approval.	
<input checked="" type="checkbox"/> A fire sprinkler system is required for this project per local Fire Code.	
<input checked="" type="checkbox"/> Fire alarm bell must be installed and working at final inspection.	
<input checked="" type="checkbox"/> Spare sprinkler heads (2 of each type) & a sprinkler wrench shall be included in red box mounted in garage or near riser.	
<input checked="" type="checkbox"/> A water storage tank is required that gravity feeds a residential fire connection	
<input checked="" type="checkbox"/> 9000 gallons of minimum water storage is required for fire protection ** Note: If a residential sprinkler system is installed, the water storage capacity shall be calculated by an approved Fire Protection Engineer (FPE).	
<input checked="" type="checkbox"/> Automatic Fill, Sight Gauge & Venting System required	
<input checked="" type="checkbox"/> Minimum 4-inch plumbing: Schedule 40 PVC or Iron Pipe	
<input checked="" type="checkbox"/> System gravity drain required	
<input checked="" type="checkbox"/> Fire connection shall be located on the approach to the structure(s)	
<input checked="" type="checkbox"/> Fire connection must be located not less than 50 feet & no more than 150 feet from the structure	
<input checked="" type="checkbox"/> Fire connection must be located 10-12 feet from the edge of the driveway/road & 24-36" above finished grade	
<input checked="" type="checkbox"/> Fire connection outlet valve must be a 2-1/2" brass National Standard male thread with brass or plastic cap. The outlet must face toward the driveway at a 90° angle.	
<input checked="" type="checkbox"/> If fire connection has less than 20 psi, then the word "DRAFT" will be clearly and permanently marked on the fire connection	
<input checked="" type="checkbox"/> Must maintain a 3 foot clear space around the circumference of the connection at all times	
<input checked="" type="checkbox"/> Blue dot reflector must be located near fire connection, visible to approaching vehicles	
<input checked="" type="checkbox"/> A fire hydrant is required that can deliver 1000 gallons per minute for 2 hours.	
<input checked="" type="checkbox"/> Must submit a completed CDF Community Water System Verification Form	
<input checked="" type="checkbox"/> Must have two 2 1/2" outlets and one 4" outlet with National Standard threads	
<input checked="" type="checkbox"/> Must be located within 8 feet of the roadway	
<input checked="" type="checkbox"/> Place a blue dot road reflector on roadway, just off center, on the side of the hydrant	
<input checked="" type="checkbox"/> Hydrant must be located within 250 feet of the residence.	
<input checked="" type="checkbox"/> Must maintain a 3 foot clear space around the circumference of the hydrant at all times	
<input checked="" type="checkbox"/> A 20-foot wide access road is required	

<input checked="" type="checkbox"/>	All weather surface capable of supporting 20 tons	
<input checked="" type="checkbox"/>	10 feet of fuel modification is required on both sides of road	
<input checked="" type="checkbox"/>	Must provide an unobstructed vertical clearance of not less than 13'6"	
<input checked="" type="checkbox"/>	Where road exceeds a 12% grade, it must be a nonskid surface	
<input checked="" type="checkbox"/>	If road exceeds a 16% grade, it must be certified by an engineer	
<input checked="" type="checkbox"/>	Road must be named & posted using the County standard signage	
<input checked="" type="checkbox"/>	Driveway must be 16 feet wide	
<input checked="" type="checkbox"/>	All weather surface capable of supporting 20 tons	
<input checked="" type="checkbox"/>	Where driveway exceeds a 12% grade, it must be a nonskid surface	
<input checked="" type="checkbox"/>	If driveway exceeds a 16% grade, it must be certified by an engineer	
<input checked="" type="checkbox"/>	10 feet of fuel modification is required on both sides of the driveway	
<input checked="" type="checkbox"/>	Must provide an unobstructed vertical clearance of not less than 13'6"	
<input checked="" type="checkbox"/>	Driveways exceeding 300 feet require a fire engine turnaround within 50 feet of the residence/structure	
<input checked="" type="checkbox"/>	Driveways exceeding 800 feet require a turnout(s) at midpoint and no more than 400 feet apart (Exception: 16' wide driveways)	
<input type="checkbox"/>	Bridge is required to support a fire engine load weight of 20 tons	
<input type="checkbox"/>	Bridge must have a sign indicating load & vertical clearance limits at entrances	
<input type="checkbox"/>	One-lane bridge: minimum 10', turnouts at both ends, one-way signs, clear visibility	
<input checked="" type="checkbox"/>	Gate entrance shall be 2 feet wider than width of traffic lane & located 30 feet from roadway.	
<input checked="" type="checkbox"/>	Center line of lane turning radius must be at least 25 feet	
<input checked="" type="checkbox"/>	Electric gates shall be maintained <u>operational at all times</u> and shall provide Fire Department emergency access via a "Knox" switch. A Knox application must be requested from the Prevention Bureau. Manual gates may be secured by a padlock.	
<input checked="" type="checkbox"/>	100 feet of vegetation clearance is required for defensible space	
<input checked="" type="checkbox"/>	Maintain a fire clearance of 30 feet around all buildings & structures	
<input checked="" type="checkbox"/>	Within the area of 30'-100' from structures, additional fire reduction measures shall be required.	
<input checked="" type="checkbox"/>	Remove limbs located within 10 feet of chimney & trim dead/dying limbs that overhang the roof. Leaves, needles, or dead growth shall be removed from the roof	
<input checked="" type="checkbox"/>	Minimum separation from buildings & property lines for LPG above ground tanks is: 10 feet for 125-500 gallon container; 25 feet for 501-2,000 gallon container	
<input checked="" type="checkbox"/>	Maintain a minimum vegetation clearance of 10 feet around LPG tanks or containers	
<input checked="" type="checkbox"/>	A Class A non-combustible roof is required that meets all requirements of Chapter 7A of the 2007 California Building Code.	
<input checked="" type="checkbox"/>	This project must meet all requirements of Chapter 7A of the 2007 California Building Code for Fire-Resistance-Rated Construction. Please contact the SLO County Planning & Building Dept. for more information at (805) 781-5600.	
<input checked="" type="checkbox"/>	Each residence requires separate address numbers, assigned by the SLO County Planning Dept. Please contact (805) 781-5157 for more information.	
<input checked="" type="checkbox"/>	Highly visible permanent address numbers shall be placed at the driveway entrance <u>and</u> on directional signs at each T or Y intersection (minimum 6" letter/number height, 1/2 inch stroke). Reflectorized numbers are highly recommended!	
<input checked="" type="checkbox"/>	Highly visible address numbers shall be placed on the residence(s). (Minimum 6" letter/number height with 1/2 inch stroke).	
<input checked="" type="checkbox"/>	Smoke detectors are required in all sleeping areas & in hallways leading to sleeping areas.	
Comments: Fire access road and driveway may not exceed 20% grade.		

When all of the fire safety requirements have been completed, please call the Fire Prevention Bureau at (805) 543-4244, extension #2220 to arrange for your final inspection. Visit our website at www.calfireslo.org for more information.

Please note: Any changes made to this project shall cancel the Fire Safety Plan and require new plans to be submitted to CAL FIRE for review and the issuance of a new fire plan. If this project is not completed within the time allotted by the Building Permit, it will be required to meet all applicable fire codes in effect at the time a new permit is issued and before final inspection of the structure. Any future change of occupancy will also require compliance with all codes in effect at that time.

Tina Rose
Fire Inspector

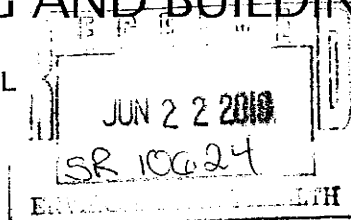


3-123

3
SAN LUIS OBISPO COUNTY

DEPARTMENT OF PLANNING AND BUILDING

THIS IS A NEW PROJECT REFERRAL



DATE: 6-18-2010

TO: Env. Health

FROM: Ryan Hostetter, Coastal Team

PROJECT DESCRIPTION: DRC2009-00095 HOWARD- MUP to construct a new SFR and secondary residence, on a 37.06 acre site located off Cave Landing Rd. in Avila Beach. APN: 076-231-063 and 065.

Return this letter with your comments attached no later than: 14 days from receipt of this referral.
By 7-9-2010 please.

PART 1 - IS THE ATTACHED INFORMATION ADEQUATE TO COMPLETE YOUR REVIEW?

- ☐ YES (Please go on to PART II.)
☐ NO (Call me ASAP to discuss what else you need. We have only 10 days in which we must obtain comments from outside agencies.)

PART II - ARE THERE SIGNIFICANT CONCERNS, PROBLEMS OR IMPACTS IN YOUR AREA OF REVIEW?

- ☐ YES (Please describe impacts, along with recommended mitigation measures to reduce the impacts to less-than-significant levels, and attach to this letter)
☐ NO (Please go on to PART III)

PART III - INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reasons for recommending denial.

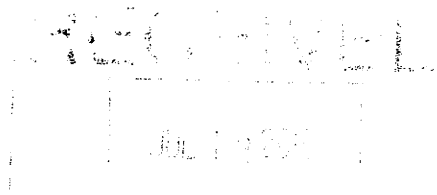
IF YOU HAVE "NO COMMENT," PLEASE SO INDICATE, OR CALL.

Septic system to be designed & installation certified by a registered civil engineer due to slope.

7/8/10
Date

[Signature]
Name

X5551
Phone



COUNTY GOVERNMENT CENTER • SAN LUIS OBISPO • CALIFORNIA 93408 • (805)781-5600

EMAIL: planning@co.slo.ca.us • FAX: (805) 781-1242 • WEBSITE: <http://www.sloplanning.org>



3-124

SAN LUIS OBISPO COUNTY

DEPARTMENT OF PLANNING AND BUILDING

THIS IS A NEW PROJECT REFERRAL

RECEIVED

DATE: 6-18-2010

FR TO: PW

JUN 22 2010

FROM: Ryan Hostetter, Coastal Team

COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF PUBLIC WORKS

PROJECT DESCRIPTION: DRC2009-00095 HOWARD- MUP to construct a new SFR and secondary residence, on a 37.06 acre site located off Cave Landing Rd. in Avila Beach. APN: 076-231-063 and 065.

Return this letter with your comments attached no later than: 14 days from receipt of this referral.
By 7-9-2010 please.

PART 1 - IS THE ATTACHED INFORMATION ADEQUATE TO COMPLETE YOUR REVIEW?

- ☒ YES (Please go on to PART II.)
☐ NO (Call me ASAP to discuss what else you need. We have only 10 days in which we must obtain comments from outside agencies.)

PART II - ARE THERE SIGNIFICANT CONCERNS, PROBLEMS OR IMPACTS IN YOUR AREA OF REVIEW?

- ☒ YES (Please describe impacts, along with recommended mitigation measures to reduce the impacts to less-than-significant levels, and attach to this letter)
☐ NO (Please go on to PART III)

PART III - INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reasons for recommending denial.

IF YOU HAVE "NO COMMENT," PLEASE SO INDICATE, OR CALL.

Road Fee, Drainage, Sedimentation & erosion control plans
submitted with building permits (encroachment permit
for driveway approach also).

Date 6-22-10Name RefPhone 5271



RE: avila project
 Madeline Cavalieri to: rhostetter
 Cc: "Jonathan Bishop"

08/04/2010 11:00 AM

Hi Ryan,

Thank you for sending the project referral for the application for new residential development on Cave Landing Road in Avila Beach (APNs 076-231-063, -065). We note that the proposed project is for a new residence and secondary residence outside of the urban services line (USL), and that it would be served by a public water supply. You have asked us about the appropriateness of allowing a public water supply to be used for the proposed project given that it is located outside of the USL when this is not allowed by the LCP (LCP Public Works Policy 1 states that new development outside of the USL must be served by private, on-site water). Based on this LCP requirement, the project is required to use an on-site source as opposed to the public water supply. Thus, to be LCP consistent in this regard, the proposed project would need to be modified so that it is served by private, on-site water. Alternatively, the County could propose an LCP amendment to move the USL so that it includes this site. Such an LCP amendment would need to be evaluated for consistency with the Coastal Act and the LCP, and certified by the Commission. It is unclear at this time what analysis might be forwarded by the County if it were to choose this route, and uncertain as to what decision might ultimately be appropriate consistent with the Coastal Act and the LCP. In the meantime, absent certification of such an amendment, the LCP requires that a private, on-site water source be used in this case.

With respect to other potential issues applicable to the proposed project, unfortunately we have not had an opportunity to review other aspects of the project application at this time. However, we do note that the project site is located within a sensitive resource area designated by the LCP and that the project may raise significant issues related to visual and biological resources.

I hope that this proves helpful. We look forward to coordinating with you on this project in the future. Please let me or Jonathan know if you have any questions.

Madeline

Madeline Cavalieri
 Coastal Planner
 California Coastal Commission
 725 Front Street, Suite 300
 Santa Cruz, CA 95060
 (831) 427-4863
 mcavalieri@coastal.ca.gov
 www.coastal.ca.gov

-----Original Message-----

From: rhostetter@co.slo.ca.us [mailto:rhostetter@co.slo.ca.us]
 Sent: Thursday, July 29, 2010 4:34 PM
 To: Madeline Cavalieri

Subject: Re: avila project

Referral:

(See attached file: ref info.pdf)

Thank You,

Ryan Hostetter, LEED AP
County of San Luis Obispo
Current Planning and Permitting
(805) 788-2351

From: "Madeline Cavalieri" <mcavalieri@coastal.ca.gov>

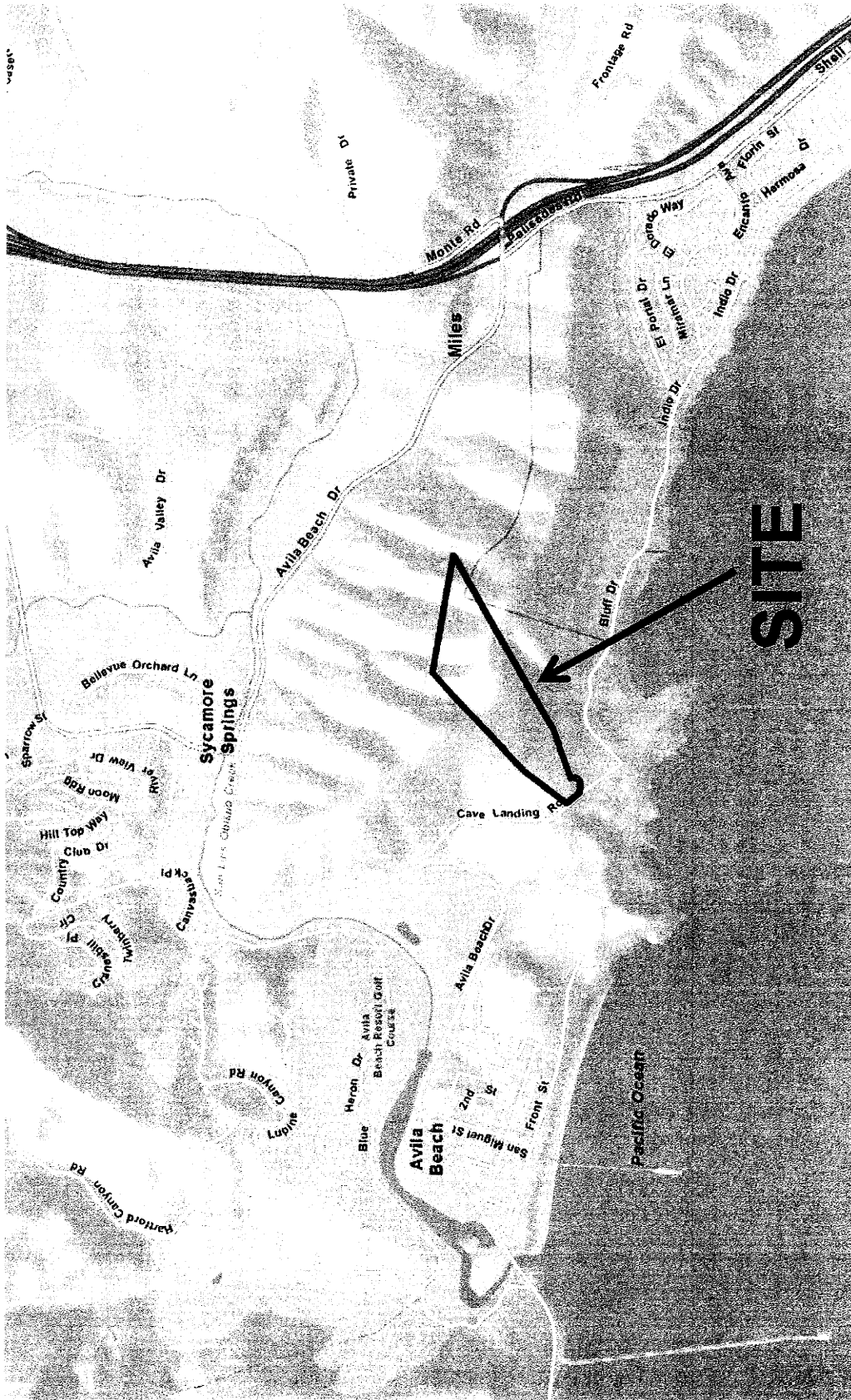
To: <rhostetter@co.slo.ca.us>

Date: 07/29/2010 04:31 PM

Subject: avila project

Madeline Cavalieri
Coastal Planner
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060
(831) 427-4863
mcavalieri@coastal.ca.gov
www.coastal.ca.gov

[Scanned @co.slo.ca.us]



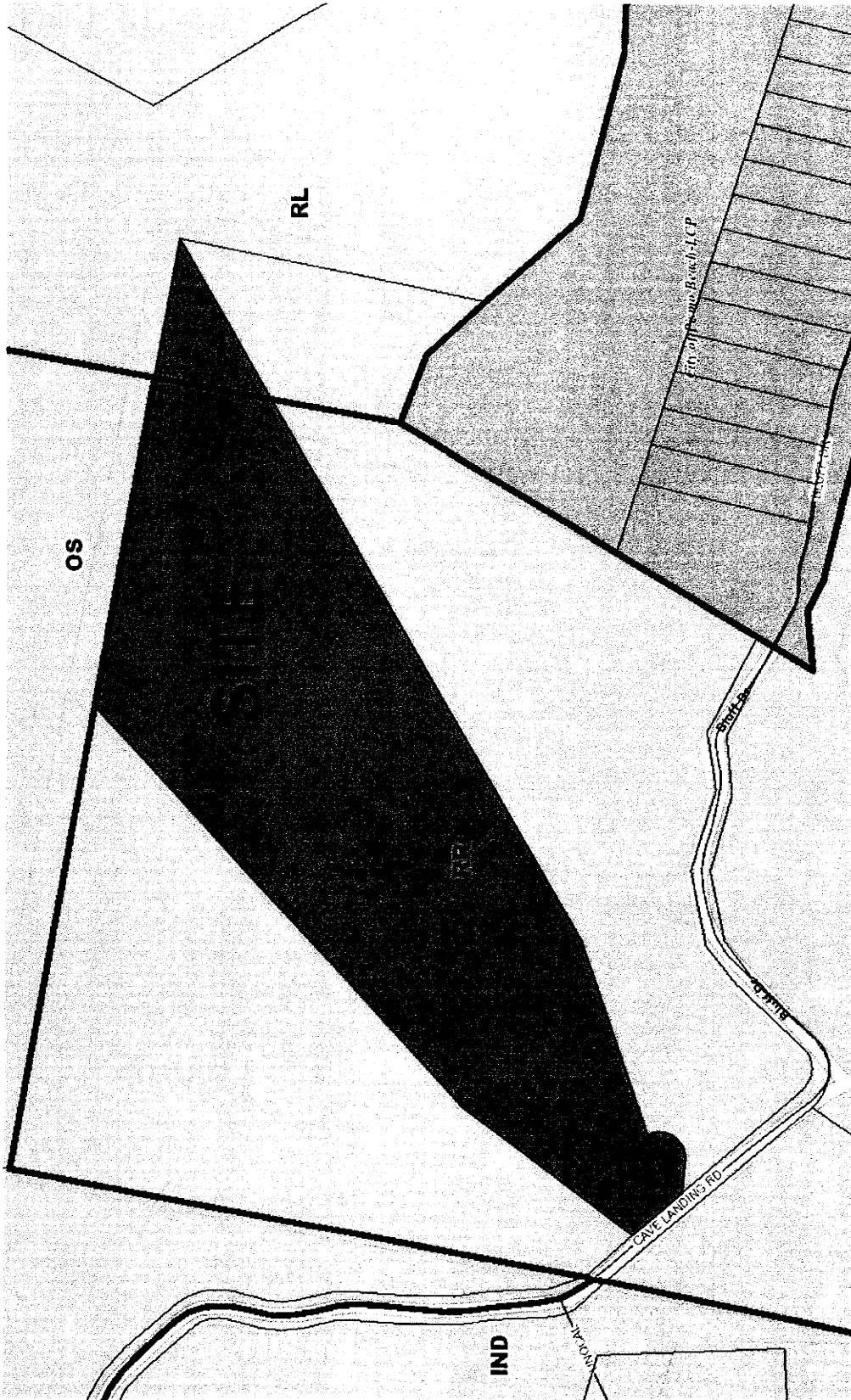
EXHIBIT

Vicinity Map



PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy



PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT

Land Use Map



PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy

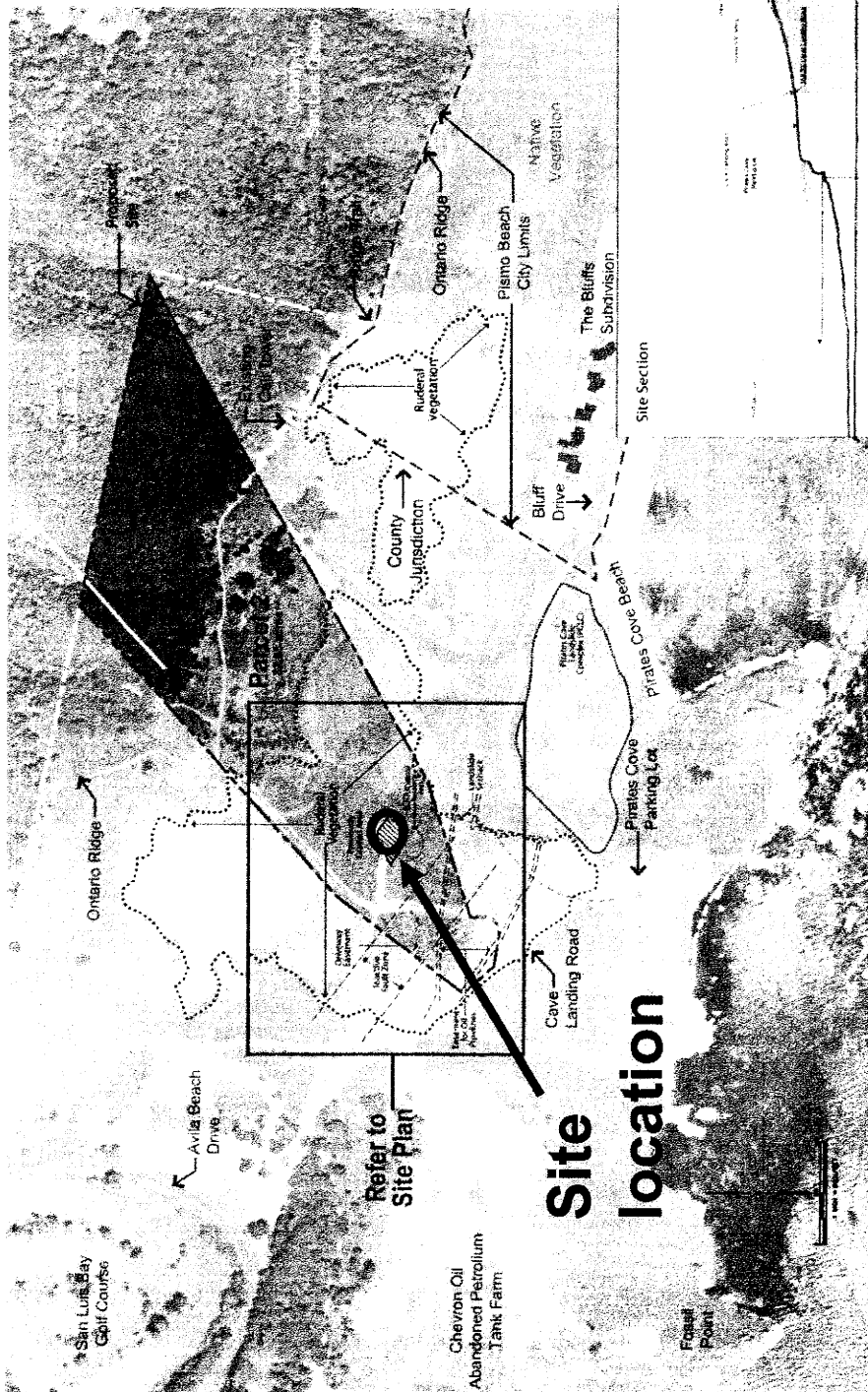


EXHIBIT

Aerial Photo

Cave Landing Ranch

Site Analysis Map
& Vicinity Map



PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT

Site Analysis & Vicinity Map

Cave Landing Ranch

Site Plan



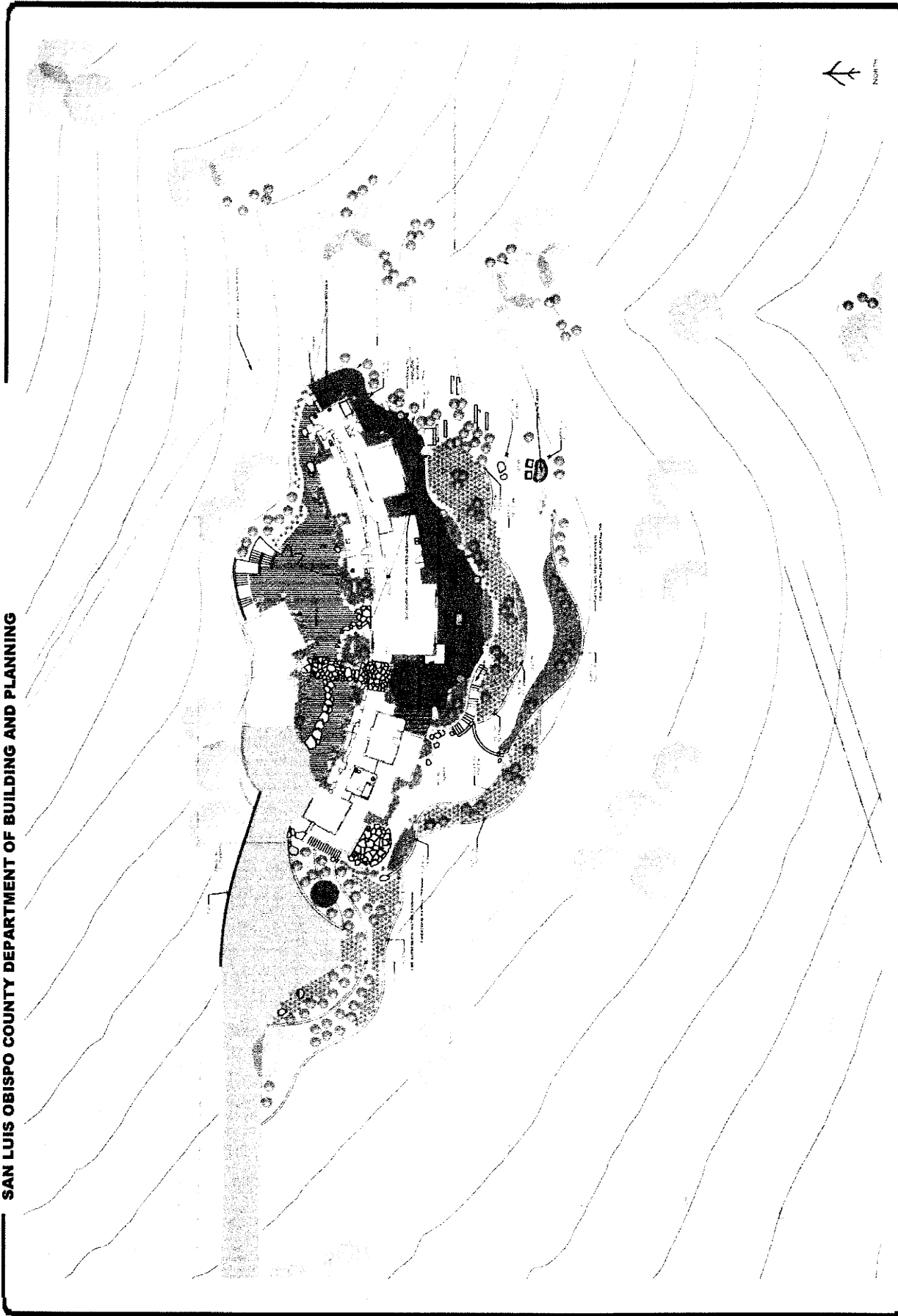
PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy

EXHIBIT

Site Plan





PROJECT

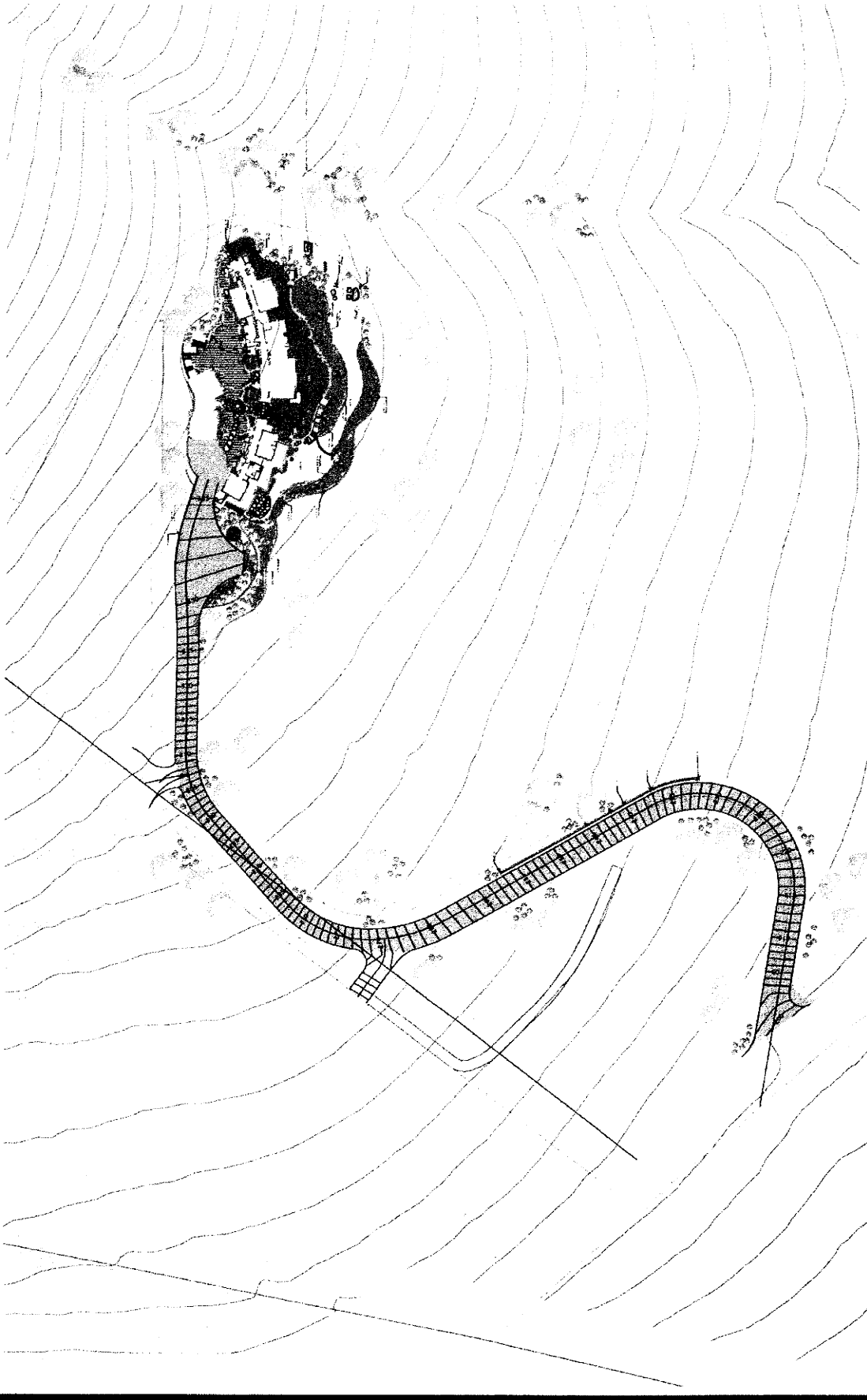
Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT

Landscape Plan





PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy

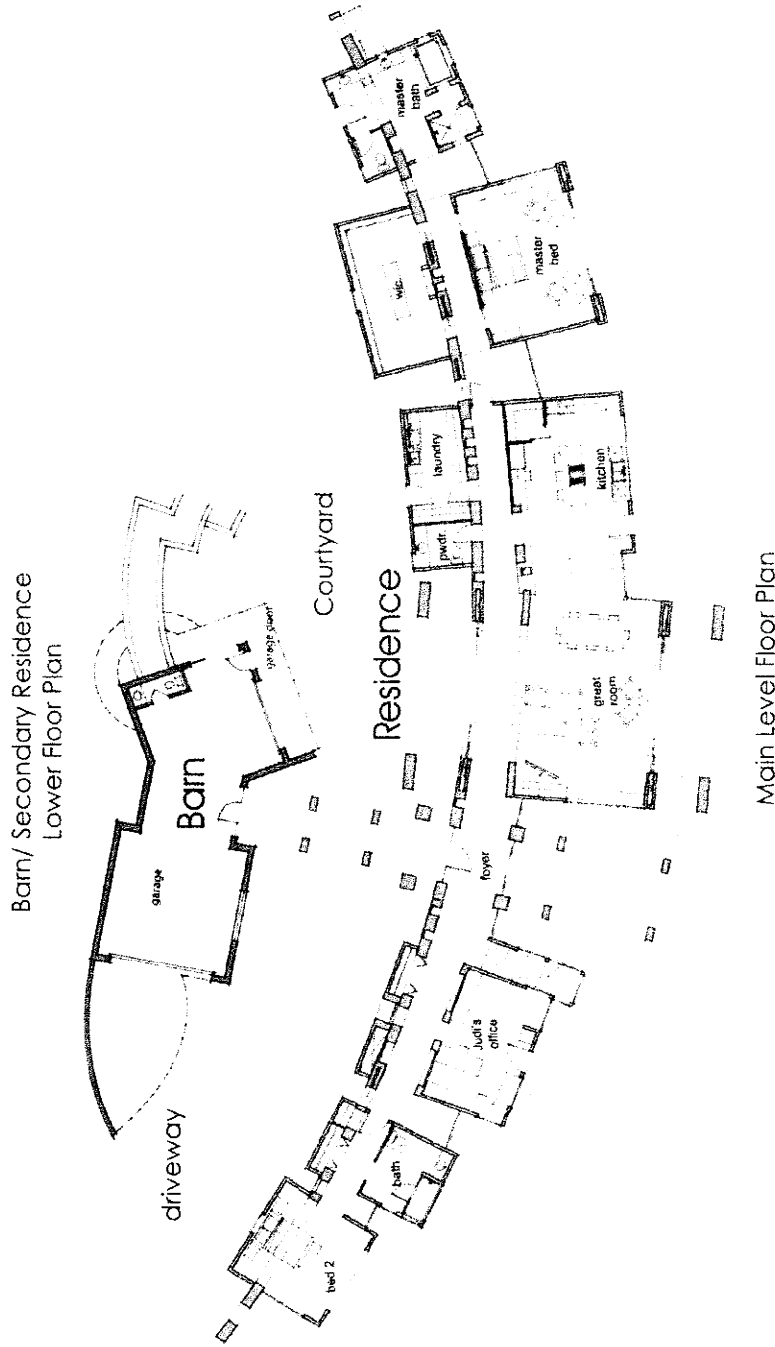


EXHIBIT

Driveway and Site Plan

Cave Landing Ranch

Main Residence/ Secondary Residence Floor Plan



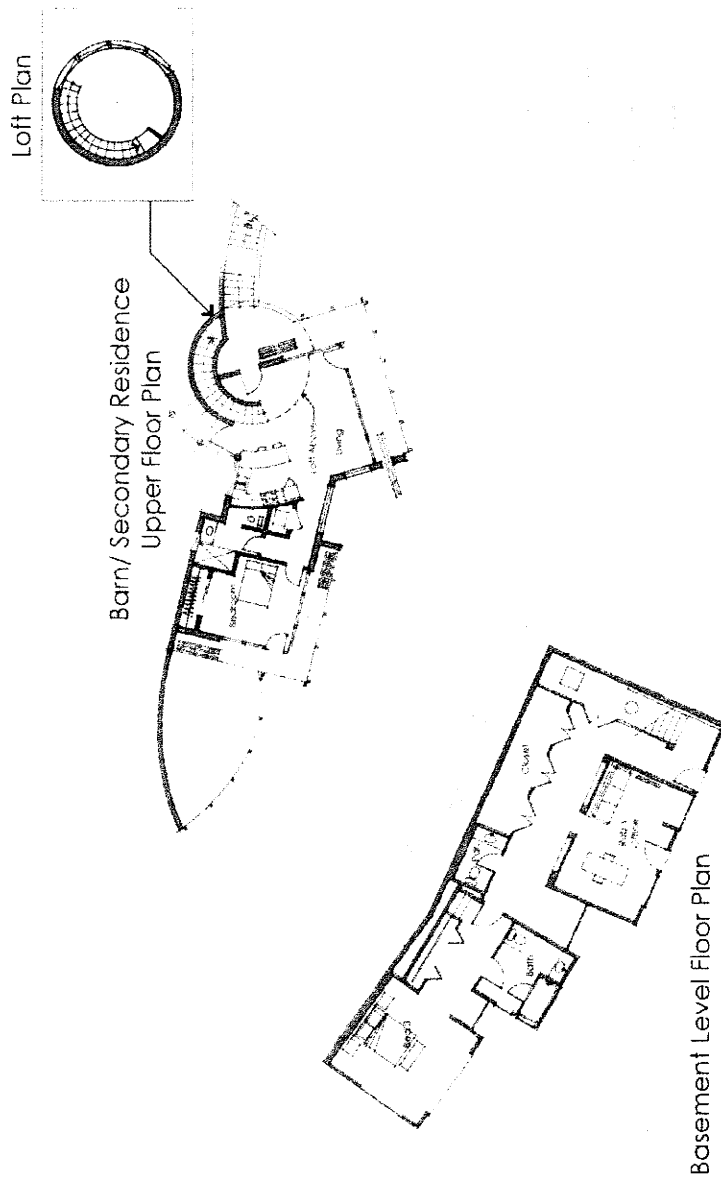
PROJECT Conditional Use Permit
DRC2009-00095 / McCarthy

EXHIBIT Floor Plan



Cave Landing Ranch

Main Residence/ Secondary Residence Floor Plan



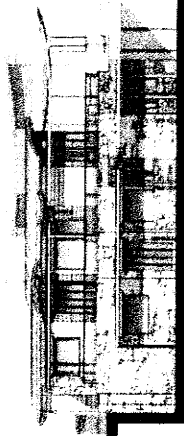
PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy

EXHIBIT

Floor Plan

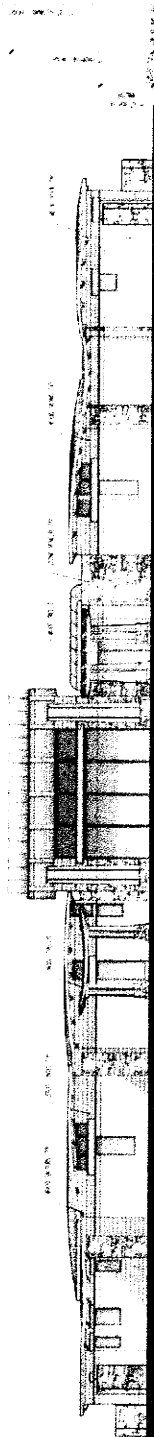




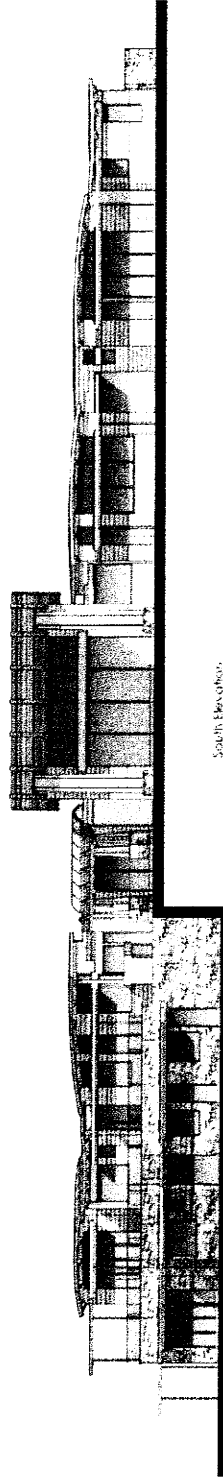
West Elevation



East Elevation



North Elevation



South Elevation



Scale: 1/8" = 1'

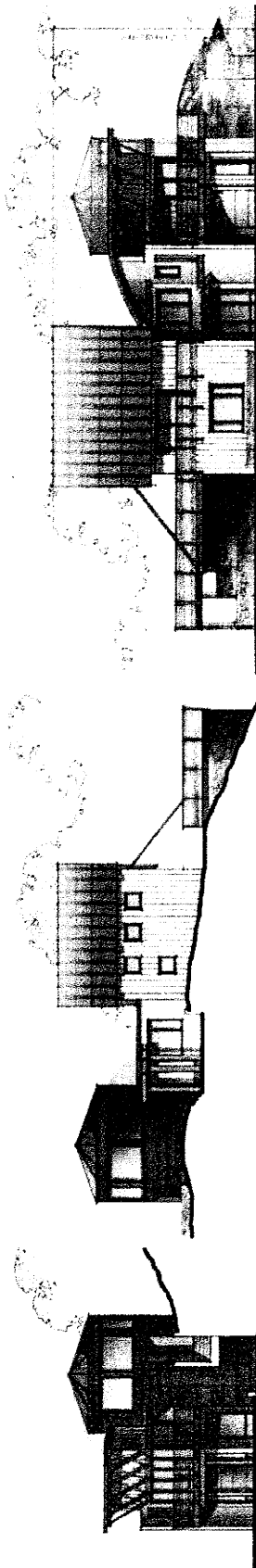
PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy



EXHIBIT

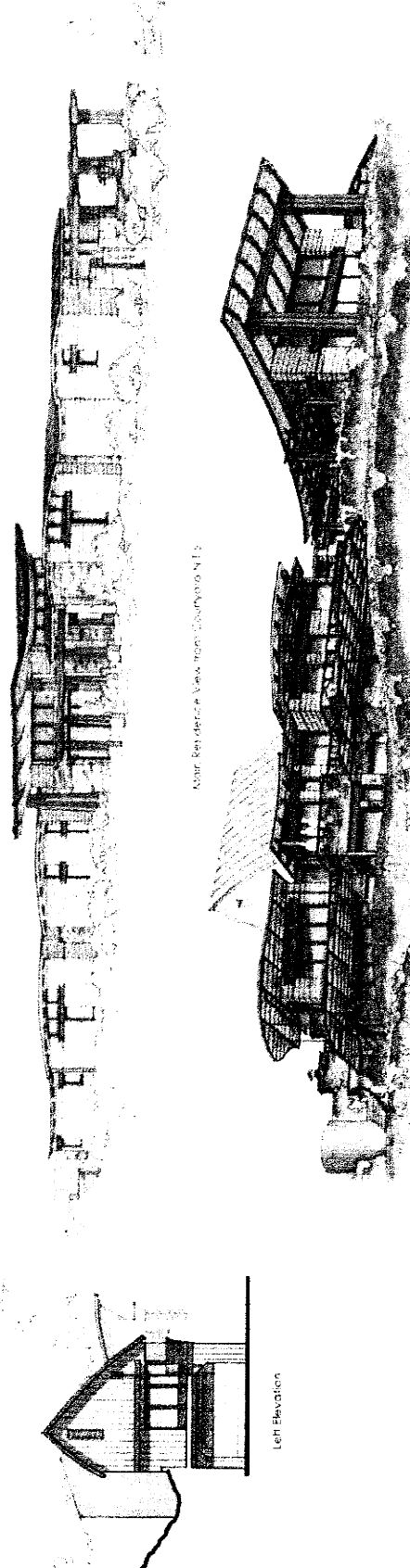
Elevations



Side Elevation

Rear Elevation

Right Elevation



Left Elevation

Main Residence View from Courtyard N.E.

Main Residence View from Gate Hill S.



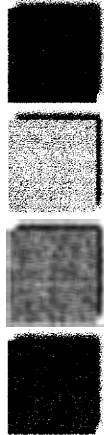
PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy

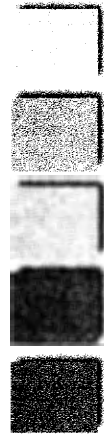


EXHIBIT

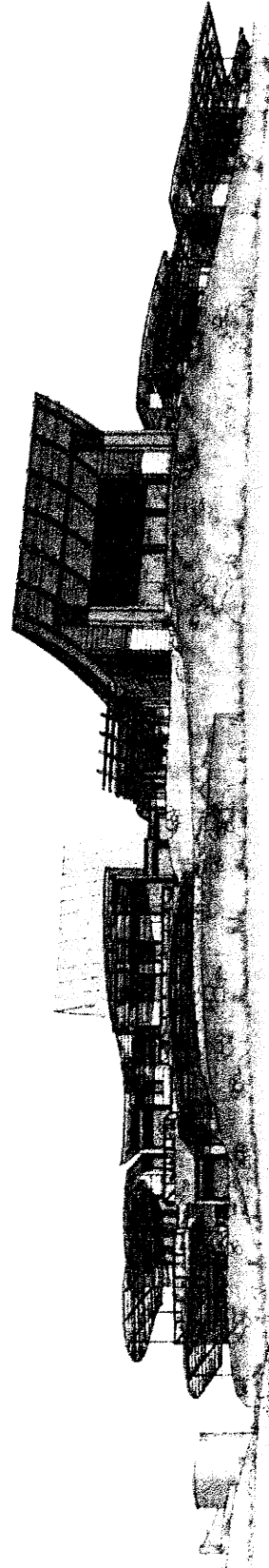
Elevations & Sketches



(Color Study in Telling Viewpoint in Arroyo Grande, CA)



(Color Study in Telling Viewpoint in Arroyo Grande, CA)



Main Residence View from Looking Lot N.T.S.

PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy

EXHIBIT

Colors & Materials



Cave Landing Ranch

View 1 From Entry Gate at Parcel 1 N.T.S.



View 1 - Looking East From Cave Landing Road N.T.S.



Views From Parcels 1, 2, and 3

View 2 From Entry Gate at Parcel 2 N.T.S.



View 2 - Looking East From Cave Landing Road N.T.S.



View 3 From Looking Loc at Parcel 3 N.T.S.



View 3 N.T.S.



LEONARD GRANT, ARCHITECT

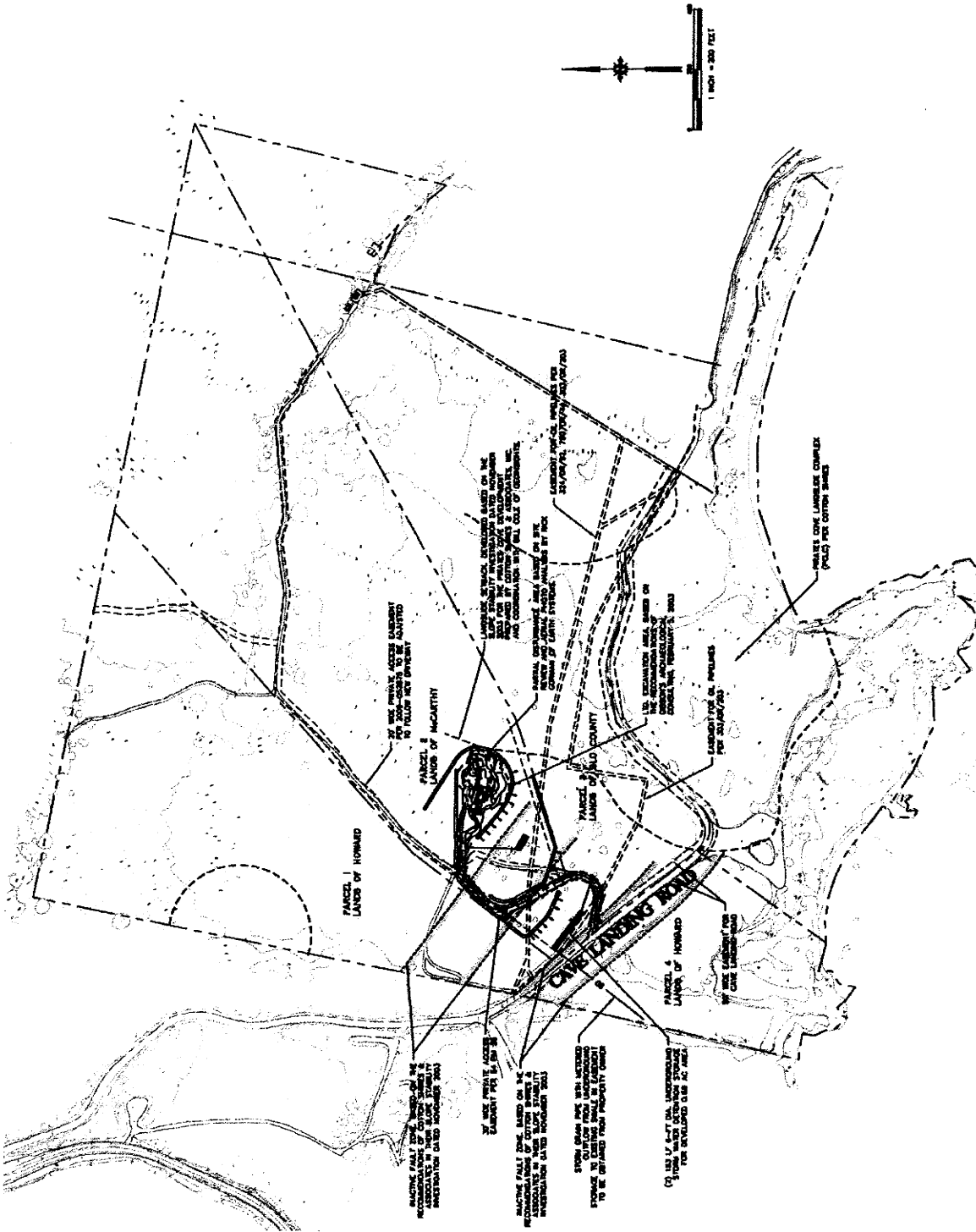
PROJECT

Conditional Use Permit
DRC2009-00095 / McCarthy

EXHIBIT

Views



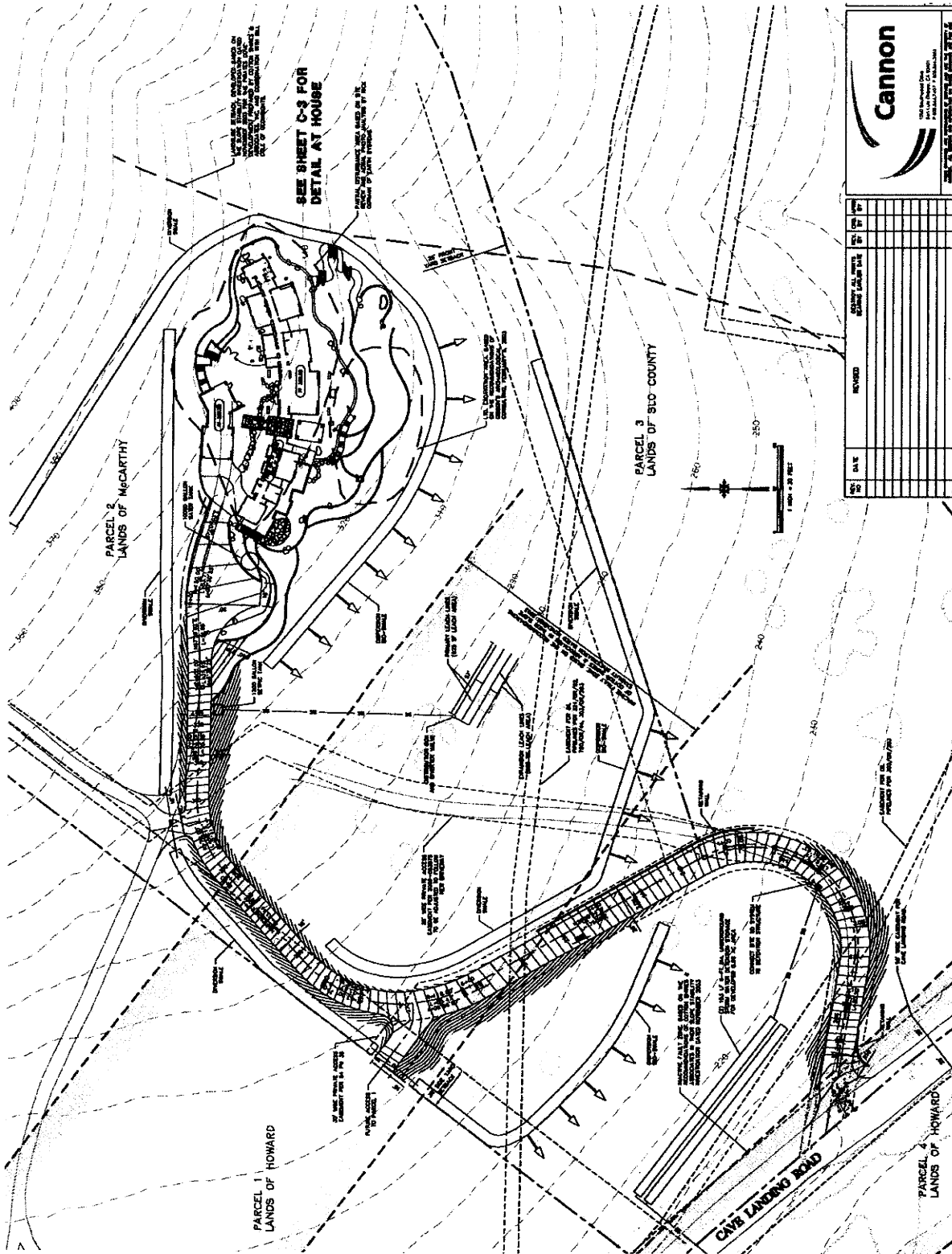


EXHIBIT

Site Plan/Grading and Drainage



PROJECT Conditional Use Permit
DRC2009-00095 / McCarthy



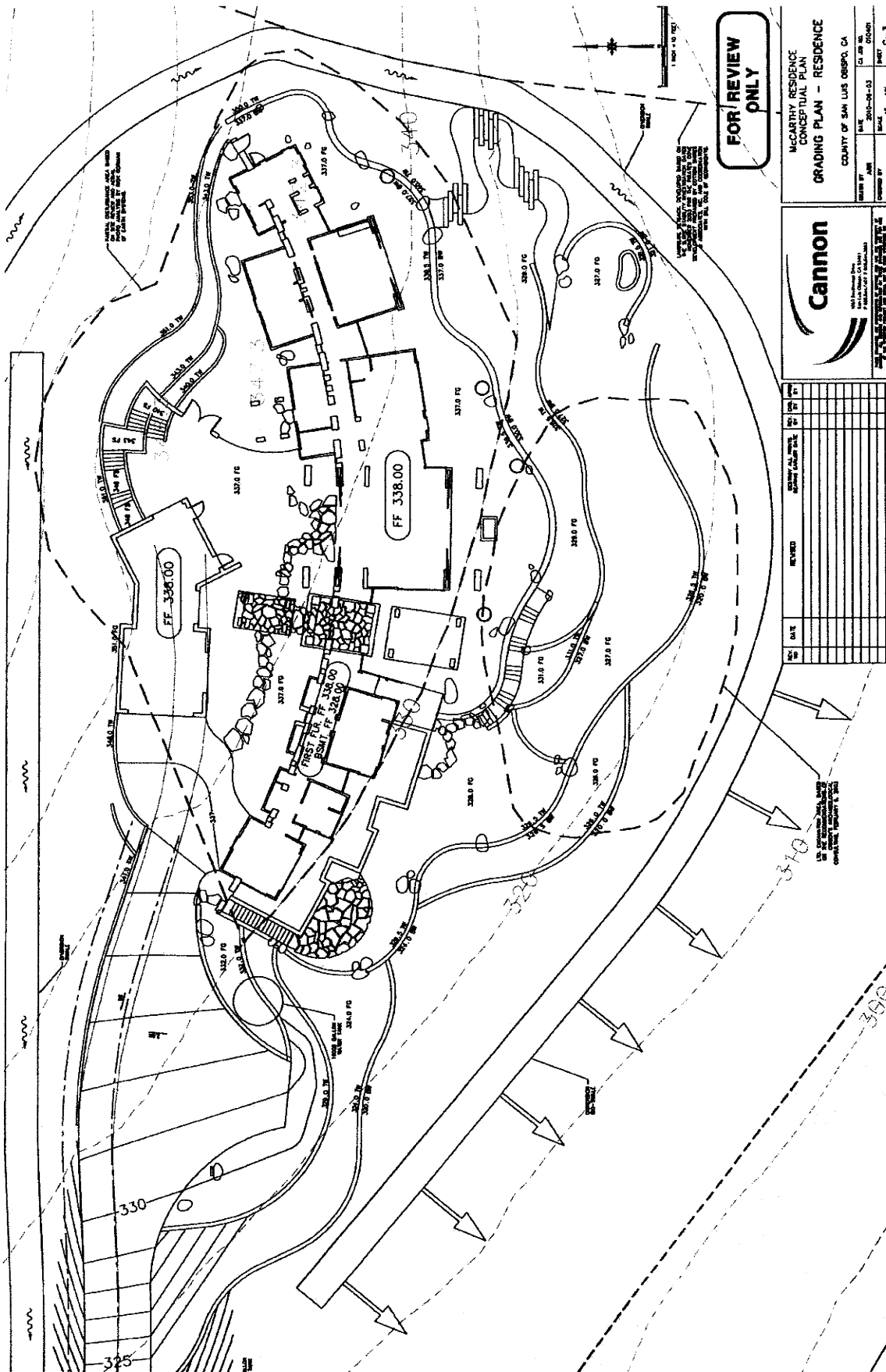
PROJECT

PROJECT
Conditional Use Permit
DRC2009-00095 / McCarthy

EXHIBIT

Grading Plan





FOR REVIEW ONLY

McARTHUR RESIDENCE CONCEPTUAL PLAN		COUNTY OF SAN LUIS OBISPO, CA	
OWNER BY	DATE	CL. NO.	CL. NO.
OWNER BY	2010-06-03	070401	
OWNER BY	SCALE	1" = 1'	1" = 1'

Cannon
1003 Industrial Drive
San Jose, CA 95131
P 408/554-7071 F 408/554-3813

[illegible]

PROJECT

PROJECT
Conditional Use Permit
DRC2009-00095 / McCarthy

EXHIBIT

Grading Plan-Residence



CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
FRONT STREET, SUITE 300
SAN CRUZ, CA 95060
427-4863 FAX (831) 427-4877
www.coastal.ca.gov

**COMMISSION NOTIFICATION OF APPEAL**

DATE: August 31, 2011

TO: Nancy Orton, Permit Chief
County of San Luis Obispo, Department of Planning and Building
976 Osos Street, Room 300
San Luis Obispo, CA 93408

FROM: Dan Carl, District Manager

RE: **Commission Appeal No. A-3-SLO-11-061**

Please be advised that the coastal development permit decision described below has been appealed to the California Coastal Commission pursuant to Public Resources Code Sections 30603 and 30625. Therefore, the decision has been stayed pending Commission action on the appeal pursuant to Public Resources Code Section 30623.

Local Permit #: DRC2009-00095

Applicant(s): Rob & Judi McCarthy

Description: Construction of a 5,500 s.f. single family residence and a 1,000 s.f. secondary residence above a detached 1,000 s.f. garage/workshop; improvements to an existing access road/driveway off Cave Landing Road (including paving and retaining walls); site preparation and grading for building pads, roads and septic systems, a 10,000 gallon water tank and landscaping. In addition, the approved project includes extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site and public water service via the new lines from County Service Area 12.

Location: Cave Landing Road (north side of road, San Luis Bay (coastal Planning area), Avila Beach (San Luis Obispo County) (APN(s) 076-231-63)

Local Decision: Approved w/ Conditions

Appellant(s): Commissioner Brain Brennan; Commissioner Mark Stone

Date Appeal Filed: 8/30/2011

The Commission appeal number assigned to this appeal is A-3-SLO-11-061. The Commission hearing date has not yet been established for this appeal. Within 5 working days of receipt of this Commission Notification of Appeal, copies of all relevant documents and materials used in the County of San Luis Obispo's consideration of this coastal development permit must be delivered to the Central Coast District office of the Coastal Commission (California Administrative Code Section 13112). Please include copies of plans, relevant photographs, staff reports and related documents, findings (if not already forwarded), all correspondence, and a list, with addresses, of all who provided verbal testimony.

A Commission staff report and notice of the hearing will be forwarded to you prior to the

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
FRONT STREET, SUITE 300
SAN LUIS OBISPO, CA 95060
TEL (831) 427-4863 FAX (831) 427-4877
www.coastal.ca.gov

**COMMISSION NOTIFICATION OF APPEAL**

DATE: August 31, 2011

TO: Nancy Orton, Permit Chief
County of San Luis Obispo, Department of Planning and Building
976 Osos Street, Room 300
San Luis Obispo, CA 93408

FROM: Dan Carl, District Manager

RE: **Commission Appeal No. A-3-SLO-11-061**

hearing. If you have any questions, please contact Jonathan Bishop at the Central Coast District office.

cc: Rob & Judi McCarthy
David Watson

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE

15 FRONT STREET, SUITE 300

SANTA CRUZ, CA 95060-4508

VOICE (831) 427-4863 FAX (831) 427-4877



APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT

Please Review Attached Appeal Information Sheet Prior To Completing This Form.

SECTION I. Appellant(s)

Name: California Coastal Commission; Commissioners Mark Stone and Brian Brennan

Mailing Address: 45 Fremont Street, Suite 200

City: San Francisco, CA

Zip Code: 95104

Phone: (415) 904-5200

SECTION II. Decision Being Appealed

1. Name of local/port government:

San Luis Obispo County

2. Brief description of development being appealed:

Construction of a 5,500 s.f. single family residence and a 1,000 s.f. secondary residence above a detached 1,000 s.f. garage/workshop; improvements to an existing access road/driveway off Cave Landing Road (including paving and retaining walls); site preparation and grading for building pads, roads and septic systems, a 10,000 gallon water tank; and landscaping. In addition, the approved project includes extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site, and public water service via the new lines from County Service Area 12.

3. Development's location (street address, assessor's parcel no., cross street, etc.):

Cave Landing Road (north side of road, Avila Beach, San Luis Obispo County APN 076231-063)

4. Description of decision being appealed (check one.):

- ☐ Approval; no special conditions
☒ Approval with special conditions:
☐ Denial

RECEIVED

AUG 30 2011

California Coastal Commission,
Central Coast Area

Note: For jurisdictions with a total LCP, denial decisions by a local government cannot be appealed unless the development is a major energy or public works project. Denial decisions by port governments are not appealable.

TO BE COMPLETED BY COMMISSION:

APPEAL NO: A-3-SLO-11-061

DATE FILED: August 30, 2011

DISTRICT: Central Coast

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 2)

5. Decision being appealed was made by (check one):

- ☐ Planning Director/Zoning Administrator
☐ City Council/Board of Supervisors
☒ Planning Commission
☐ Other

6. Date of local government's decision: July 28, 2011

7. Local government's file number (if any): DRC2009-00095

SECTION III. Identification of Other Interested Persons

Give the names and addresses of the following parties. (Use additional paper as necessary.)

a. Name and mailing address of permit applicant:

Rob and Judi McCarthy, 1800 19th Street, Bakersfield, CA 93301

b. Names and mailing addresses as available of those who testified (either verbally or in writing) at the city/county/port hearing(s). Include other parties which you know to be interested and should receive notice of this appeal.

(1) David Watson, P.O. Box 385 Pismo Beach, CA 93448-0385

(2) Nancy Orton, Permit Chief, San Luis Obispo County Planning and Building Department, 976 Osos St., Rm. 300, San Luis Obispo, CA 93408

(3)

(4)

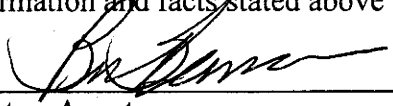
State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

See Attached.

Note: The above description need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Signed: 
Appellant or Agent

Date: August 29, 2011

Agent Authorization: I designate the above identified person(s) to act as my agent in all matters pertaining to this appeal.

Signed: _____

Date: _____

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT

Page 3

State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

See Attached.

Note: The above description need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Signed: M. Allen Stan
Appellant or Agent

Date: August 30, 2011

Agent Authorization: I designate the above identified person(s) to act as my agent in all matters pertaining to this appeal.

Signed: _____

Date: _____

(Document2)

**Reasons for Appeal: San Luis Obispo County Coastal Development Permit Application
DRC2009-00095 (McCarthy SFD)**

San Luis Obispo County approved a coastal development permit (CDP) to construct a 5,500 square-foot single-family residence, and a 1,000 square-foot secondary residence above a detached 1,000 square-foot garage/workshop on a 37-acre parcel in Avila Beach. The approved project also includes improvements to an existing access road/driveway off of Cave Landing Road (including paving and retaining walls); site preparation and grading for building pads, roads and septic systems; a 10,000-gallon water tank; and landscaping. In addition, the approved project includes extension of water lines and utilities from Avila Beach Drive up Cave Landing Road to the project site, and public water service via the new lines from County Service Area 12. The site is located in the Local Coastal Program's (LCP's) Residential Rural land use category on the north-east (uphill) side of Cave Landing Road, approximately 500 feet north of the parking/access area for Pirates Cove Beach, and within the LCP's San Luis Bay Coastal planning area. The County approved project raises Local Coastal Program (LCP) conformance issues and questions as follows:

The LCP, like the Coastal Act, is generally premised on directing development to existing developed areas capable of sustaining such development, including in terms of adequate public services, and away from rural areas. The LCP helps implement these locational criteria through delineation of urban-rural boundaries, including identification of the LCP's Urban Services Line (USL) within which services are to be contained and not extended to areas outside the USL. In fact, LCP Public Works Policy 1 allows development outside of the LCP's USL only if it can be served by adequate private onsite water and wastewater disposal systems, and this policy prohibits extension of services outside the USL to serve such development. In this case, the County-approved project is located outside of the LCP's USL, and the approval of a public water extension to this site is inconsistent with the LCP. Not only does it extend urban services outside of the USL to facilitate development of this property, but it extends such services out into an area where such extension is not allowed per the LCP and it could induce additional urban type growth inconsistent with the core urban-rural locational criteria of the LCP. The County-approved project cannot be approved on this point consistent with the LCP (including LCP Public Works Policies 1, 2, 3, and 4).

The County-approved project is also located in the Ontario Ridge Sensitive Resource Area (SRA) on the slopes above the parking/access area for Pirates Cove Beach, a popular public beach access area and scenic overlook. Ontario Ridge forms an important scenic backdrop for the coastal area of Avila Beach and Pismo Beach, and is part of a significant public viewshed. The LCP includes a suite of visual and scenic resource protection policies and a specific set of standards for development in SRA's. Per the LCP, new development must be sited to protect scenic views, minimize visibility from public view corridors, be located in the least visible portion of the site, minimize structural height and mass by using low-profile design, and to be subordinate to and blend with the rural character of the area (including LCP Visual and Scenic Resources Policies 1, 2, 4, 5, and LCP Coastal Zone Land Use Ordinance (CZLUO) Section 23.04.210(c)). The County-approved project appears inconsistent with these requirements because the large residential development approved would be prominent in the public view in a way that will degrade the character of this significant scenic rural viewshed, and it appears that alternative site locations and project designs are available that can avoid and better minimize visual and scenic resource impacts.

The County-approved project is also located within an LCP designated Archaeologically Sensitive Area. The LCP requires that archaeological resources be protected and preserved, with the highest priority given to avoiding disturbance of the resources (including LCP Archaeology Policies 1, 4, 5 and CZLUO Section 23.07.104). The County approval raises issues with these requirements because it appears to allow portions of the project to be constructed directly on top of archaeological resources, when avoidance appears possible.

The County-approved project is also located within an LCP designated Geologic Study Area. This site is on a steep slope and in an area known for overall geologic instability (including due to faults, landslides, unconsolidated soils and slopes, erosion, etc.). The LCP requires that new development ensure structural stability while not creating or contributing to erosion or geological instability (including LCP Hazards Policies 1 and 2, and CZLUO Section 23.07.086). The approved project includes substantial areas of cut and fill, substantial retaining walls, and heavily engineered drainage and erosion control devices on multiple areas of the site. It is not clear if the project, including septic systems, can ensure safety from, and not contribute to, geologic hazards, and it appears to raise LCP hazard avoidance and minimization issues as well.

And finally, the County-approved project is located on the slopes along Ontario Ridge, as described above. Ontario Ridge is well known to include a rich mosaic of oak woodlands, wetlands seeps, and drainages that intermix with chaparral and grassland habitats. Much of this area is environmentally sensitive habitat area (ESHA) per the LCP and requires protection (including ESHA Policies 1, 2, and 3). It is not clear from the County action notice if these habitats/ESHA extend onto or are located in close proximity to the project site, and to what degree such resources require protection (the County-approved project includes no such protections). As such, the County-approved project may also raise LCP ESHA protection issues.

In short, it does not appear that the County-approved project is consistent with the LCP's Public Works, Visual and Scenic Resources, Archaeology, Hazards, and ESHA protection policies and related requirements, and the County-approved project warrants further Commission review and deliberations regarding these issues.

**APPLICABLE AND CITED COUNTY OF SAN LUIS OBISPO COASTAL
PROGRAM POLICIES AND ZONING ORDINANCE SECTIONS**

Public Works Policy 1 - Availability of Service Capacity. *New development (including divisions of land) shall demonstrate that adequate public or private service capacities are available to serve the proposed development. Priority shall be given to infilling within existing subdivided areas. Prior to permitting all new development, a finding shall be made that there are sufficient services to serve proposed development given the already outstanding commitment to existing lots within the urban service line for which service will be needed consistent with the Resource Management System where applicable. Permitted development outside the USL shall be allowed only if:*

(a): it can be serviced by adequate private on-site water and waste disposal systems; and

(b): the proposed development reflects that it is an environmentally preferable alternative.

The applicant shall assume responsibility in accordance with county ordinances or the rules and regulations of the applicable service district or other providers of services for costs of service extensions or improvements that are required as a result of the project. Lack of proper arrangements for guaranteeing service is grounds for denial of the project or reduction of the density that could otherwise be approved consistent with available resources.

Public Works Policy 2 - New or Expanded Public Works Facilities. *New or expanded public works facilities shall be designed to accommodate but not exceed the needs generated by projected development within the designated urban reserve lines. Other special contractual agreements to serve public facilities and public recreation areas beyond the urban reserve line may be found appropriate.*

Public Works Policy 3 - Special Districts. *The formation or expansions of special districts shall not be permitted where they would encourage new development that is inconsistent with the LCP. In participation of LAFCo actions, the country should encourage sphere-of-influence and annexation policies which reflect the LCP.*

Public Works Policy 4 - Urban Service Line Amendments. *Amendments to an urban service line must be found consistent with the Coastal Act and the LCP. Approval of LCP amendments by the Coastal Commission or its successor in interest is required.*

Visual and Scenic Resources Policy 1 - Protection of Visual and Scenic Resources. *Unique and attractive features of the landscape, including, but not limited to unusual landforms, scenic vistas and sensitive habitats are to be preserved and protected.*

Visual and Scenic Resources Policy 2 - Site Selection for New Development. *Permitted development shall be sited so as to protect views to and along the ocean and scenic coastal areas. Wherever possible, site selection for new development is to emphasize*

locations not visible from major public view corridors. In particular, new development should utilize slope created “pockets” to shield development and minimize visual intrusion.

Visual and Scenic Resources Policy 4 - New Development in Rural Areas. New development shall be sited to minimize its visibility from public view corridors. Structures shall be designed (height, bulk, style) to be subordinate to, and blend with, the rural character of the area. New development which cannot be sited outside of public view corridors is to be screened utilizing native vegetation; however, such vegetation, when mature, must also be selected and sited in such a manner as to not obstruct major public views. New land divisions whose only building site would be on a highly visible slope or ridgetop shall be prohibited.

Visual and Scenic Resources Policy 5 - Landform Alterations. Grading, earthmoving, major vegetation removal and other landform alterations within public view corridors are to be minimized. Where feasible, contours of the finished surface are to blend with adjacent natural terrain to achieve a consistent grade and natural appearance.

CZLUO 23.04.210(c) - Standards for Critical Viewsheds and SRAs for protection of visual resources. The following standards apply within areas identified as Critical Viewsheds or SRAs in the area plans for protection of visual resources:

(1): Location of Development. Locate development, including, but not limited to primary and secondary structures, accessory structures, fences, utilities, water tanks, and access roads, in the least visible portion of the site, consistent with protection of other resources. Emphasis shall be given to locations not visible from major public view corridors. Visible or partially visible development locations shall only be considered if no feasible non-visible development locations are identified, or if such locations would be more environmentally damaging. New development shall be designed (e.g., height, bulk, style, materials, color) to be subordinate to, and blend with, the character of the area. Use naturally occurring topographic features and slope-created “pockets” first and native vegetation and berming second, to screen development from public view and minimize visual intrusion.

(2) Structure visibility. Minimize structural height and mass by using low-profile design where feasible, including sinking structures below grade. Minimize the visibility of structures by using design techniques to harmonize with the surrounding environment.

(3) Ridgetop development. Locate structures so that they are not silhouetted against the skyline or ridgeline as viewed from the shoreline, public beaches, the Morro Bay estuary, and applicable roads or highways described in the applicable planning area standards in the area plans, unless compliance with this standard is infeasible or results in more environmental damage than an alternative.

(4) Landscaping for hillside and ridgetop development. Provide screening of development at plant maturity using native vegetation of local stock, non-invasive, or drought-tolerant vegetation without obstructing major public views (e.g., screening should occur at the building site rather than along a public road). The use of vegetation appropriate to the site shall be similar to existing native vegetation. Alternatives to such screening may be approved if visual impacts are avoided through use of natural topographic features and the design of structures. Provisions shall be made to maintain visual screening for the life of the development.

(5) Land divisions and lot-line adjustments - cluster requirement. New land divisions and lot-line adjustments where the only building site would be on a highly visible slope or ridgetop shall be prohibited. Land divisions and their building sites that are found consistent with this provision shall be clustered in accordance with Chapter 23.04 or otherwise concentrated in order to protect the visual resources.

(6) Open space preservation. Pursuant to the purpose of the Critical Viewshed or SRA to protect significant visual resources, sensitive habitat or watershed, open space preservation is a compatible measure. Approval of an application for new development in these scenic coastal areas is contingent upon the applicant executing an agreement with the county to maintain in open space use appropriate portions of the site within the Critical Viewshed or SRA (for visual protection). Guarantee of open space preservation may be in the form of public purchase, agreements, easement controls or other appropriate instrument approved by the Planning Director, provided that such guarantee agreements are not to provide for public access unless acceptable to the property owner or unless required to provide public access in accordance with the LCP.

Section 23.07.164(e). Any land use permit application within a Sensitive Resource Area shall be approved only where the Review Authority can make the following required findings:

(1) The development will not create significant effects on the natural features of the site or vicinity that were the basis for the Sensitive Resource Area designation, and will preserve and protect such features through the site design.

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(2) Natural features and topography have been considered in the design and siting of all proposed physical improvements.

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(3) Any proposed clearing of topsoil, trees, or other features is the minimum necessary to achieve safe and convenient access and siting of proposed structures and will not create significant adverse effects on the identified sensitive resource.

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(4) The soil and subsoil conditions are suitable for any proposed excavation; site preparation and drainage improvements have been designed to prevent soil erosion, and sedimentation of streams through undue surface runoff.

Archeology Policy 1 - Protection of Archeological Resources. The county shall provide for the protection of both known and potential archeological resources. All available measures, including purchase, tax relief, purchase of development rights, etc., shall be explored at the time of a development proposal to avoid development on important archeological sites. Where these measures are not feasible and development will adversely affect identified archeological or paleontological resources, adequate mitigation shall be required.

Archeology Policy 4 - Preliminary Site Survey for Development within Archeologically Sensitive Areas. Development shall require a preliminary site survey by a qualified archeologist knowledgeable in Chumash culture prior to a determination of the potential environmental impacts of the project.

Archeology Policy 5 - Mitigation Techniques for Preliminary Site Survey before Construction. Where substantial archeological resources are found as a result of a preliminary site survey before construction, the county shall require a mitigation plan to protect the site. Some examples of specific mitigation techniques include:

(a): Project redesign could reduce adverse impacts of the project through relocation of open space, landscaping or parking facilities.

(b): Preservation of an archeological site can sometimes be accomplished by covering the site with a layer of fill sufficiently thick to insulate it from impact. This surface can then be used for building that does not require extensive foundations or removal of all topsoil.

(c): When a project impact cannot be avoided, it may be necessary to conduct a salvage operation. This is usually a last resort alternative because excavation, even under the best conditions, is limited by time, costs and technology. Where the chosen mitigation measure necessitates removal of archeological resources, the county shall require the evaluation and proper deposition of the findings based on consultation with a qualified archeologist knowledgeable in the Chumash culture.

(d): A qualified archeologist knowledgeable in the Chumash culture may need to be on-site during initial grading and utility trenching for projects within sensitive areas.

CZLUO 23.07.104 - Archeologically Sensitive Areas. To protect and preserve archaeological resources, the following procedures and requirements apply to development within areas of the coastal zone identified as archaeologically sensitive.

(a). **Archaeologically sensitive areas.** The following areas are defined as archaeologically sensitive:

(1) Any parcel within a rural area which is identified on the rural parcel number list prepared by the California Archaeological Site Survey Office on file with the county Planning Department.

(2) Any parcel within an urban or village area which is located within an archaeologically sensitive area as delineated by the official maps (Part III) of the Land Use Element.

(3) Any other parcel containing a known archaeological site recorded by the California Archaeological Site Survey Office.

(b). Preliminary site survey required. *Before issuance of a land use or construction permit for development within an archaeologically sensitive area, a preliminary site survey shall be required. The survey shall be conducted by a qualified archaeologist knowledgeable in local Native American culture and approved by the Environmental Coordinator. The County will provide pertinent project information to the Native American tribe(s).*

(c). When a mitigation plan is required. *If the preliminary site survey determines that proposed development may have significant effects on existing, known or suspected archaeological resources, a plan for mitigation shall be prepared by a qualified archaeologist. The County will provide pertinent project information to the Native American tribe(s) as appropriate. The purpose of the plan is to protect the resource. The plan may recommend the need for further study, subsurface testing, monitoring during construction activities, project redesign, or other actions to mitigate the impacts on the resource. Highest priority shall be given to avoiding disturbance of sensitive resources. Lower priority mitigation measures may include use of fill to cap the sensitive resources. As a last resort, the review authority may permit excavation and recovery of those resources. The mitigation plan shall be submitted to and approved by the Environmental Coordinator, and considered in the evaluation of the development request by the Review Authority.*

(d). Archeological resources discovery. *In the event archeological resources are unearthed or discovered during any construction activities, the standards of Section 23.05.140 of this title shall apply. Construction activities shall not commence until a mitigation plan, prepared by a qualified professional archaeologist reviewed and approved by the Environmental Coordinator, is completed and implemented. The County will provide pertinent project information to the affected Native American tribe(s) and consider comments prior to approval of the mitigation plan. The mitigation plan shall include measures to avoid the resources to the maximum degree feasible and shall provide mitigation for unavoidable impacts. A report verifying that the approved mitigation plan has been completed shall be submitted to the Environmental Coordinator prior to occupancy or final inspection, whichever occurs first.*

Hazard Policy 1 - New Development. *All new development proposed within areas subject to natural hazards from geologic or flood conditions (including beach erosion) shall be located and designed to minimize risks to human life and property. Along the*

shoreline new development (with the exception of coastal-dependent uses or public recreation facilities) shall be designed so that shoreline protective devices (such as seawalls, cliff retaining walls, revetments, breakwaters, groins) that would substantially alter landforms or natural shoreline processes, will not be needed for the life of the structure. Construction of permanent structures on the beach shall be prohibited except for facilities necessary for public health and safety such as lifeguard towers.

Hazard Policy 2 - Erosion and Geologic Stability. *New development shall ensure structural stability while not creating or contributing to erosion or geological instability.*

CZLUO 23.070.086 - Geologic Study Area Special Standards. *All uses within a Geologic Study Area are to be established and maintained in accordance with the following, as applicable:*

(a). Grading: Any grading not otherwise exempted from the permit requirements of Sections 23.05.020 et seq. (Grading) is to be performed as engineered grading under the provisions of those sections.

(b). Seismic hazard areas: As required by California Public Resources Code Sections 2621 et seq. and California Administrative Code Title 14, Sections 3600 et seq., no structure intended for human occupancy shall be located within 50 feet of an active fault trace within an Earthquake Fault Zone.

(c). Erosion and geologic stability. New development shall insure structural stability while not creating or contributing to erosion, sedimentation or geologic instability.

ESHA Policy 1 - Land Uses Within or Adjacent to Environmentally Sensitive Habitats. *New development within or adjacent to locations of environmentally sensitive habitats (within 100 feet unless sites further removed would significantly disrupt the habitat) shall not significantly disrupt the resource. Within an existing resource, only those uses dependent on such resources shall be allowed within the area.*

ESHA Policy 2 - Permit Requirement. *As a condition of permit approval, the applicant is required to demonstrate that there will be no significant impact on sensitive habitats and that proposed development or activities will be consistent with the biological continuance of the habitat. This shall include an evaluation of the site prepared by a qualified professional which provides: a) the maximum feasible mitigation measures (where appropriate), and b) a program for monitoring and evaluating the effectiveness of mitigation measures where appropriate.*

ESHA Policy 3 - Habitat Restoration. *The county or Coastal Commission should require the restoration of damaged habitats as a condition of approval when feasible. Detailed wetlands restoration criteria are discussed in Policy 11.*

Access Policy 2. *Maximum public access from the nearest public roadway to the*

shoreline and along the coast shall be provided in new development...

Recreation Policy 1. *Coastal recreational and visitor-serving facilities, especially lower-cost facilities, shall be protected, encouraged and where feasible provided by both public and private means.*

Recreation Policy 2. *Recreational development and commercial visitor-serving facilities shall have priority over non-coastal dependent use, but not over agriculture or coastal dependent industry in accordance with PRC 30222.*

Coastal Act 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.*

Coastal Act Section 30211. *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Coastal Act Section 30213. *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. ...*

Coastal Act Section 30220. *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

Coastal Act Section 30221. *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

Coastal Act Section 30222. *The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*

Coastal Act Section 30223. *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Coastal Act Section 30240(b). *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Coastal Watershed Policy 7: Siting of New Development. Grading for the purpose of creating a site for a structure or other development shall be limited to slopes of less than 20 percent except:

Existing lots of record in the Residential Single-Family category and where a residence cannot be feasibly sited on a slope less than 20 percent;

When grading of an access road or driveway is necessary to provide access to an area of less than 20 percent slope where development is intended to occur, and where there is no less environmentally damaging alternative;

The county may approve grading and siting of development on slopes between 20 percent and 30 percent through Minor Use Permit, or Development Plan approval, if otherwise required by the Coastal Zone Land Use Ordinance. Also in review of proposed land divisions, each new parcel shall locate the building envelope and access road on slopes of less than 20 percent. In allowing grading on slopes between 20 percent and 30 percent the county shall consider the specific characteristics of the site and surrounding area that include but are not limited to: the proximity of nearby streams or wetlands, the erosion potential and slope stability of the site, the amount of grading necessary, neighborhood drainage characteristics and measures proposed by the applicant to reduce potential erosion and sedimentation. The county may also consider approving grading on slopes between 20 percent and 30 percent where it has been demonstrated that there is no other feasible method of establishing an allowable use on the site without grading. Grading and erosion control plans shall be prepared by a registered civil engineer and accompany any request to allow grading on slopes between 20 percent and 30 percent. It shall also be demonstrated that the proposed grading is sensitive to the natural landform of the site and surrounding area. In all cases, siting of development and grading shall not occur within 100 feet of any environmentally sensitive habitat. In urban areas as defined by the Urban Services Line, grading may encroach within the 100 foot setback when locating or siting a principally permitted development, if application of the 100 foot setback renders the parcel physically unusable for the principally permitted use. Secondly, the 100 foot setback shall only be reduced to a point at which the principally permitted use, as modified as much as practical from a design standpoint, can be accomplished to no point less than the setback allowed by the planning area standard or 50 feet whichever is the greater distance.

Policy 8: Timing of Construction and Grading. Land clearing and grading shall be avoided during the rainy season if there is a potential for serious erosion and sedimentation problems. All slope and erosion control measures should be in place before the start of the rainy season. Soil exposure should be kept to the smallest area and the shortest feasible period.

Policy 9: Techniques for Minimizing Sedimentation. Appropriate control measures (such as sediment basins, terracing, hydro-mulching, etc.) shall be used to minimize

erosion and sedimentation. Measures should be utilized from the start of site preparation. Selection of appropriate control measures shall be based on evaluation of the development's design, site conditions, predevelopment erosion rates, environmental sensitivity of the adjacent areas and also consider costs of on-going maintenance. A site specific erosion control plan shall be prepared by a qualified soil scientist or other qualified professional. To the extent feasible, non-structural erosion techniques, including the use of native species of plants, shall be preferred to control run-off and reduce increased sedimentation.

Policy 10: Drainage Provisions. *Site design shall ensure that drainage does not increase erosion. This may be achieved either through on-site drainage retention, or conveyance to storm drains or suitable watercourses.*

Framework for Planning:

SRA – Sensitive Resource Area

Purpose:

- 1. To identify areas of high environmental quality, including but not limited to important geologic features, wetlands and marshlands, undeveloped coastal areas and important watersheds.*
- 3. To enhance and maintain the amenities accruing to the public from the preservation of the scenic and environmental quality of SLO*

General Objectives:

- 2. Buildings and structures should be designed and located in harmonious relationships with surrounding development and the natural environment.*
- 3. Buildings, structures and plant material should be constructed, installed or planted to avoid unnecessary impairment of scenic views.*
- 4. Potentially unsightly features should be located to be inconspicuous from streets, highways, public walkways and surrounding properties; or effectively screened from view.*

San Luis Bay Coastal Area Plan:

Avila Beach Urban Area – Pirates Cove (page 6-6 to 6-7):

“hillside protection is important because they form a major scenic backdrop”

“residential uses should be clustered on the most level portions of the property adjacent to Avila Beach or Pismo Beach”

“future development should be clustered and remain above Cave Landing Road”

Ontario Ridge SRA (page 7-1): *this major ridge forms an important scenic backdrop for the coastal area of Avila Beach and Pismo Beach, as well as for Avila Valley. Open space agreements on the slopes should be obtained at the time of development proposals.*

LCP Public Acquisition: #10 (page 7-4) *Mallagh Landing. The state Department of Parks and Recreation, the county, or other appropriate agencies should accept the offer to dedicate Pirates Cove and Mallagh Landing.*

Residential Rural land use category at Pirates Cove: Mallagh Landing:

- 1. Residential clusters shall be identified in accordance with the sections of the CZLUO which identifies cluster densities...*
- 2. Site selection for the residential clusters totaling 17 units shall be located adjacent to Pismo Beach...*
- 3. A preliminary archeological survey shall be required...*
- 4. A geologic report shall be required...*
- 5. Appropriate methods for ensuring public access and recreational uses of Pirates Cove and adjacent blufftop shall be identified...*

Residential Rural Land Use Category:

Purpose:

- a. to provide for residential development at a low density compatible with a rural atmosphere and life-style which maintains the character of the open countryside and is compatible with surrounding agricultural uses*
- b. to allow limited, compatible, non-residential uses commensurate with rural parcel sizes*
- c. to permit residential uses in area where agriculture is clearly a secondary use, or where agriculture is not feasible yet large open space areas are maintained as part of a residential life-style*
- d. to encourage agricultural and other open space uses as part-time or incidental “hobby” activities, such as horse raising or specialty farming.*



076-231

Exhibit 6

REVISIONS	
NO.	DATE
1A	12-09-03
06-061	06-16-05
07-138	06-23-06
08-251	11-13-07
1A	02-25-11

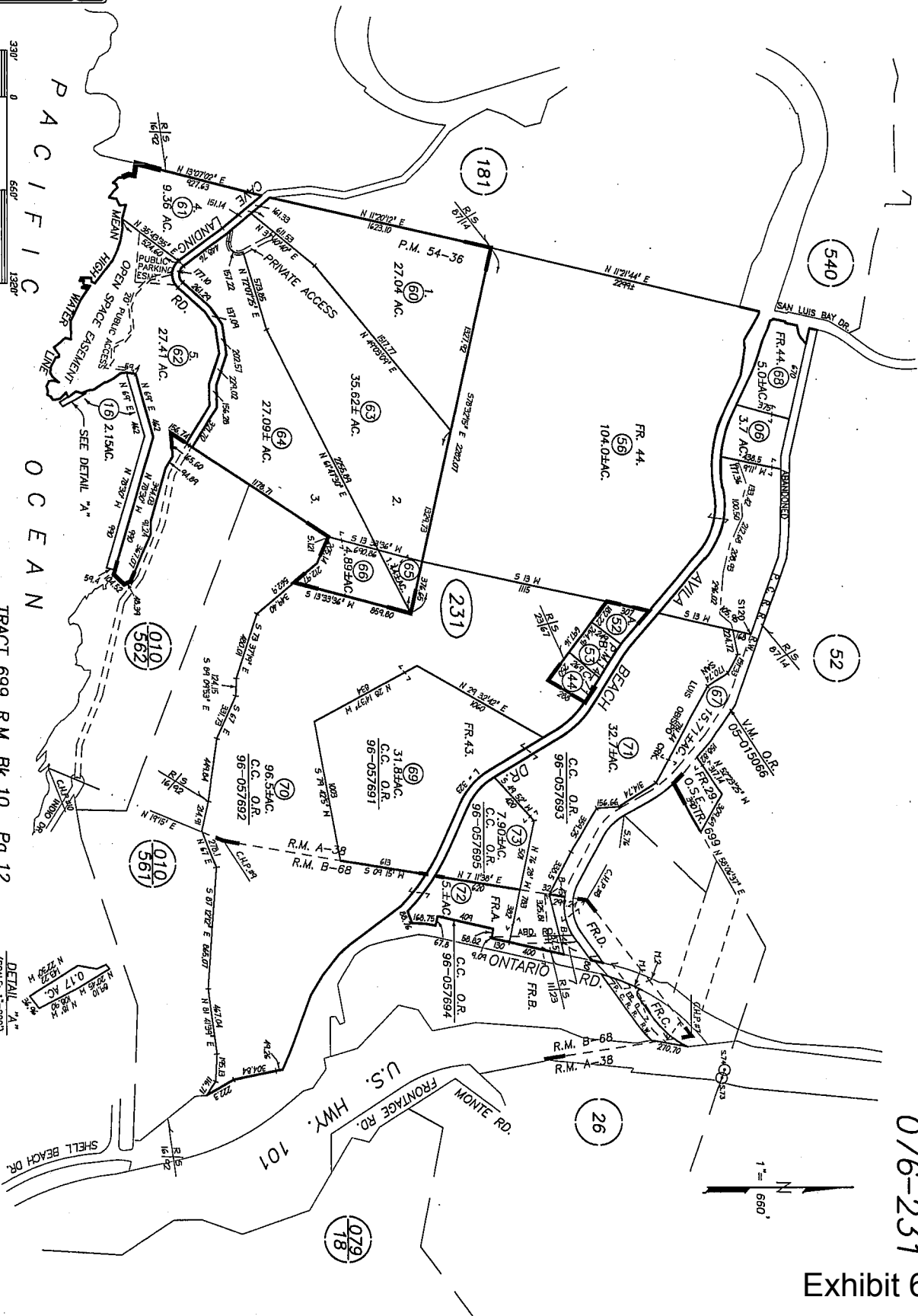
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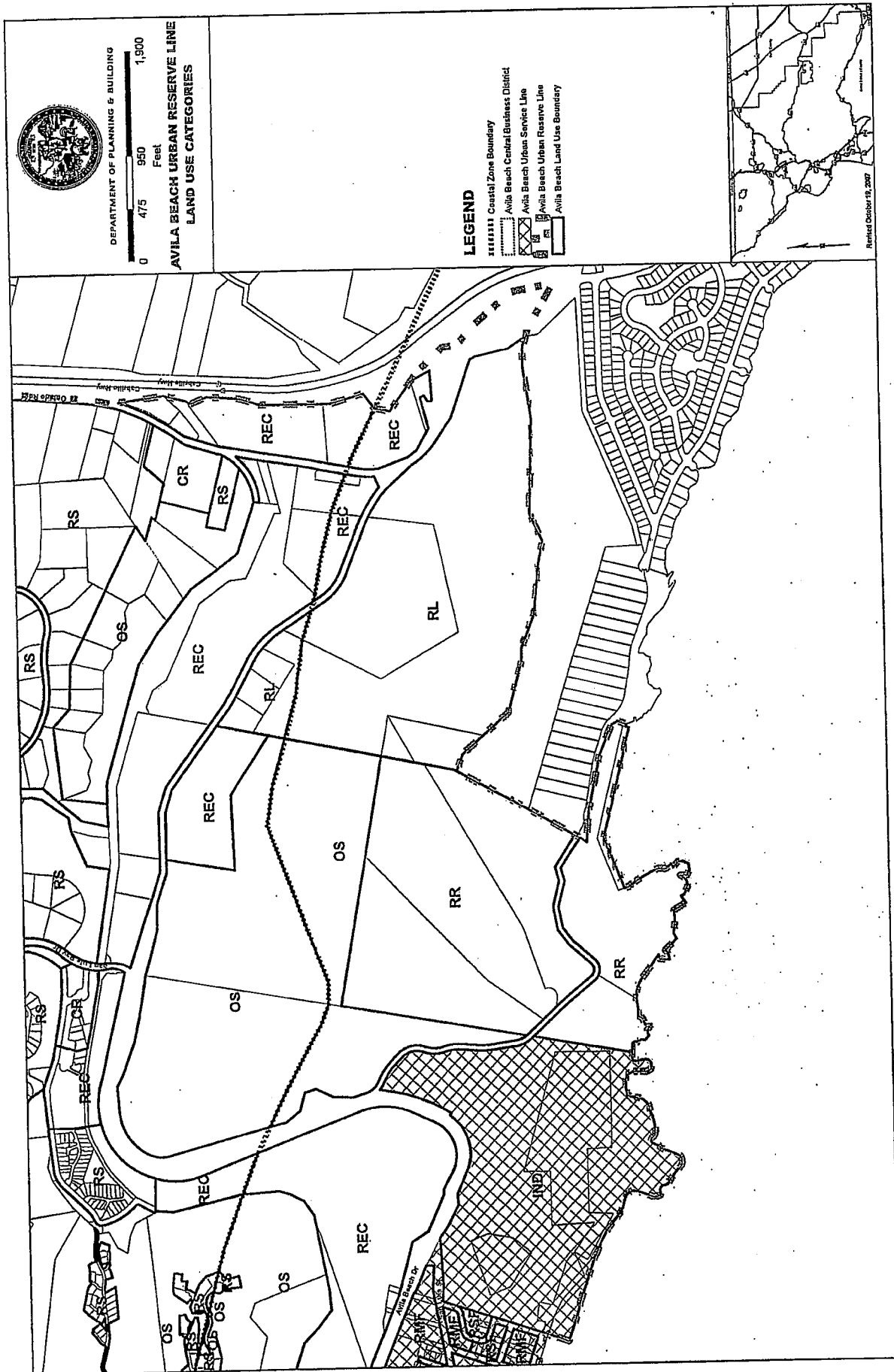
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3-31-99 ASSESSMENT PURPOSES ONLY.

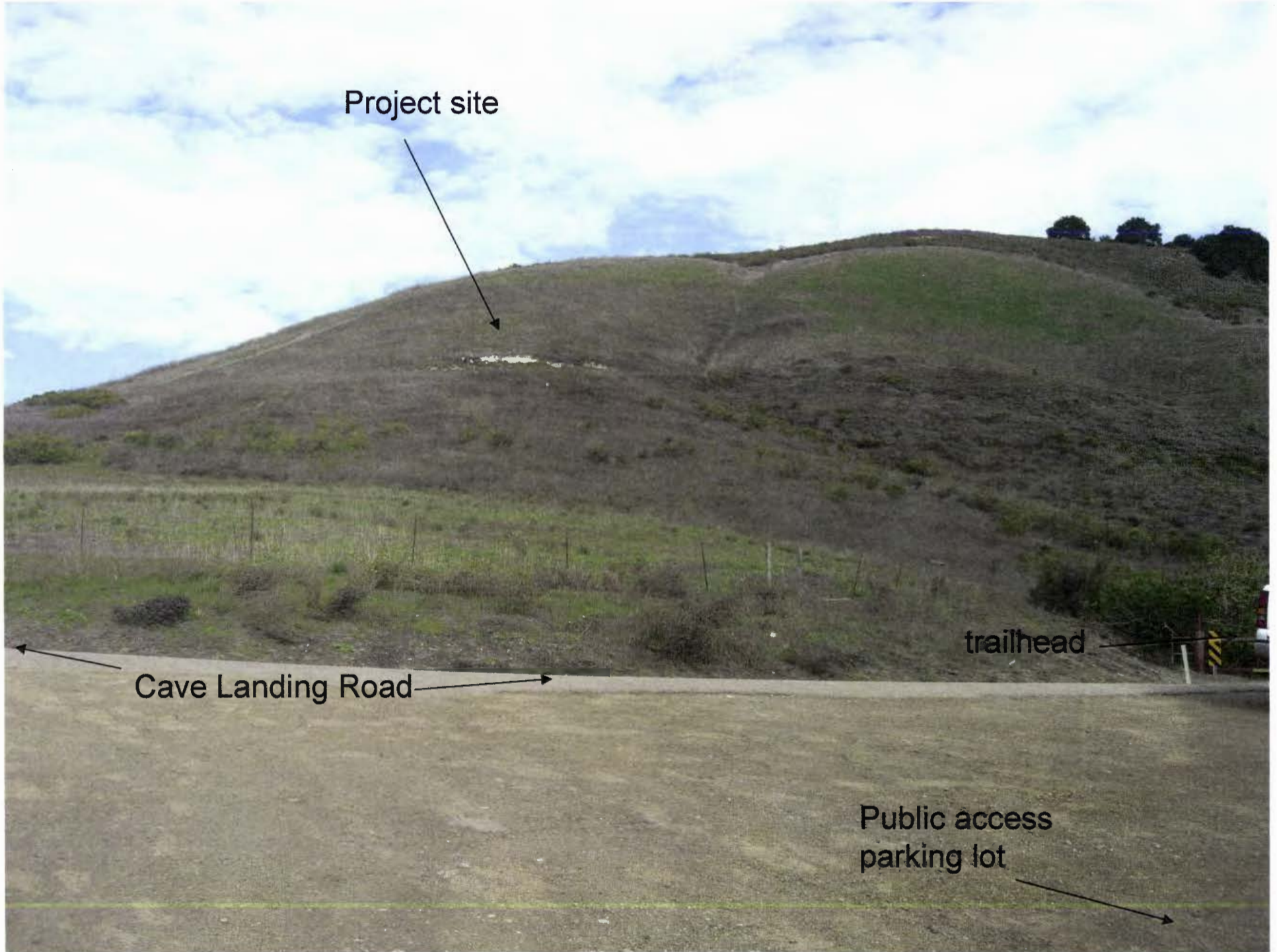
TRACT 699, R.M. Bk. 10, Pg. 12.
W. L. BEEBE TRACT PTN., R.M. Bk. B, Pg. 68.
RANCHO SAN MIGUELITO, R.M. Bk. A, Pg. 38.

DETAIL "A"
(SCALE 1"=200')

ASSESSOR'S MAP COUNTY OF
SAN LUIS OBISPO, CA
BOOK 076 PAGE 231







View from parking area



View from trailhead/parking area

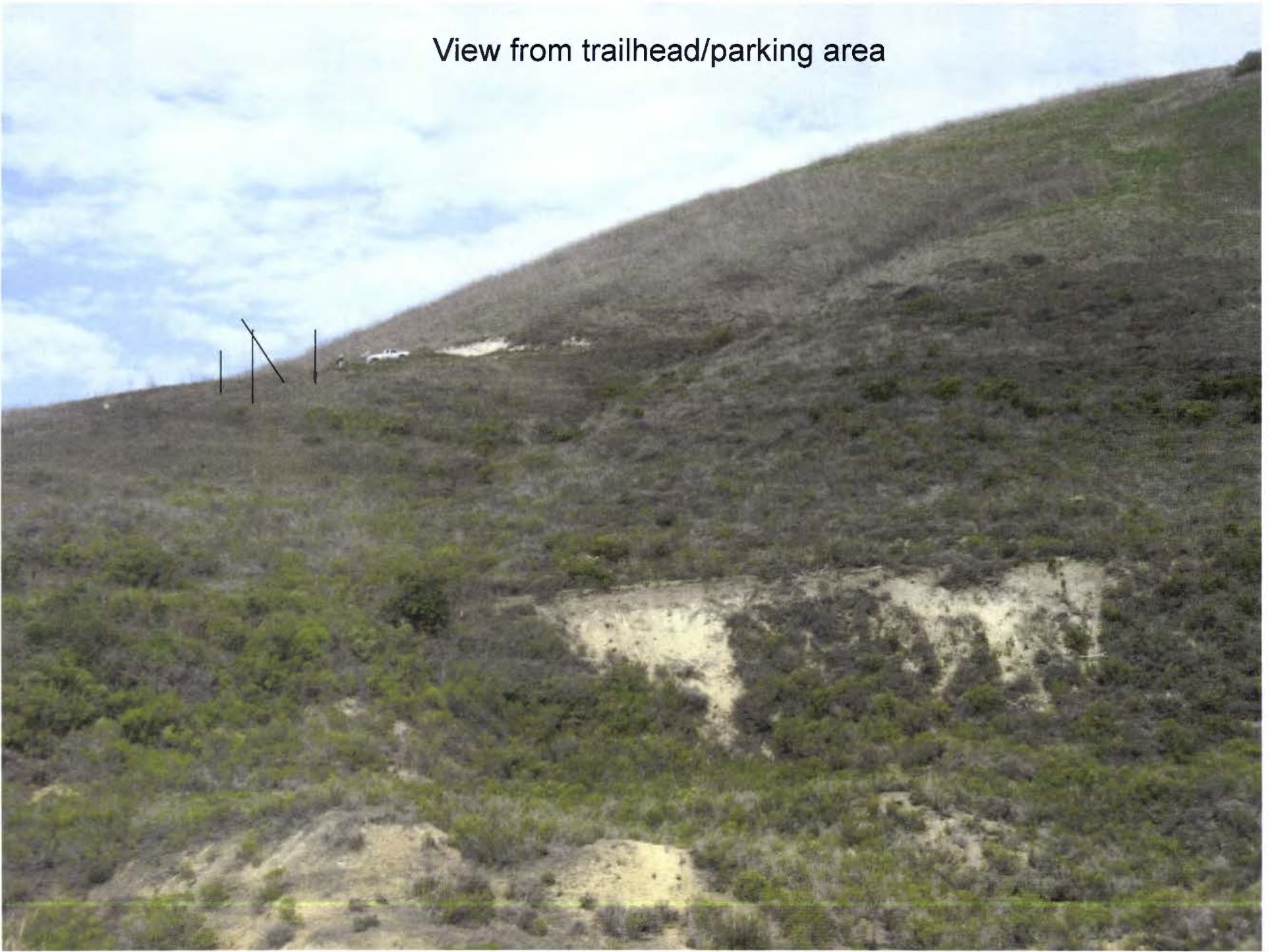




Exhibit 8
Page 4 of 8





Exhibit 8
Page 6 of 8







View #1: Looking East from Cave Landing Road, camera position on East side of roadway and is in-line with Parcel 2's North-west property line. Camera elevation 213.00'. Photograph taken April 5, 2010 by LGA.

View #2: Looking East from Cave Landing Road, camera position on East side of roadway and is located in front of the site's existing entry gate. Camera elevation 205.00'. Photograph taken April 5, 2010 by LGA.

View #3: Looking North from Cave Landing Road, camera position is on the South side of roadway adjacent to the entrance to the Pirate's Cove dirt parking lot. Camera elevation 173.00'. Photograph taken April 5, 2010 by LGA.

View #4: Looking East from the public parking lot at the entrance to the Cal Poly Research Pier, camera position on East side of roadway and is in-line with Parcel 2's North-west property line. Camera elevation 34.00'. Photograph taken July 13, 2010 by LGA.

View #5: Looking East from Avila Beach Pier, the camera position is located approximately 650' along the pier length. Camera elevation 31.00'. Photograph taken April 5, 2010 by LGA.

View #6: Looking East from the Avila Bay Club private driveway, camera position is above the North-west side of Avila Beach Drive along the private driveway entrance to the Avila Bay Club. Camera elevation 48.00'. Photograph taken April 5, 2010 by LGA.

View #7: Looking East from Cave Landing Road, camera position on West side of roadway and is in-line with Parcel 2's North-west property line. Camera elevation 213.00'. Photograph taken June 29, 2011 by RRM Design Group.

View #8: Looking North from Cave Landing Road, camera position is on the South side of roadway adjacent to the entrance to the Pirate's Cove dirt parking lot. Camera elevation 173.00'. Photograph taken June 29, 2011 by RRM Design Group.

MASTER KEY PLAN

CAVE LANDING | RANCH

MC CARTHY VISUAL SIMULATIONS SLO COUNTY PERMIT #DRC 2009-00095

rrm design group
creating environments people enjoy



23 NOVEMBER 2011

Cave Landing Ranch

Views From Parcels 1, 2, and 3



View 1- Looking East From Cave Landing Road N.T.S



View 2- Looking East From Cave Landing Road N.T.S



View 3 N.T.S.



EXHIBIT A-1
 COMPILATION REPORT
 VISUAL ANALYSIS
 23 NOVEMBER 2011
 rrm group

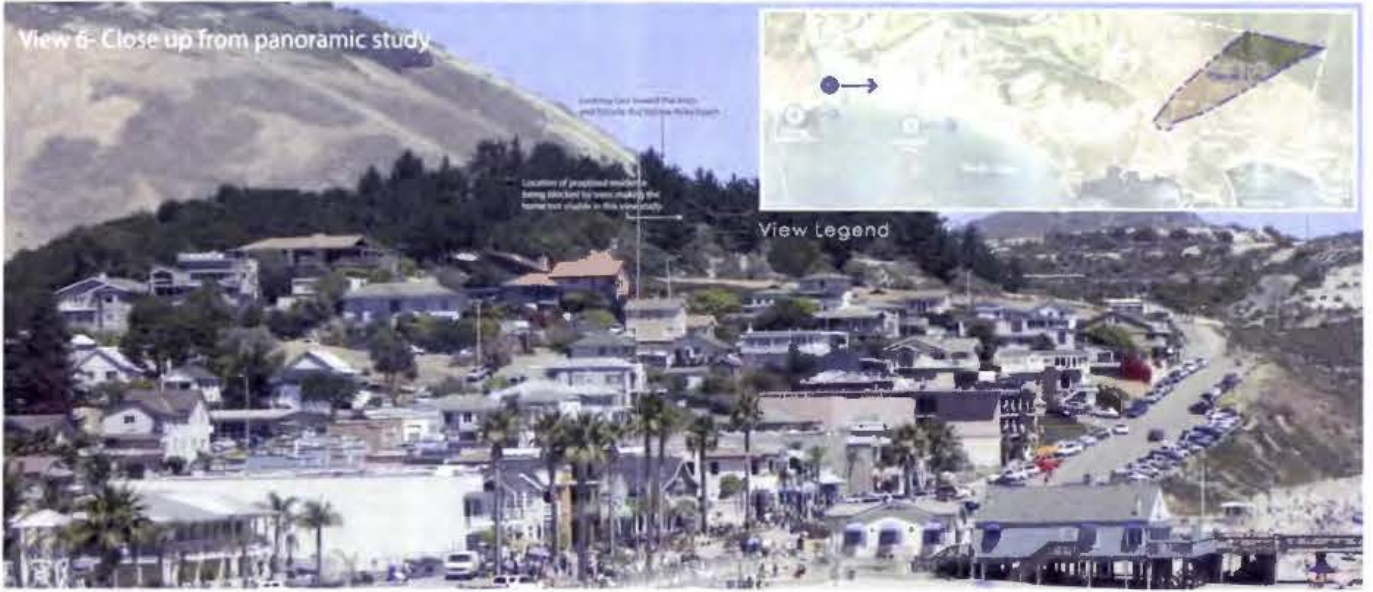
LEONARD GRANT, ARCHITECT
 LICENSE NUMBER C26973



View 4- Looking West From Cal Poly Research Pier



View 5- Looking N.West From Middle of Avila Beach Pier



View 6- Looking West From Avila Bay Golf Club Entrance



EXHIBIT B-1
COMPILATION REPORT
VISUAL ANALYSIS
23 NOVEMBER 2011
rrm group

LEONARD GRANT, ARCHITECT
LICENSE NUMBER C26973



View legend



View #1 from front property line at entry gate



View legend



View #2 from Pirate's Cove parking lot



EXHIBIT C-3
 COMPILATION REPORT
 VISUAL ANALYSIS
 23 NOVEMBER 2011
 rrm design group



View #3: South view from Cal Poly research pier



EXHIBIT C-4
 COMPILATION REPORT
 VISUAL ANALYSIS
 23 NOVEMBER 2011
 rrm design group



View #4: South view from Avila Beach pier

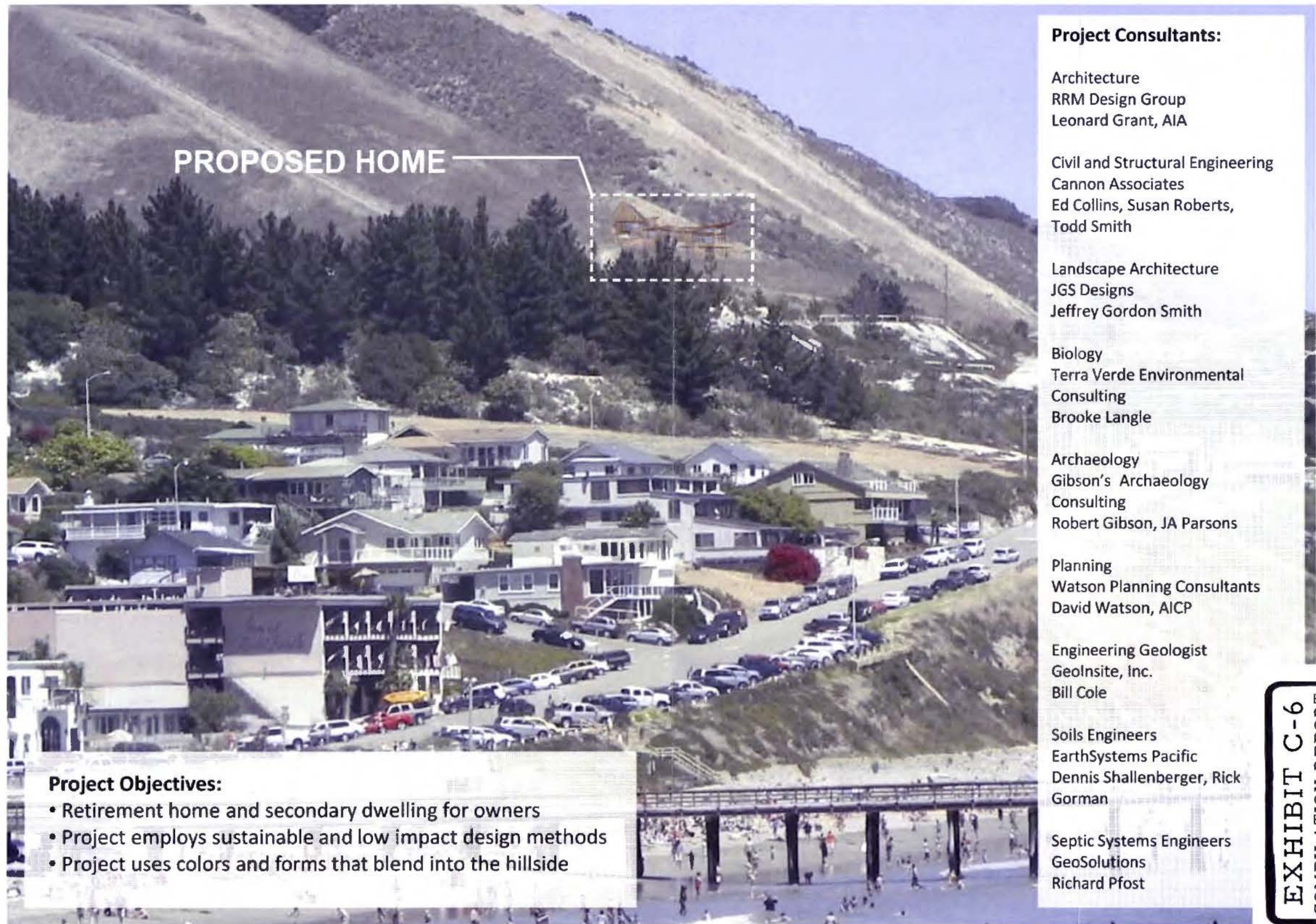
Location of proposed residence as blocked by trees. Home not visible in this view study.



EXHIBIT C-5
 COMPILATION REPORT
 VISUAL ANALYSIS
 23 NOVEMBER 2011
 rrm design group



View #5: South view from Avila Bay Club entrance



PROPOSED HOME

Project Objectives:

- Retirement home and secondary dwelling for owners
- Project employs sustainable and low impact design methods
- Project uses colors and forms that blend into the hillside

Project Consultants:

Architecture
RRM Design Group
Leonard Grant, AIA

Civil and Structural Engineering
Cannon Associates
Ed Collins, Susan Roberts,
Todd Smith

Landscape Architecture
JGS Designs
Jeffrey Gordon Smith

Biology
Terra Verde Environmental
Consulting
Brooke Langle

Archaeology
Gibson's Archaeology
Consulting
Robert Gibson, JA Parsons

Planning
Watson Planning Consultants
David Watson, AICP

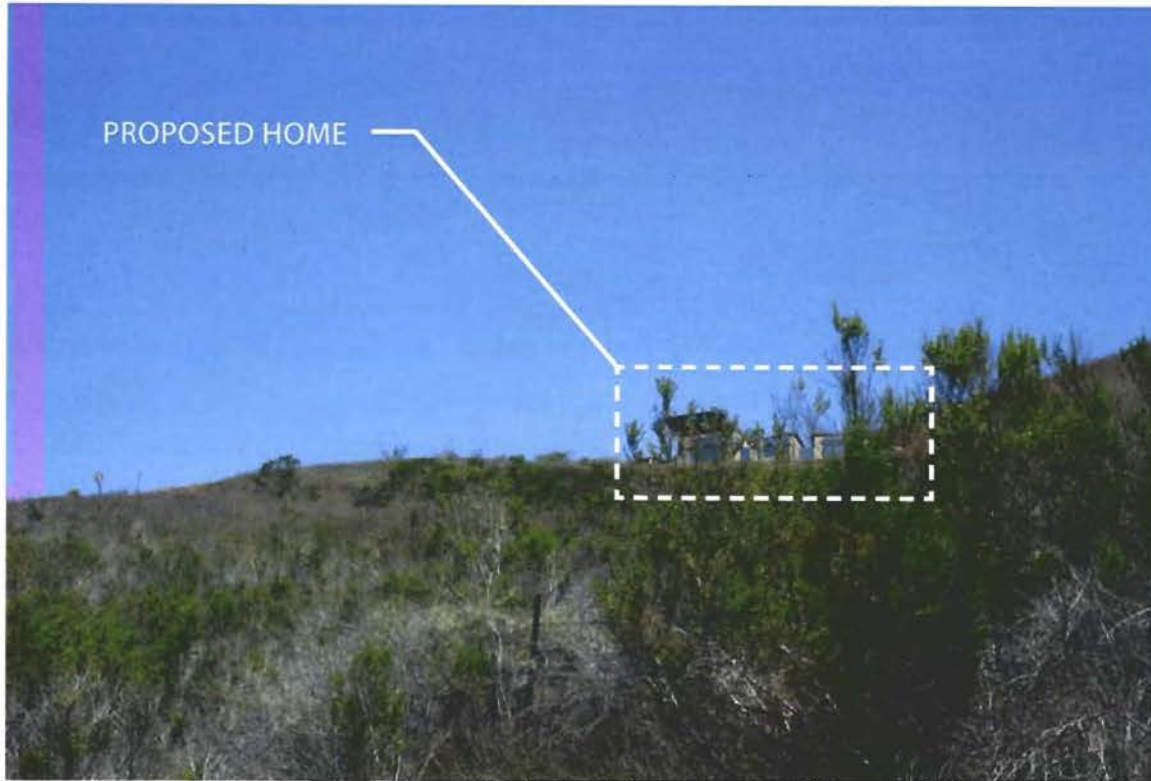
Engineering Geologist
GeoInsite, Inc.
Bill Cole

Soils Engineers
EarthSystems Pacific
Dennis Shallenberger, Rick
Gorman

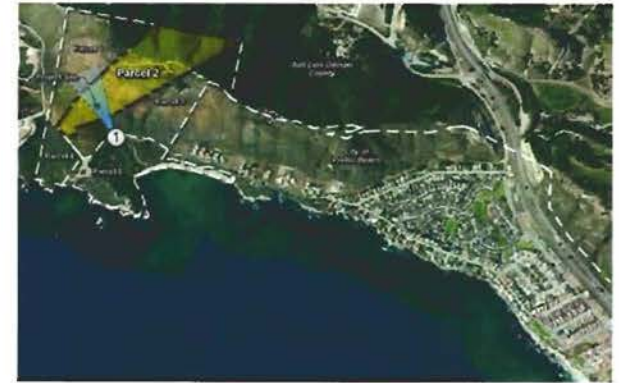
Septic Systems Engineers
GeoSolutions
Richard Pfost

EXHIBIT C-6
COMPILATION REPORT
VISUAL ANALYSIS
23 NOVEMBER 2011
rrm design group





VIEW FROM BLUFFS TRAIL BENEATH PROPOSED HOME



VIEW LEGEND

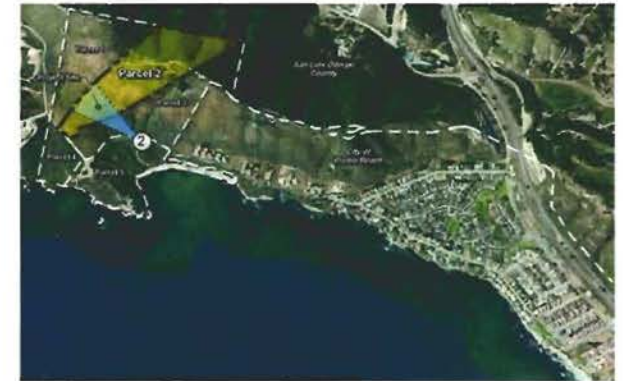


EXISTING CONDITION

A-1



VIEW FROM BENCH ON BLUFFS TRAIL



VIEW LEGEND



EXISTING CONDITION

A-2



VIEW FROM PUBLIC TRAIL ADJACENT TO CAVE LANDING ROAD IN THE BLUFF'S DEVELOPMENT



VIEW LEGEND



EXISTING CONDITION

A-3



VIEW FROM PALISADES PARK



VIEW LEGEND



EXISTING CONDITION

A-4



VIEW FROM PALISADES PARK TENNIS COURT PARKING LOT



VIEW LEGEND

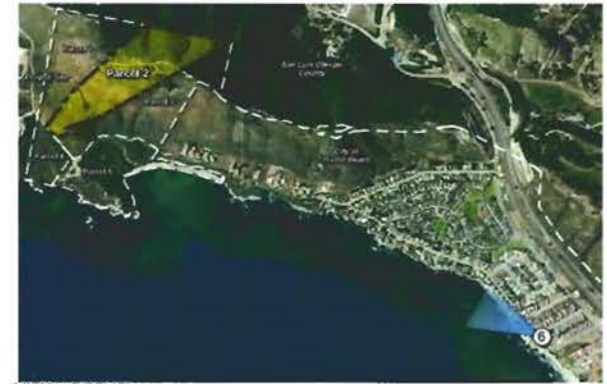


EXISTING CONDITION

A-5



VIEW FROM PALISADES BLUFF PUBLIC WALKWAY



VIEW LEGEND

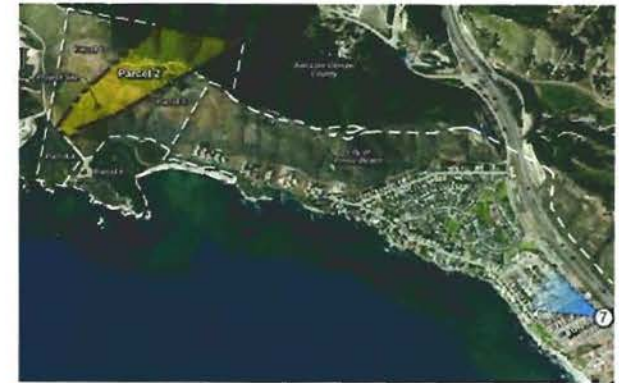


EXISTING CONDITION

A-6



VIEW FROM BEACHCOMBER PARKING LOT ALONG SHELL BEACH RD.



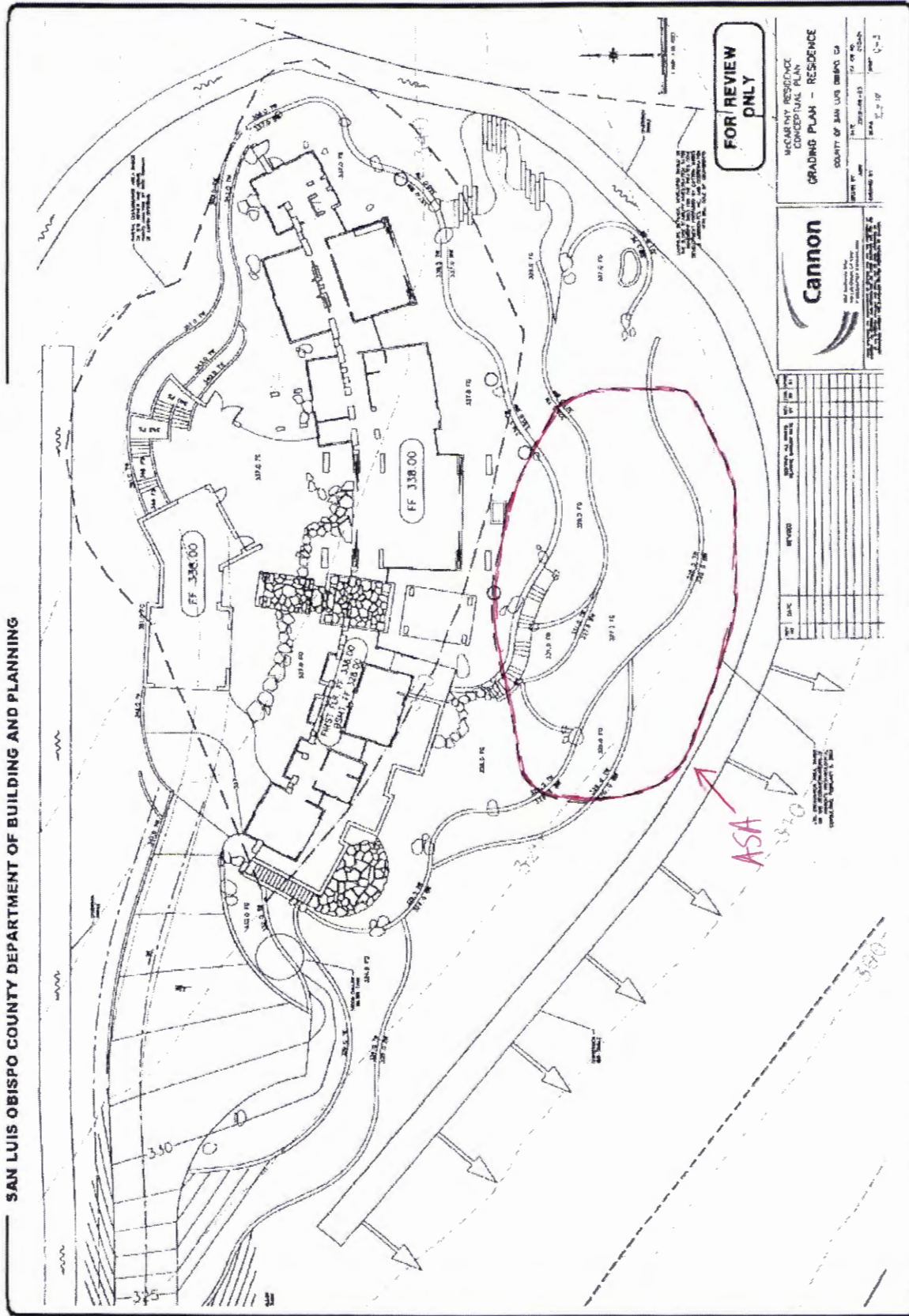
VIEW LEGEND



EXISTING CONDITION

A-7

SAN LUIS OBISPO COUNTY DEPARTMENT OF BUILDING AND PLANNING



FOR REVIEW ONLY

McKENNEY RESIDENCE
CONCEPTUAL PLAN
GRADING PLAN - RESIDENCE
COUNTY OF SAN LUIS OBISPO, CA
DATE: 2009-08-15
SCALE: 1" = 10'

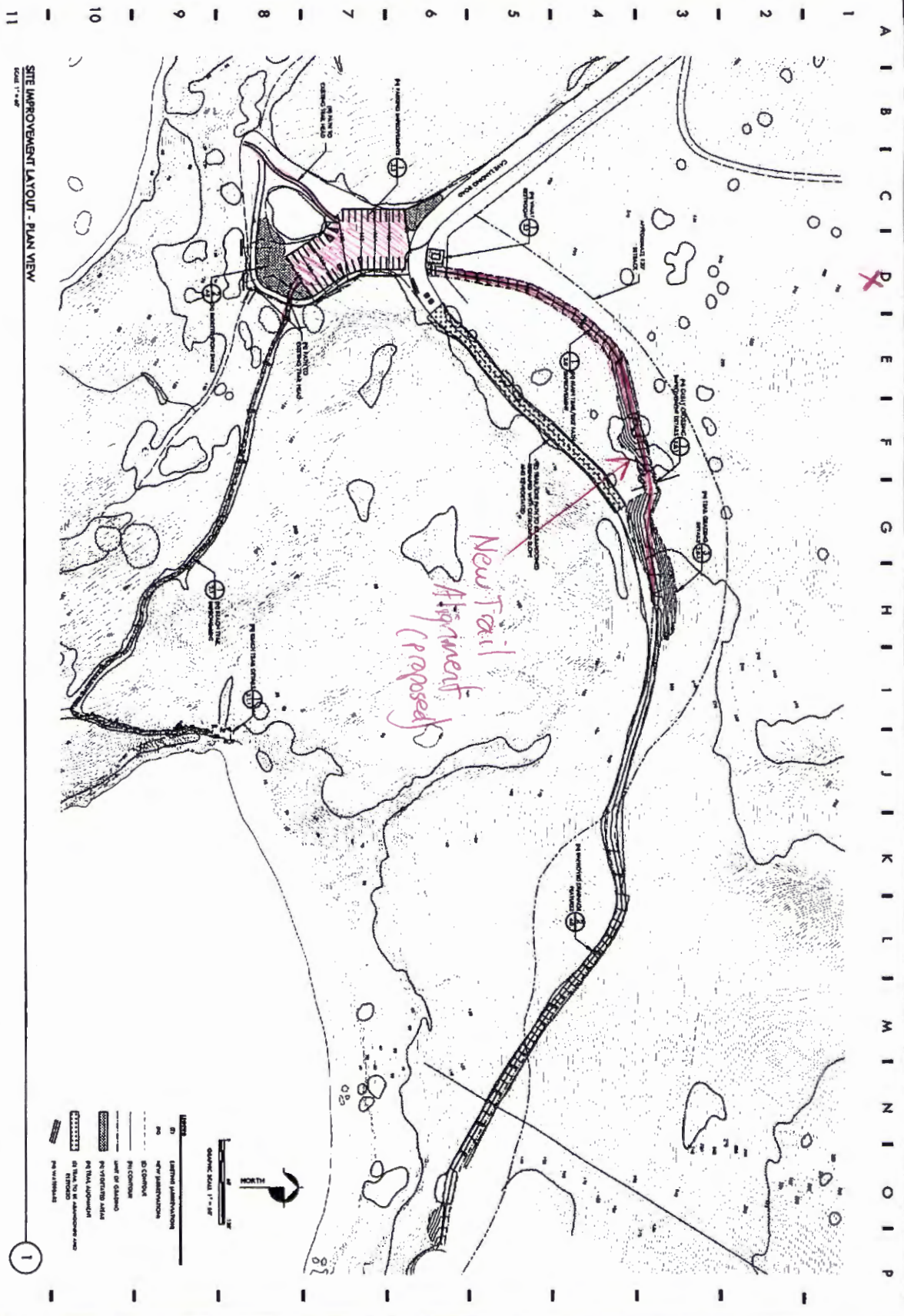


NO.	DATE	DESCRIPTION	BY	CHK
1	2009-08-15	ISSUED FOR PERMIT	ASA	
2				
3				
4				
5				
6				
7				
8				
9				
10				

EXHIBIT
Grading Plan-Residence



PROJECT
Conditional Use Permit
DRC2009-00095 / McCarthy



SITE IMPROVEMENT LAYOUT - PLAN VIEW
Scale 1" = 40'

1

LEGEND

- EXISTING LANDSCAPING
- NEW LANDSCAPING
- EXISTING PAVEMENT
- NEW PAVEMENT
- EXISTING SIDEWALK
- NEW SIDEWALK
- EXISTING DRIVEWAY
- NEW DRIVEWAY
- EXISTING UTILITY
- NEW UTILITY
- EXISTING FENCE
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- NEW SAND
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- EXISTING ASPHALT
- NEW ASPHALT
- EXISTING CONCRETE
- NEW CONCRETE
- EXISTING BRICK
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- EXISTING TILE
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- EXISTING FEEL
- NEW FEEL
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- NEW TASTE
- EXISTING SMELL
- NEW SMELL
- EXISTING TOUCH
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- EXISTING SMELL
- NEW SMELL
- EXISTING TOUCH
- NEW TOUCH

	PROJECT CAVE LANDING BEE PARK IMPROVEMENTS CAVE LANDING ROAD SAN LUIS OBISPO, CALIFORNIA	OWNER COUNTY OF SAN LUIS OBISPO PARKS DIVISION ATTN: BRADY COOPER 1007 SANTA ROSA STREET SAN LUIS OBISPO, CA	PREPARED BY PRELIMINARY SITE IMPROVEMENT PLAN
	DATE MAY 2011	SCALE 1" = 40'	PROJECT NO. 11



RECEIVED

JUL 26 2012

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

July 26, 2012

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California Coastal Commission
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Refer To File #: 400494-0001

**Re: Coastal Commission Appeal No. A-3-SLO-11-061 (Rob and Judi McCarthy
Single Family Residence)**

Dear Mr. Carl:

As you know, we represent Rob and Judi McCarthy, the owners of the Pirates Cove Property (sometimes called the "Ontario Ridge" Property in County of San Luis Obispo Planning Documents), situated between the eastern boundary of the Avila Beach Community Services District and the western boundary of the City of Pismo Beach (the "Property").

Mr. and Mrs. McCarthy are the applicants for a Coastal Development Permit ("CDP"), to construct a single family residence on a parcel situated within Pirates Cove. For ease of reference, we are submitting with this letter copies of our prior letters of January 17 and March 12, 2012, and the Commission Staff's letter of February 17, 2012. As you also know, the CDP, which was approved by the County of San Luis Obispo, has been appealed to the Coastal Commission. It is our understanding that the appeal may be heard at the August Commission meeting, and that the staff may recommend approval of the CDP if water is provided to the project by means of an on-site well. Although it remains our position that our clients, consistent with the Commission-certified Local Coastal Program ("LCP"), have the right to obtain service from CSA 12, we do not intend to object to approval of the project as so conditioned. We will, however, be seeking in the future to connect to CSA 12. Our hope, after we have explained our position, is that the Commission will indicate at the hearing on the project its agreement in principle with our clients' right to connect to CSA 12 in accordance with the LCP.

It has been the position of the staff that the property lies outside the Avila Beach Urban Services Line ("USL") and therefore cannot, consistent with the LCP, connect to CSA 12. The staff's position has been based upon Public Works Policy 1 of the LCP, which reads:

New development (including divisions of land) shall demonstrate that adequate public or private service capacities are available to serve the proposed development. Priority shall be given to infilling within existing subdivided areas.

Prior to permitting all new development, a finding shall be made that there are sufficient services to serve the proposed development given the already outstanding commitment to existing lots within the urban service line for which services will be needed consistent with the Resource Management System where applicable. Permitted development outside the USL shall be allowed only if:

- a. It can be serviced by adequate private on-site water and waste disposal systems; and
- b. The proposed development reflects that it is an environmentally preferable alternative.

The applicant shall assume responsibility in accordance with county ordinances or the rules and regulations of the applicable service district or other providers of services for costs of service extensions or improvements that are required as a result of the project. Lack of proper arrangements for guaranteeing service is grounds for denial of the project or reduction of the density that could otherwise be approved consistent with available resources. [THIS POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTION 23.04.021c (DIVISIONS OF LAND), 23.04.430 AND 23.04.432 (OTHER DEVELOPMENT) OF THE CZLUO.]

[Amended 2004, Ord. 3006]

As Policy 1 itself states explicitly, the Policy is implemented in part via sections to 23.04.430 and 23.04.432 of the County's Coastal Zone Lane Use Ordinance ("CZLUO"). The CZLUO is a part of the Commission-certified LCP.

Section 23.04.430 of the CZLUO reads as follows:

A land use permit for new development that requires water or disposal of sewage shall not be approved unless the applicable approval body determines that there is adequate water and sewage disposal capacity available to serve the proposed development, as provided by this section. Subsections a. and b. of this section give priority to infilling development within the urban service line over development proposed between the USL and URL. In communities with limited water and sewage disposal service capacities as defined by Resource Management System alert levels II or III:

- a. A land use permit for development to be located between an urban services line and urban reserve line shall not be approved unless the approval body first finds that the capacities of available water supply and sewage disposal services are sufficient to

accommodate both existing development, and allowed development on presently-vacant parcels within the urban services line.

b. Development outside the urban services line shall be approved only if it can be served by adequate on-site water and sewage disposal systems, except that development of a single-family dwelling on an existing parcel may connect to a community water system if such service exists adjacent to the subject parcel and lateral connection can be accomplished without trunk line extension.

Section 23.04.432 reads:

To minimize conflicts between agricultural and urban land uses, development requiring new community water or sewage disposal service extensions beyond the urban services line shall not be approved.

As shown above, subdivision a. of section 23.04.430 authorizes approval of a land use permit for development between an urban services line and urban reserve line where the approval body finds that the capacities of available water supply and sewage disposal services are sufficient to accommodate both existing development and allow development on presently vacant parcels within the urban services line. The latest Municipal Service Review for the Avila Beach Community Services District, prepared by the County of San Luis Obispo Local Agency Formation Commission, establishes that the water supply and sewage capacities are sufficient to accommodate both existing development and allowed development within the urban services line. (See pp. 16-17; the Review, shown online as a "draft," was later finally approved by the County LAFCO. A copy of the Review is submitted herewith.)

Further, the McCarthys' predecessor-in-interest arranged for the transfer of four (4) acre-feet of Lake Lopez water entitlement previously granted to the City of Pismo Beach to CSA 12 for the benefit of the McCarthys' parcel and three other parcels that comprise the entirety of the Pirates Cove Property. We will forward to you documentation of the water rights transfer under separate cover.

As for subdivision b., it provides for approval of development outside the urban services line if it can be served by adequate on-site water and sewage disposal systems, **except** that development of a **single-family dwelling on an existing parcel** may connect to a community water system if such service exists adjacent to the subject parcel and lateral connection can be accomplished without trunk line extension.

The property lies within CSA 12, a "community water system," and adjacent to the CSA 12 water delivery infrastructure system. A connection to the system may be accomplished by a lateral connection without a trunk line extension. (See Cannon Civil Engineering letter, also enclosed.) Therefore, the certified LCP, without any amendment thereto, authorizes service of the project by CSA 12.

It should be noted in this context that the preferred definition of "adjacent" (Merriam-Webster's Collegiate Dictionary (10th ed. 1994) is: "not distant: NEARBY (the City and adjacent suburbs)." The preferred Webster's definition of "adjacent" is consistent with the preferred definition found in Black's Law Dictionary:

Lying near or close to; contiguous. The difference between adjacent and adjoining seems to be that the former implies that the two objects are not widely separated, though they may not actually touch, while adjoining imports that they are so joined or united to each other that no third object intervenes.

The County's LCP does not define "adjacent" and there is no reason to construe the word differently from the meaning accorded by Webster's or by Black's Law Dictionary. The LCP does define "contiguous," which requires not only adjacency (i.e., that the property is near), but also that the relevant properties share a common border for at least 25 feet. "Adjacent" and "contiguous" have different meanings. Therefore, the property is adjacent to the CSA 12 water system.

Finally, as established by the letter from Cannon Civil Engineering, the development of the McCarthys' single-family dwelling can be accomplished by means of a lateral connection, without a trunk line extension. For that reason, connection to CSA 12 is consistent with section 23.04.432, since that section precludes only such extensions of a line.

As stated, above, we intend to interpose no objection to a Commission approval that imposes a condition requiring water service by means of an on-site well, and encourage the Commission to approve the CDP for the McCarthys' proposal at the earliest hearing possible.

As also stated, we would appreciate the Commission's confirmation at such hearing of the right of our clients to connect to CSA 12 precisely as authorized by the Commission-certified LCP.

We look forward to working with you further on the consideration of our clients' application, and to answer any questions the Commission might have about the project.

Thank you, as always, for your consideration of our letter.

Very truly yours,

A handwritten signature in cursive script that reads "Gregory W. Sanders".

Gregory W. Sanders
of Nossaman LLP

GWS/JJF/rrg
Enclosures