

**COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT**

DATE: August 9, 2017

TO: Planning Commission

FROM: Planning Staff

SUBJECT: EXECUTIVE SUMMARY: Consideration of a Coastal Development Permit and Design Review Permit, pursuant to Sections 6328.4 and 6565.3 of the San Mateo County Zoning Regulations, respectively, to allow construction of a new 4,742 sq. ft. two-story single-family residence, plus a 651 sq. ft. attached garage, subsequent to the demolition of the existing residence, on a legal 10,548 sq. ft. parcel. No significant trees are proposed for removal and only minimal grading is involved. The project is appealable to the California Coastal Commission.

County File Number: PLN 2016-00317 (Reilly)

PROPOSAL

The applicant, Mark Reilly, requests approval to construct a new 4,742 sq. ft. two-story single-family residence, plus a 651 sq. ft. attached garage, subsequent to the demolition of the existing residence, on a legal 10,548 sq. ft. parcel. The two-story home includes a two-car garage, great room, office, guest bedroom and bathroom, powder room, outdoor lounge and kitchen, mudroom, gym and laundry room on the first floor, while the second floor accommodates a master bedroom and bath, three additional bedrooms and two bathrooms, kitchen, dining and living rooms. The proposed development is located at 146 La Grande Avenue. The project site is located in the California Coastal Commission's appeals jurisdiction.

RECOMMENDATION

That the Planning Commission approve the Coastal Development Permit and Design Review Permit, County File Number PLN 2016-00317, based on and subject to the required findings and conditions of approval listed in Attachment A.

SUMMARY

The project site consists of an existing two-story single-family residence with a detached playhouse located at 146 La Grande Avenue in the unincorporated Moss Beach area of San Mateo County, within a general area of developed parcels with single-family homes

of various architectural styles. The current residence will be demolished to accommodate a larger structure. La Grande Avenue is northward, San Ramon Avenue is eastward, and developed parcels to the west and south bound this parcel.

The project conforms with applicable policies of the County's General Plan and the San Mateo County Local Coastal Program (LCP). Regarding the General Plan, the project complies with applicable policies, specifically those relating to water and wastewater supply. The project already has connections to the Montara Water and Sanitary District (MWSD) for water and wastewater supply, where MWSD has indicated that there is adequate capacity to further accommodate the project. Regarding the LCP, the project complies with policies regarding infill development, hazards, shoreline access and design review standards. The property is within the existing Riviera Ocean Villa Tract Subdivision (recorded in 1908) in the urban area of Moss Beach, where public facilities, services and utilities are available.

The Coastside Design Review Committee (CDRC) considered the project at the May 11, 2017 meeting where the CDRC determined that the project complies with applicable Design Review Standards to warrant a recommendation for project approval. The project respects the scale of other larger homes in the neighborhood while the building dimensions, shape and form, and architectural details are complimentary to other homes in the neighborhood. The project achieves a higher quality of design and construction than the current residence, and elevates the character of the neighborhood.

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PROPOSAL

The applicant, Mark Reilly, requests approval to construct a new single-family residence, subsequent to the demolition of the existing residence, on a legal 10,548 sq. ft. parcel. The proposed two-story home includes a two-car garage, great room, office, guest bedroom and bathroom, powder room, outdoor lounge and kitchen, mudroom, gym and laundry room on the first floor, while the second floor accommodates a master bedroom and bath, three additional bedrooms and two bathrooms, kitchen, dining and living rooms. No significant trees are proposed for removal and only minimal grading is involved. The project site is located in the Geological Hazard (GH) Zoning District and in the California Coastal Commission's appeals jurisdiction.

RECOMMENDATION

That the Planning Commission approve the Coastal Development Permit and Design Review Permit, County File Number PLN 2016-00317, based on and subject to the required findings and conditions of approval listed in Attachment A.

BACKGROUND

Report Prepared By: Dennis P. Aguirre, Project Planner, Telephone 650/363-1867

Owners: Julia Paige and Dan Spangler

Applicant: Mark Reilly

Location: 146 La Grande Avenue, Moss Beach

APN: 037-258-260

Parcel Size: 10,548 sq. ft.

Parcel Legality: Building Permit #A-11326 was issued in 1967 for construction of the existing residence. A formal merger of the parcels was recorded on July 20, 2017.

Existing Zoning: R-1/S-17/DR/GH/CD (Single-Family Residential District/S-17 Combining District with 5,000 sq. ft. minimum parcel size/Design Review/Geological Hazard District/Coastal Development)

General Plan Designation: Medium Density Residential (1 to 8.7 dwelling units/acre)

Sphere-of-Influence: City of Half Moon Bay

Existing Land Use: Developed Single-Family Residential Parcel

Water and Sewer Services: Montara Water and Sanitary District

Flood Zone: FEMA Flood Insurance Rate Map designation indicates parcel as Zone X, Areas of Minimal Flooding, Community Panel No. 06081C0119E, dated October 16, 2012.

Environmental Evaluation: Categorically exempt pursuant to Section 15303, Class 3 of the California Environmental Quality Act (CEQA) Guidelines, related to new construction of small structures, including single-family residences in an urban residential zone. Further discussion is in Section B of this report.

Setting: The project site contains an existing two-story single-family residence with a detached playhouse located, within a general area of developed parcels with single-family homes of various architectural styles. The current residence will be demolished to accommodate a larger residence. La Grande Avenue is westward, San Ramon Avenue is eastward, and developed parcels to the south bound this parcel.

Chronology:

<u>Date</u>	<u>Action</u>
August 1, 2016	- Application submitted. The Geotechnical Report initially provided to staff was for an addition to the existing residence.

- May 11, 2017 - Coastside Design Review Committee (CDRC) considers the project and recommends approval based on its conformance with Design Review District Standards.
- July 5, 2017 - A revised version of the Geotechnical Report (Attachment D) by the applicant's Geotechnical Consultant was submitted to indicate that the site is suitable for development for a new residence, contingent upon the implementation of geotechnical recommendations.
- July 20, 2107 - Parcel merger recorded.
- July 29, 2017 - Application deemed complete after County geotechnical review.
- August 9, 2017 - Planning Commission public hearing.

DISCUSSION

A. **KEY ISSUES**

1. **Conformance with the County General Plan**

Upon review of the applicable provisions of the General Plan, staff has determined that the project complies with all General Plan Policies, including the following:

Water Supply Policy 10.1 (*Coordinate Planning*) requires the County to coordinate water supply planning with land use and wastewater management planning to assure that the supply and quality of water is commensurate with the level of development planned in the area. The Montara Water and Sanitary District (MWSD) has provided staff with a project review comment, including requirements to obtain a Domestic Water/Fire Protection Connection and submittal of fire flow calculations from a Certified Fire Protection Contractor. The MWSD may also require that the existing water meter and service line be upgraded in accordance with MWSD regulations, to include payment of fees prior to the issuance of a connection permit. The addition of a backflow device to the service line will also be required during construction (See Condition Nos. 19 through 22).

Wastewater Policies 11.1 and 11.2 (*Adequate Wastewater Management and Coordinate Planning*) require the County to plan for the provision of adequate wastewater management facilities to serve development in order to protect public health and water quality and to coordinate wastewater management planning with land use and water supply planning to assure that the capacity of sewerage facilities is commensurate with the level of

development planned for an area. The MWSD has provided staff with a project review comment, including requirements to obtain a Sewer Remodel Permit, TV inspection, potential repairs or upgrades to current MWSD Standards and temporary capping of the sewer lateral during construction, according to MWSD Sanitary Engineers Recommendations (See Condition No. 22).

2. Conformance with the Local Coastal Program

A Coastal Development Permit is required pursuant to Section 6328.4 of the County Zoning Regulations for development in the Coastal Development (CD) District. The parcel is not located in a scenic corridor, nor does the property contain or adjoin an area of sensitive habitat. The site is located within the Geological Hazard (GH) Zoning District. Staff has determined that the project is in compliance with applicable Local Coastal Program (LCP) Policies, elaborated as follows:

a. Locating and Planning New Development Component

Policy 1.18 (*Location of New Development*) directs new development to existing urban areas in order to discourage urban sprawl and maximize the efficiency of public facilities, services and utilities. Also, the policy requires new development to be concentrated in urban areas by requiring the “infilling” of existing residential subdivisions. Policy 1.19 (*Definition of Infill*) defines infill as the development of vacant land in urban areas that is subdivided and zoned for development at densities greater than one dwelling unit per 5 acres, and/or served by sewer and water. The project complies with these policies as it involves the replacement of the existing residence, where public facilities, services and utilities are available, with a new residence on a newly merged parcel. The project is also consistent with LCP Policies which encourage the merger of contiguous parcels.

b. Policy 1.23 (*Timing of New Housing Development in the Midcoast*) limits the maximum number of new dwelling units built in the urban Midcoast to 40 units per calendar year so that roads, public services and facilities and community infrastructure are not overburdened resulting from new residential development. Staff estimates that there have been five building permits for dwelling units so far in 2017. This permit is active for 5 years; therefore, the project is likely to be within this limit.

Policy 1.36 (*Half Moon Bay Airport Influence Area Requirements – Map 1.5*) locates the project site in the Half Moon Bay Airport Influence Area. Although it is in this area, the proposed development is outside of Airport Safety Zones based on the 1996 San Mateo

County Comprehensive Airport Land Use Plan. Regarding noise, the site is within the 55-60 Community Noise Equivalent Level (CNEL) noise contour where single-family residential uses are allowed.

c. Visual Resources Component

Visual Resources Policy 8.12(a) (*General Regulations*) applies the Design Review Zoning District to urbanized areas of the Coastal Zone, which includes Moss Beach. The project is, therefore, subject to Section 6565.20 of the Zoning Regulations. As discussed in Section 3.b of this report, the Coastside Design Review Committee (CDRC) considered this project at the regularly scheduled CDRC meeting on May 11, 2017, and determined that the project is in compliance with applicable Design Review Standards, and recommended approval. See further discussion in Section 3.b.

Visual Resources Policy 8.13 (*Special Design Guidelines for Coastal Communities*) establishes design guidelines for Montara, Moss Beach, El Granada, and Miramar. The proposed home complies with these guidelines as follows:

- (1) On-site grading is not extensive and only limited to standard construction activity.
- (2) The proposed materials for the home, such as cedar shingles and cedar boards, have a natural appearance.
- (3) The proposed home design uses gable roofs, including non-reflective, standing seam metal as the primary roof material.
- (4) The building dimensions, shape and form, and architectural details bring the proposed structure to scale with the rest of the homes in the neighborhood.

d. Hazards Component

Policy 9.3 (*Regulation of Geologic Hazard Areas*) requires the application of the Resource Management (RM) Zoning Ordinance, Section 6326.3 (*Seismic Fault/Fracture Area Criteria*) and Section 6326.4 (*Slope Instability Area Criteria*) to sites located in a designated geologic hazard area. Single-family residential structures are allowed in these areas if no other locations susceptible to such hazards are reasonably available on the site for development and subject to the submittal of a detailed geologic site investigation prepared by a geologist registered in the State of California, and adequate engineering design, indicating that the site is suitable for

development. The policy prohibits location of structures across the trace of an active fault.

The Geotechnical Report (Report) initially provided to staff was for an addition. A revised version (Attachment D), by the applicant's Geotechnical Consultant (Consultant), was submitted on July 5, 2017 to indicate that the site is suitable for development for a new residence, contingent upon the implementation of the Report's geotechnical recommendations. The recommendations include, but are not limited to, installing a mat slab foundation, 5 inches thick and underlain by at least 12 inches of non-expansive granular fill, including a slab-on-grade for the garage. The site has been determined to be within landslide areas. Based on the Report, a small graben was identified closest to the project site, which does not appear to have moved closer to the site in the last 37 years. Also, the possibility of fault rupture is highly unlikely based on the absence of any fault trace traversing the site, as determined by the fault study conducted on-site. The main trace of the Seal Cove Fault is located 450 feet to the east of the project site. The Report also included three previous fault studies located at the project site (1989), at 155 La Grande Avenue (1988) and 854 San Ramon Avenue (1995). No faults were identified at the site in all these studies.

Policy 9.10 (*Geotechnical Investigation of Building Sites*) requires the County Geologist or an independent certified consulting engineering geologist to review building permits in hazard areas for evaluation of potential geotechnical problems and to review and approve all required investigations for adequacy. The Report was reviewed by the Geotechnical Section of the Planning and Building Department which found it adequate for planning permit approval. As required by Policy 9.10, further review of the project, including structural and foundation designs and compliance with Report recommendations, will be required at the building permit stage.

e. Shoreline Access Component

Because the project site is located on a site between the first public through road and the sea, to be approved, it must be found to be consistent with LCP and Coastal Act Policies regarding coastal access and recreation.

Policy 10.1 (*Permit Conditions for Shoreline Access*) requires shoreline access provision as a condition of granting development permits for any public or private development between the sea and the nearest road. The subject site is located between the Pacific Ocean westward and San Ramon Avenue eastward and is, therefore, subject

to this policy; San Ramon Avenue is the first through road to the east of the subject parcel.

Policy 10.12(a) (*Residential Areas*) requires that vertical access be provided at the ends of streets perpendicular to the shoreline. The project complies with this policy based on the existing vertical access provided by La Grande Avenue to the shoreline area southward. Scenic vistas to the Pacific Ocean are available at the end of this access thoroughfare. The existence of this access point also complies with the requirements of Section 30212 of the California Coastal Act, such that no additional access points are required.

3. Conformance with the Half Moon Bay Airport (HAF) Airport Land Use Compatibility Plan (ALUCP)

Upon review of the provisions of the Half Moon Bay Airport (HAF) Airport Land Use Compatibility Plan (ALUCP) for the environs of Half Moon Bay Airport, as adopted by the City/County Association of Governments (C/CAG) in October 9, 2014, staff has determined that the project's site location complies with the safety, noise and height limit criteria for compatibility. The project site is located in Runway Safety Zone 7, the Airport Influence Area (AIA), where the airport accident risk level is considered low. The project site is outside of the defined aircraft noise exposure contours and, therefore, would not be exposed to high levels of aircraft noise. The proposed height of 27.5 feet would not penetrate the established airspace threshold.

4. Conformance with the Zoning Regulations

a. Conformance with S-17 District Development Standards

The proposal complies with the property's R-1/S-17/DR/GH/CD Zoning designation, as indicated in the following table:

	S-17 Development Standards	Proposed
Minimum Site Area	5,000 sq. ft.	10,548 sq. ft. (existing)
Maximum Floor Area	5,590 sq. ft. (53% maximum)	5,393 sq. ft. (51%)
Maximum Building Site Coverage	3,692 sq. ft. (35% maximum)	2,622 sq. ft. (25%)
Minimum Front Setback	20 ft.	20 ft. – 7 in.
Minimum Rear Setback	20 ft.	20 ft.
Minimum Right Side Setback	5 ft.	10 ft. - 3 in.

	S-17 Development Standards	Proposed
Minimum Left Side Setback	10 ft.	28 ft. – 2 in.
Maximum Building Height	28 ft.	27 ft. – 6 in.
Minimum Parking Spaces	2	2
Facade Articulation	Finding by CDRC	Complies

The proposed two-story residence meets the zoning district height standards, and includes a design, scale and size compatible with other residences located in the vicinity including a proposed lot coverage of 25% (2,622 sq. ft.) of total lot size, where 35% (3,692 sq. ft.) is the maximum allowed. Additionally, the total floor area proposed is 51% (5,393 sq. ft.) of total lot size, where 53% (5,590 sq. ft.) is the maximum allowed.

b. Conformance with Design Review District Standards

The CDRC considered the project at a regularly scheduled CDRC meeting on May 11, 2017 and adopted the findings to recommend project approval, pursuant to the Design Review Standards for One-Family Residential Development in the Midcoast, Section 6565.20 of the San Mateo County Zoning Regulations, specifically elaborated as follows (see Attachment D):

- (1) Section 6565.20(D) ELEMENTS OF DESIGN 1b. Building Mass, Shape and Scale: While the proposed home is 30% larger, and has greater lot coverage than any other home in the neighborhood, it respects the scale of other larger homes in the neighborhood through minimal grading/excavation at the front and side of the property, building dimensions, shape and form, and architectural details that are complimentary to other homes in the neighborhood.
- (2) Section 6565.20(D) ELEMENTS OF DESIGN 2d. Elements of Design: The proposed project achieves a higher quality of design and construction than the current residence, and elevates the character of the neighborhood.
- (3) Section 6565.20(D) ELEMENTS OF DESIGN 2d(1). Architectural Styles and Features: The proposed project remedies the current issue of the garage being the dominant feature of the home and blends it into the overall design of the home.

- (4). Section 6565.20(F) ELEMENTS OF DESIGN 4. Lighting: The proposed project includes exterior lighting that is architecturally integrated with the home's design, style, material and colors, and is designed and located so light and glare are directed away from neighbors and confined to the site. Lighting is minimal and designed with specific activities in mind so outdoor areas will be illuminated no more than necessary to support the activity designated for that area.

c. Conformance with Geological Hazards (GH) District Standards

The site is located in the Geological Hazard Area Zone 2. Section 6296.2 (*Description of Hazardous Zones in Seal Cove Area*) allows development in Zone 2 by proper site development, including but not limited to, siting of homes away from active faults, structural and foundation design and adequate surface drainage plans as recommended by any required geotechnical investigation. A report has been submitted and reviewed by the Geotechnical Section of the Planning and Building Department.

As discussed in Section 2.d above, the applicant submitted a Report indicating that the site is suitable for development contingent upon the implementation of the report's geotechnical recommendations, based on the site's Geological Hazard Zone 2 location. Risk to development in this area is considered moderate to high where reduction of this risk is achieved by implementing proper site development, as already stipulated in the development recommendations of the Consultant.

Pursuant to Section 6295.4 of the San Mateo County Zoning Regulations, building permits shall not be approved unless the County Geologist has evaluated the project to show compliance with applicable district regulations. The project has received preliminary review by the Geotechnical Section of the Planning and Building Department, authorizing the project to move forward, pending submittal of more information at the building permit stage, if required.

In accordance with GH District Regulations, Planning staff also includes a Condition of Approval No. 48, pursuant to Section 6294.4(2) of the San Mateo County Zoning Ordinance, that the applicant shall record the following deed restriction with the San Mateo County Recorder's Office, prior to the issuance of the building permit, stated as follows ... "This property is located in Zone 2 of the Seal Cove Geologic Hazards District established by Section 6296 of the San Mateo County Ordinance Code, Zoning Annex. Maps of this district are on file with the San Mateo County Planning and Building Department."

B. ENVIRONMENTAL REVIEW

This project is exempt from environmental review pursuant to the California Environmental Quality Act (CEQA), Section 15303, Class 3, related to new construction of small structures, including single-family residences in a residential zone. Section 15300.2 (*Exceptions*) of the CEQA Guidelines states that Class 3 exemptions are qualified by consideration of where the project is to be located, such as a location where a project could have an impact on an environmental resource of hazardous or critical concern, where designated, precisely mapped, and officially adopted pursuant to law by federal, state or local agencies.

While the site is located within a mapped geological hazard area (Geologic Hazard (GH) Zoning District), the site is within a developed residential area of Moss Beach where all public services are available. The site is developed with an existing residential use that will be maintained under the project. Based on the geotechnical report submitted by the applicant and comments from the Geotechnical Section of the San Mateo County Planning and Building Department, the site is suitable for the proposed demolition and construction of a new single-family residence, subject to the recommendations provided in the report from the Geotechnical Consultant. During the site investigation, no active Seal Cove fault was found on the property and the likelihood of the landslide complex impacting the proposed residence is considered low to moderate. Therefore, as proposed and conditioned, the project is not likely to have a significant impact in the area of geologic stability and qualifies for a categorical exemption under Class 3 of the CEQA Guidelines.

C. REVIEW BY THE MIDCOAST COMMUNITY COUNCIL

Staff referred the project to the Midcoast Community Council and did not receive any comments.

D. REVIEW BY THE CALIFORNIA COASTAL COMMISSION

Staff referred the project to the California Coastal Commission and received comments (Attachment F) that included a recommendation for staff to discuss LCP Policies (Policies) regarding compliance with the development of a new single-family residence located in the R-1/S-17/DR/GH/CD Zoning District (Single-Family Residential District/S-17 Combining District /Design Review/Geological Hazard District/Coastal Development). The project will not include a second unit and no trees are proposed for removal. Staff has found that the project complies with Policies regarding infill development, hazards, shoreline access and compliance with design review standards and findings. Specific to hazards, the project complies with applicable regulations, contingent upon the recommendations specified by the Consultant, to include the recordation of a deed restriction prior to the issuance of a building permit, pursuant to Section 6295.4 of the Zoning Regulations, as specified in Condition No. 48.

E. OTHER REVIEWING AGENCIES

Building Inspection Section
Geotechnical Section
Department of Public Works
Coastside Fire Protection District
Montara Water and Sanitary District

ATTACHMENTS

- A. Recommended Findings and Conditions of Approval
- B. Vicinity Map
- C. Project Plans
- D. Geotechnical Report prepared by Sigma Prime Geosciences, Inc. on July 5, 2017
- E. Coastside Design Review Committee Decision Letter, dated July 21, 2017
- F. Comment Letter from the California Coastal Commission, dated July 28, 2017
- G. Site Photos

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County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2016-00317

Hearing Date: August 9, 2017

Prepared By: Dennis P. Aguirre
Project Planner

For Adoption By: Planning Commission

RECOMMENDED FINDINGS

Regarding the Environmental Review, Find:

1. That the proposed project is categorically exempt pursuant to Section 15303, Class 3, of the California Environmental Quality Act (CEQA) Guidelines, related to new construction of small structures, including single-family residences in a residential zone.

Regarding the Coastal Development Permit, Find:

2. That the project, as described in the application and accompanying materials required by the Zoning Regulations, Section 6328.4, and as conditioned in accordance with Section 6328.14, conforms with the applicable policies and required findings of the San Mateo County Local Coastal Program (LCP). Specifically, the project complies with policies regarding infill development, hazards, shoreline access and compliance with design review standards and findings.
3. That the number of building permits for the construction of single-family residences issued in the calendar year does not exceed the limitations of LCP Policies 1.23 and 1.24.

Regarding the Design Review, Find:

4. That, with the conditions of approval recommended by the Coastside Design Review Committee (CDRC) at its meeting of May 11, 2017, the project is in compliance with the Design Review Standards for the Coastside. The project, as designed and conditioned, complements the predominant style and respects the scale of the larger homes in the neighborhood. The project is well articulated; uses colors and materials that appear natural; incorporates drought tolerant, native and non-invasive plant species; and uses downward-directed exterior lighting fixtures.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. The project shall be constructed in compliance with the plans approved by the Planning Commission on August 9, 2017. Any changes or revisions to the approved plans shall be submitted to the Design Review Officer for review and approval prior to implementation. Minor adjustments to the project may be approved by the Design Review Officer if they are consistent with the intent of and are in substantial conformance with this approval. Alternatively, the Design Review Officer may refer consideration of the revisions to the Coastside Design Review Committee, with applicable fees to be paid.
2. The Coastal Development Permit and Design Review approvals shall be valid for five (5) years from the date of final approval in which time a building permit shall be issued and a completed inspection (to the satisfaction of the Building Inspector) shall have occurred within 180 days of its issuance. An extension of these approvals will be considered upon written request and payment of the applicable fees sixty (60) days prior to the permits' expiration.
3. The applicant shall include the permit approval letter on the top pages of the building plans.
4. The applicant shall submit the following item and indicate the following on plans submitted for a building permit, as stipulated by the Coastside Design Review Committee:
 - a. Lower the height of the covered glass roof deck to equal or less than the adjacent gable height.
 - b. Recommendation: Remove the roof and side doors on the covered glass roof deck.
5. The applicant shall provide "finished floor elevation verification" to certify that the structure is actually constructed at the height shown on the submitted plans. The applicant shall have a licensed land surveyor or engineer establish a baseline elevation datum point in the vicinity of the construction site.
 - a. The applicant shall maintain the datum point so that it will not be disturbed by the proposed construction activities until final approval of the building permit.
 - b. This datum point and its elevation shall be shown on the submitted site plan. This datum point shall be used during construction to verify the elevation of the finished floors relative to the existing natural or to the grade of the site (finished grade).

- c. Prior to Planning approval of the building permit application, the applicant shall also have the licensed land surveyor or engineer indicate on the construction plans: (1) the natural grade elevations at the significant corners (at least four) of the footprint of the proposed structure on the submitted site plan, and (2) the elevations of proposed finished grades.
 - d. In addition, (1) the natural grade elevations at the significant corners of the proposed structure, (2) the finished floor elevations, (3) the topmost elevation of the roof, and (4) the garage slab elevation must be shown on the plan, elevations, and cross-section (if one is provided).
 - e. Once the building is under construction, prior to the below floor framing inspection or the pouring of the concrete slab (as the case may be) for the lowest floor(s), the applicant shall provide to the Building Inspection Section a letter from the licensed land surveyor or engineer certifying that the lowest floor height, as constructed, is equal to the elevation specified for that floor in the approved plans. Similarly, certifications on the garage slab and the topmost elevation of the roof are required.
 - f. If the actual floor height, garage slab, or roof height, as constructed, is different than the elevation specified in the plans, then the applicant shall cease all construction and no additional inspections shall be approved until a revised set of plans is submitted to and subsequently approved by both the Building Official and the Community Development Director.
6. During project construction, the applicant shall, pursuant to Chapter 4.100 of the San Mateo County Ordinance Code, minimize the transport and discharge of stormwater runoff from the construction site into storm drain systems and water bodies by:
- a. Using filtration materials on storm drain covers to remove sediment from dewatering effluent.
 - b. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 1 and April 30.
 - c. Removing spoils promptly, and avoiding stockpiling of fill materials, when rain is forecast. If rain threatens, stockpiled soils and other materials shall be covered with a tarp or other waterproof material.
 - d. Storing, handling, and disposing of construction materials and wastes so as to avoid their entry to the storm drain system or water body.
 - e. Avoiding cleaning, fueling or maintaining vehicles on-site, except in an area designated to contain and treat runoff.

- f. Limiting and timing application of pesticides and fertilizers to avoid polluting runoff.
7. The applicant shall include an erosion and sediment control plan to comply with the County's Erosion Control Guidelines on the plans submitted for the building permit. This plan shall identify the type and location of erosion control measures to be installed upon the commencement of construction in order to maintain the stability of the site and prevent erosion and sedimentation off-site.
8. All new power and telephone utility lines from the street or nearest existing utility pole to the project structures on the property shall be placed underground.
9. The applicant shall apply for a building permit and shall adhere to all requirements from the Building Inspection Section, the Department of Public Works and the Coastside Fire Protection District.
10. No site disturbance shall occur, including any grading or vegetation removal, until a building permit has been issued.
11. A Tree Protection Plan, in compliance with Sections 12,020.4 and 12,020.5 of the County's Significant Tree Ordinance, shall be submitted with the building permit plans for review and approval by the Current Planning Section.
12. To reduce the impact of construction activities on neighboring properties, comply with the following:
 - a. All debris shall be contained on-site; a dumpster or trash bin shall be provided on-site during construction to prevent debris from blowing onto adjacent properties. The applicant shall monitor the site to ensure that trash is picked up and appropriately disposed of daily.
 - b. The applicant shall remove all construction equipment from the site upon completion of the use and/or need of each piece of equipment which shall include but not be limited to tractors, back hoes, cement mixers, etc.
 - c. The applicant shall ensure that no construction-related vehicles shall impede through traffic along the right-of-way on La Grande Avenue. All construction vehicles shall be parked on-site outside the public right-of-way or in locations which do not impede safe access on La Grande Avenue. There shall be no storage of construction vehicles in the public right-of-way.
13. The exterior color samples submitted to the CDRC are approved. Color verification shall occur in the field after the applicant has applied the approved materials and colors but before a final inspection has been scheduled.

14. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 5:00 p.m. Saturdays. Said activities are prohibited on Sundays, Thanksgiving and Christmas (San Mateo Ordinance Code Section 4.88.360).
15. Plans shall demonstrate compliance with the Water Efficient Landscape Ordinance (WELO). Installation of the approved landscape plan is required prior to final inspection.
16. The project site is located within the Fitzgerald Area of Special Biological Significance (ASBS) Watershed. Runoff and other polluted discharges from the site are prohibited. Development shall minimize erosion, treat stormwater from new/replaced impervious surfaces, and prevent polluted discharges into the ASBS or a County storm drain (e.g., car washing in a driveway or street, pesticide application on lawn).
17. The project site is located within the Fitzgerald Area of Special Biological Significance (ASBS) Watershed and is considered a Construction Stormwater Regulated Site. Weekly construction inspections are required throughout the duration of land disturbance during the rainy season (October 1 to through April 30) for sites within the ASBS Watershed, as required by the State Water Resources Control Board General Exceptions to the California Ocean Plan with Special Protections adopted on March 20, 2012.

Building Inspection Section

18. The applicant shall apply for a building permit.

Montara Water and Sanitary District (MWSD)

19. Prior to the issuance of a building permit, the applicant shall obtain Domestic Water/Fire Protection Connection and Sewer Permits, including the submittal of adequate fire flow calculations from a certified fire protection contractor.
20. Prior to the issuance of a building permit, the existing water meter and service line shall be upgraded in accordance with MWSD regulations, to include payment of fees prior to the issuance of a connection permit, if required.
21. Prior to the issuance of a building permit, the addition of a backflow device to the service line will also be required during construction.
22. Prior to the issuance of a building permit, TV Inspection, potential repairs or upgrades to current MWSD Standards and temporary capping of the sewer lateral during construction, according to MWSD sanitary engineers recommendations shall be required.

Department of Public Works

23. Prior to the issuance of the building permit, the applicant shall have prepared, by a registered civil engineer, a drainage analysis of the proposed project and submit it to the Department of Public Works for review and approval. The drainage analysis shall consist of a written narrative and a plan. The flow of the stormwater onto, over, and off of the property shall be detailed on the plan and shall include adjacent lands as appropriate to clearly depict the pattern of flow. The analysis shall detail the measures necessary to certify adequate drainage. Post-development flows and velocities shall not exceed those that existed in the pre-developed state. Recommended measures shall be designed and included in the improvement plans and submitted to the Department of Public Works for review and approval.
24. Prior to the issuance of the building permit, the applicant shall submit a driveway "Plan and Profile," to the Department of Public Works, showing the driveway access to the parcel (garage slab) complying with County Standards for driveway slopes (not to exceed 20%) and to County Standards for driveways (at the property line) being the same elevation as the center of the access roadway. When appropriate, as determined by the Department of Public Works, this plan and profile shall be prepared from elevations and alignment shown on the roadway improvement plans. The driveway plan shall also include and show specific provisions and details for both the existing and the proposed drainage patterns and drainage facilities.
25. No proposed construction work within the County right-of-way shall begin until County requirements for the issuance of an encroachment permit, including review of the plans, have been met and an encroachment permit issued. Applicant shall contact a Department of Public Works Inspector 48 hours prior to commencing work in the right-of-way.
26. Prior to the issuance of the building permit, the applicant will be required to provide payment of "roadway mitigation fees" based on the square footage (assessable space) of the proposed building per Ordinance No. 3277.

Coastside Fire Protection District

27. Smoke detectors which are hardwired: As per the California Building Code, State Fire Marshal Regulations, and Coastside Fire Protection District Ordinance No. 2013-03, the applicant is required to install State Fire Marshal approved and listed smoke detectors which are hardwired, interconnected, and have battery backup. These detectors are required to be placed in each new and reconditioned sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. In existing sleeping rooms, areas may have battery powered smoke alarms. A minimum of one detector shall be

- placed on each floor. Smoke detectors shall be tested and approved prior to the building final.
28. Add the following note to the plans: New residential buildings shall have internally illuminated address numbers contrasting with the background so as to be seen from the public way fronting the building. Residential address numbers shall be at least 6 feet above the finished surface of the driveway. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the Coastside Fire Protection District. This remote signage shall consist of a 6-inch by 18-inch green reflective metal sign with 3-inch reflective numbers/letters similar to Hy-Ko 911 or equivalent.
 29. Roof covering: As per Coastside Fire Protection District Ordinance No. 2013-03, the roof covering of every new building or structure, and materials applied as part of a roof covering assembly, shall have a minimum fire rating of Class "B" or higher as defined in the current edition of the California Building Code.
 30. Vegetation management: As per the Coastside Fire Protection District Ordinance No. 2013-03, the 2013 California Fire Code and Public Resources Code 4291:
 - a. A fuel break of defensible space is required around the perimeter of all structures to a distance of not less than 30 feet and may be required to a distance of 100 feet or to the property line. In SRA (State Responsible Area), the fuel break is 100 feet or to the property line.
 - b. Trees located within the defensible space shall be pruned to remove dead and dying portions, and limbed up 6 to 10 feet above the ground. New trees planted in the defensible space shall be located no closer than 10 feet to adjacent trees when fully grown or at maturity.
 - c. Remove that portion of any existing tree, which extends within 10 feet of the outlet of a chimney or stovepipe or is within 5 feet of any structure.
 31. Add note to plans: Smoke alarms/detectors are to be hardwired, interconnected, or with battery backup. Smoke alarms to be installed per manufacturer's instruction and NFPA 72.
 32. Add note to plans: Escape or rescue windows shall have a minimum net clear openable area of 5.7 sq. ft.; 5.0 sq. ft. allowed at grade. The minimum net clear openable height dimension shall be 24 inches. The net clear openable width dimension shall be 20 inches. Finished sill height shall be not more than 44 inches above the finished floor.
 33. Identify rescue windows in each bedroom and verify that they meet all requirements. Add this to plans.

34. Fire apparatus access roads to be an approved all weather surface. Grades 15% or greater to be surfaced with asphalt, or brushed concrete. Grades 15 % or greater shall be limited to 150 feet in length with a minimum of 500 feet between the next section. For roads approved less than 20 feet, 20-foot wide turnouts shall be on each side of 15% or greater section. No grades over 20%. (Plan and profile required) CFC 503.
35. Add the following note to the plans: The installation of an approved spark arrester is required on all chimneys, existing and new. Spark arresters shall be constructed of woven or welded wire screening of 12-gauge USA standard wire having openings not exceeding 1/2-inch.
36. Add the following note to the plans: A fuel break or defensible space is required around the perimeter of all structures, existing and new, to a distance of not less than 30 feet and may be required to a distance of 100 feet or to the property line. This is neither a requirement nor an authorization for the removal of living trees.
37. Add the following note to the plans: Trees located within the defensible space shall be pruned to remove dead and dying portions, and limbed up 6 feet above the ground. New trees planted in the defensible space shall be located no closer than 10 feet to adjacent trees when fully grown or at maturity.
38. Add the following note to the plans: Remove that portion of any existing tree, which extends within 10 feet of the outlet of a chimney or stovepipe or is within 5 feet of any structure. Maintain any tree adjacent to or overhanging a building free of dead or dying wood.
39. Fire Hydrant: As per 2013 CFC, Appendix B and C, a fire district approved fire hydrant (Clow 960) must be located within 250 feet of the proposed single-family dwelling unit measured by way of drivable access. As per 2013 CFC, Appendix B, the hydrant must produce a minimum fire flow of 1,000 gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure for 2 hours. Contact the local water purveyor for water flow details.
40. Show location of fire hydrant on a site plan. A fire hydrant is required within 250 feet of the building and flow a minimum of 1,000 gpm at 20 psi. This information is to be verified by the water purveyor in a letter initiated by the applicant and sent to San Mateo County Fire/Cal-Fire or Coastside Fire Protection District. If there is not a hydrant within 250 feet with the required flow, one will have to be installed at the applicant's expense.
41. Automatic Fire Sprinkler System: As per San Mateo County Building Standards and Coastside Fire Protection District Ordinance Number 2013-03, the applicant is required to install an automatic fire sprinkler system throughout the proposed or improved dwelling and garage. All attic access locations will be provided with a pilot head on a metal upright. All areas that are accessible for storage purposes

shall be equipped with fire sprinklers including closets and bathrooms. The only exception is small linen closets less than 24 sq. ft. with full depth shelving. The plans for this system must be submitted to the San Mateo County Planning and Building Department. A building permit will not be issued until plans are received, reviewed and approved. Upon submission of plans, the County will forward a complete set to the Coastside Fire Protection District for review.

42. Unconditioned areas of first floor to have fire sprinklers or 1-hour separation from bedrooms on second floor i.e., outdoor kitchen, lounge.
43. Installation of underground sprinkler pipe shall be flushed and visually inspected by the Coastside Fire Protection District prior to hook-up to riser. Any soldered fittings must be pressure tested with trench open.
44. Exterior bell and interior horn/strobe: are required to be wired into the required flow switch on your fire sprinkler system. The bell, horn/strobe and flow switch, along with the garage door opener are to be wired into a separate circuit breaker at the main electrical panel and labeled.
45. All fire conditions and requirements must be incorporated into your building plans, prior to building permit issuance. It is your responsibility to notify your contractor, architect and engineer of these requirements.

Geotechnical Section

46. Prior to the issuance of the building permit, approval of the development plans and applicable structural design criteria must be obtained from the Geotechnical Consultant of record as required by Section I of the "Geotechnical Consultant Approval" form.
47. Section II of the "Geotechnical Consultant Approval" form must be observed and completed by the Geotechnical Consultant of record prior to acceptance of the completed work by the Geotechnical Section of the Planning and Building Department.
48. Prior to the issuance of the building permit and pursuant to Section 6294.4(2) of the San Mateo County Zoning Ordinance, the applicant shall record a deed restriction with the San Mateo County Recorder's Office, stating the following: "This property is located in Zone 2 of the Seal Cove Geologic Hazards District established by Section 6296 of the San Mateo County Ordinance Code, Zoning Annex. Maps of this district are on file with the San Mateo County Planning and Building Department."

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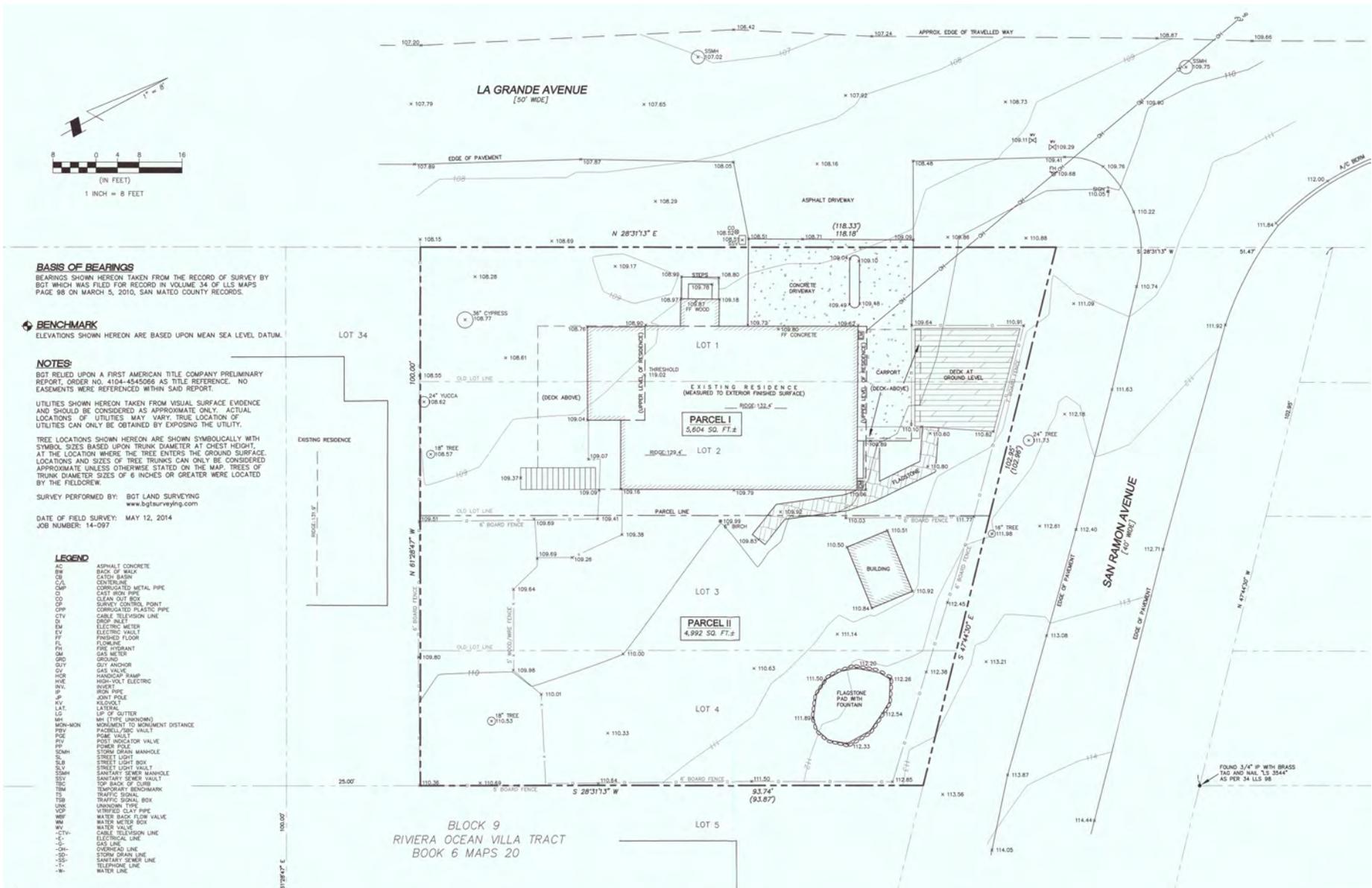


San Mateo County Planning Commission Meeting

Owner/Applicant: _____

Attachment: _____

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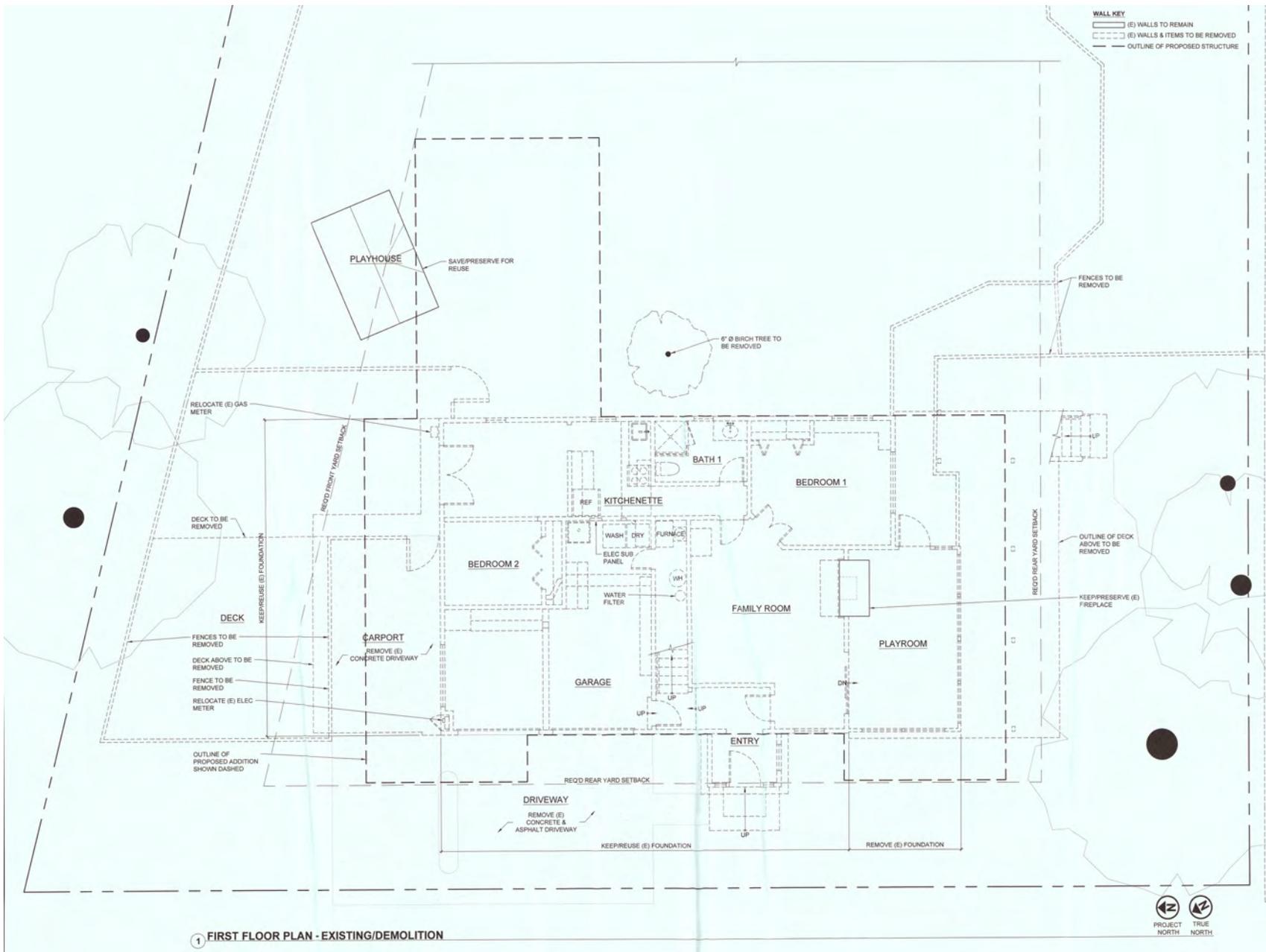


San Mateo County Planning Commission Meeting

Owner/Applicant:

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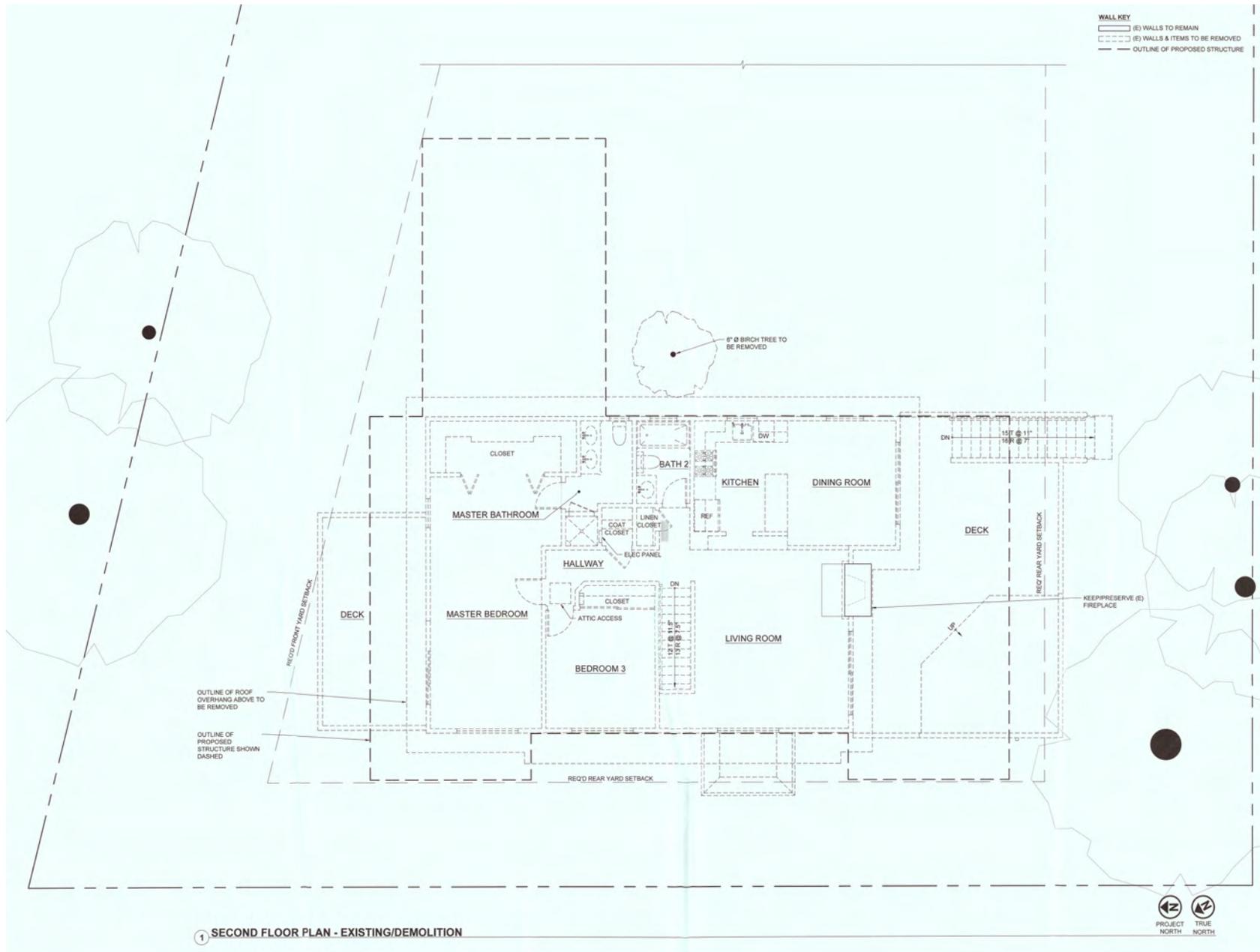


San Mateo County Planning Commission Meeting

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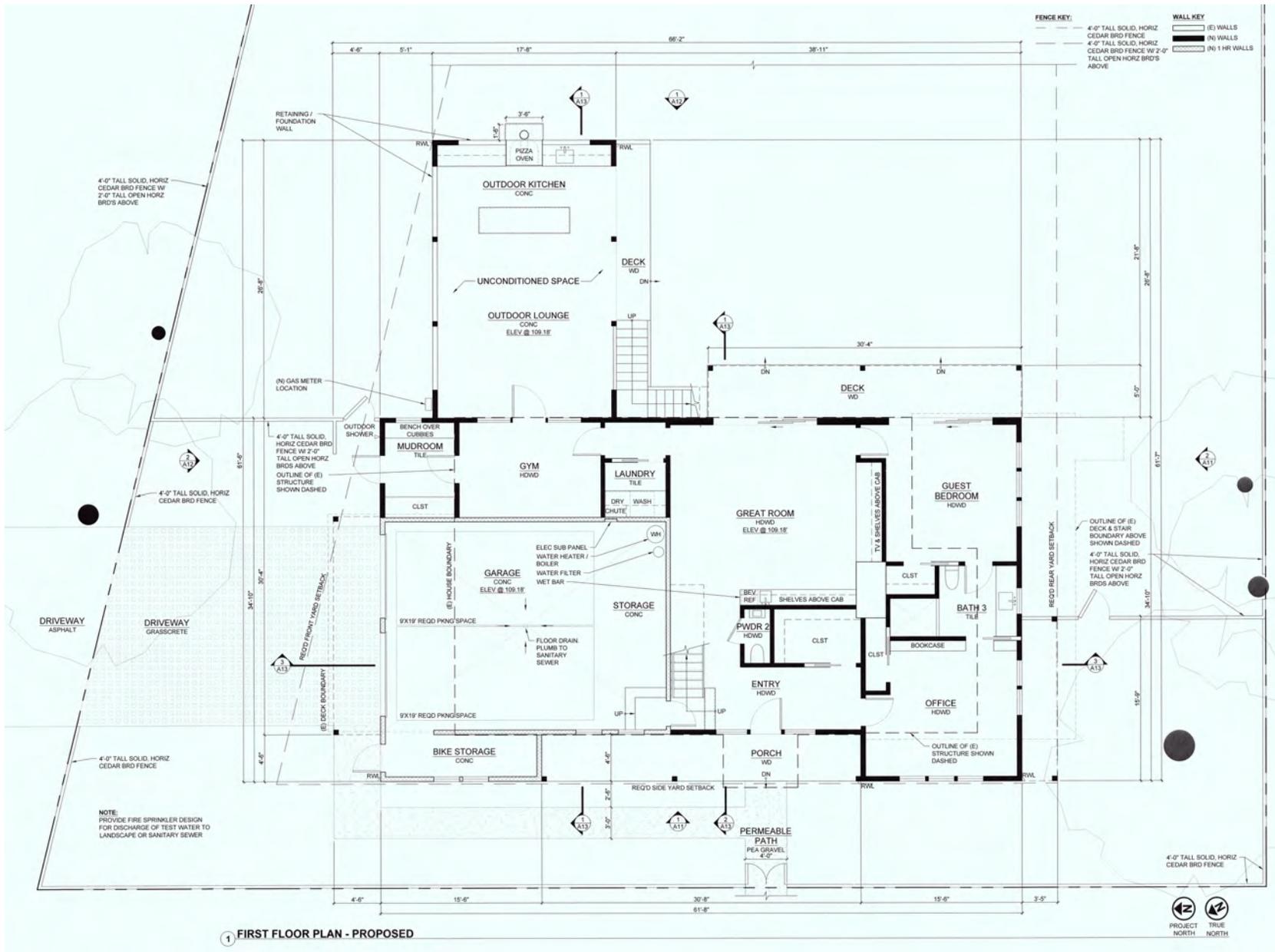


San Mateo County Planning Commission Meeting

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San Mateo County Planning Commission Meeting

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San Mateo County Planning Commission Meeting

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San Mateo County Planning Commission Meeting

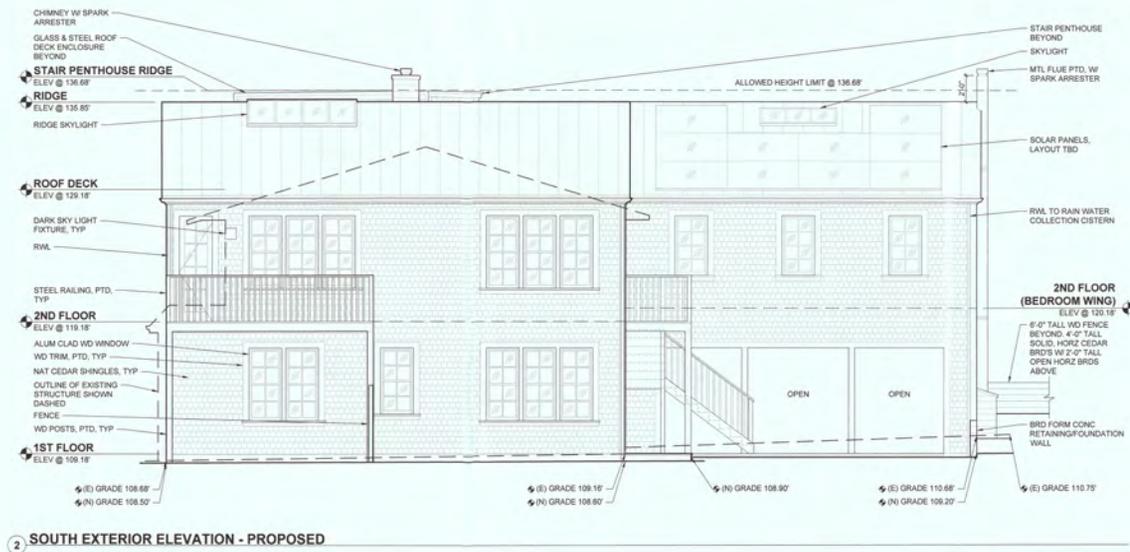
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1 WEST EXTERIOR ELEVATION - PROPOSED



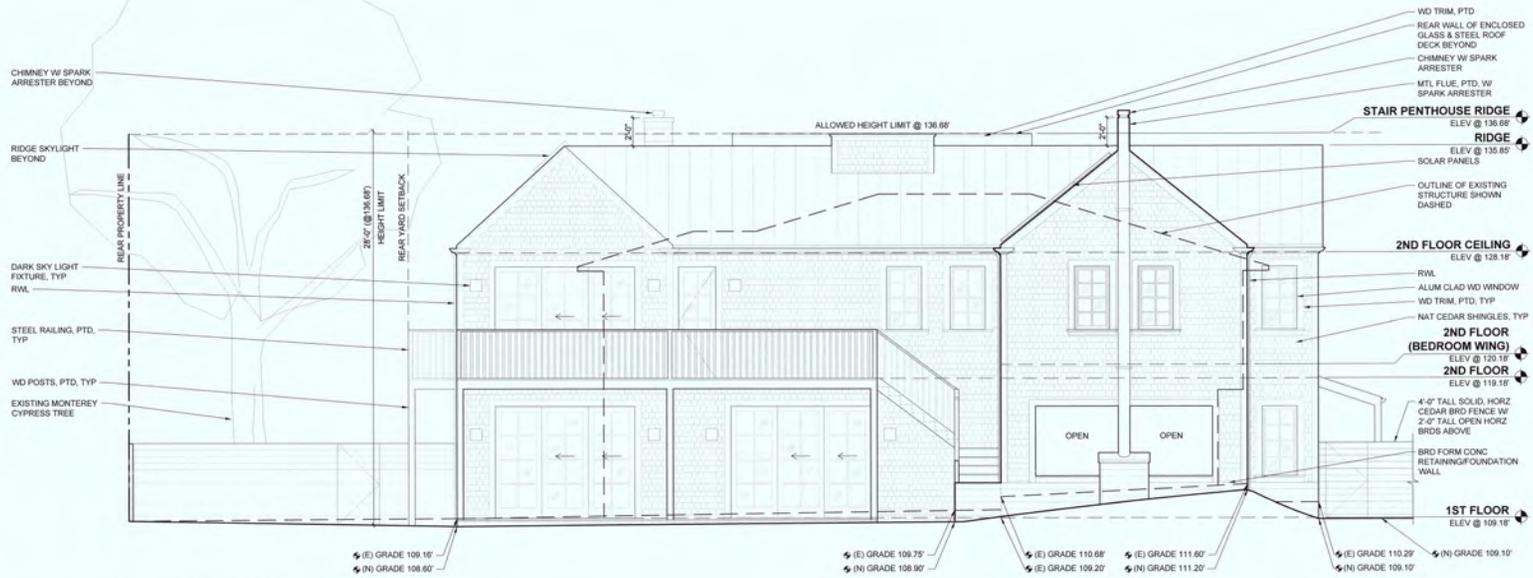
2 SOUTH EXTERIOR ELEVATION - PROPOSED

San Mateo County Planning Commission Meeting

Owner/Applicant:

Attachment:

File Numbers:



1 EAST EXTERIOR ELEVATION - PROPOSED



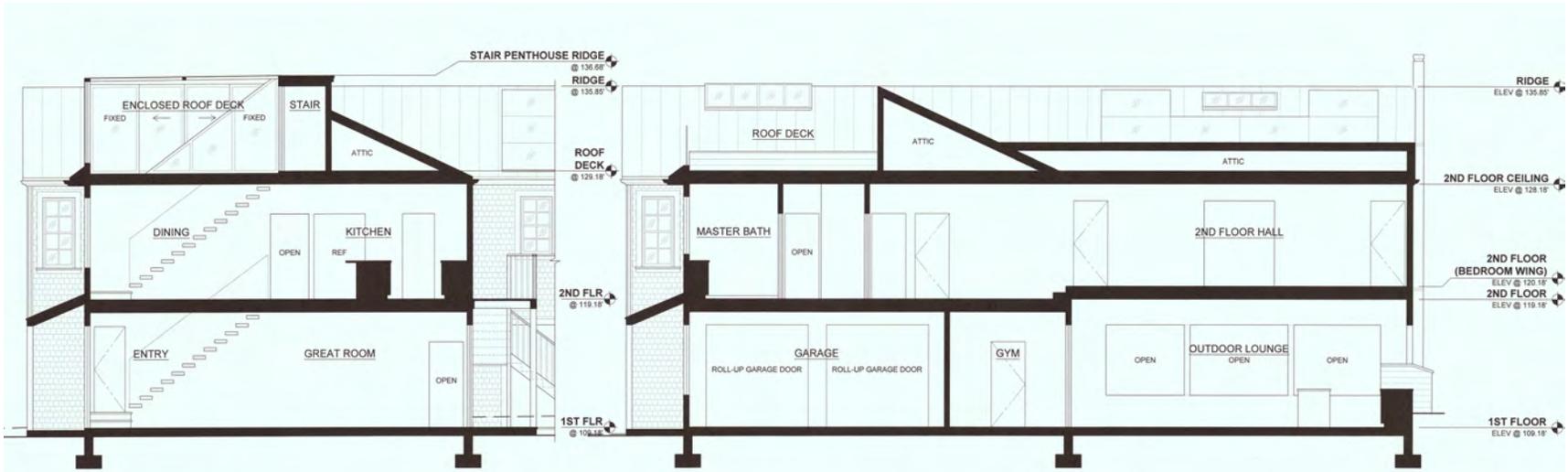
2 NORTH EXTERIOR ELEVATION - PROPOSED

San Mateo County Planning Commission Meeting

Owner/Applicant: _____

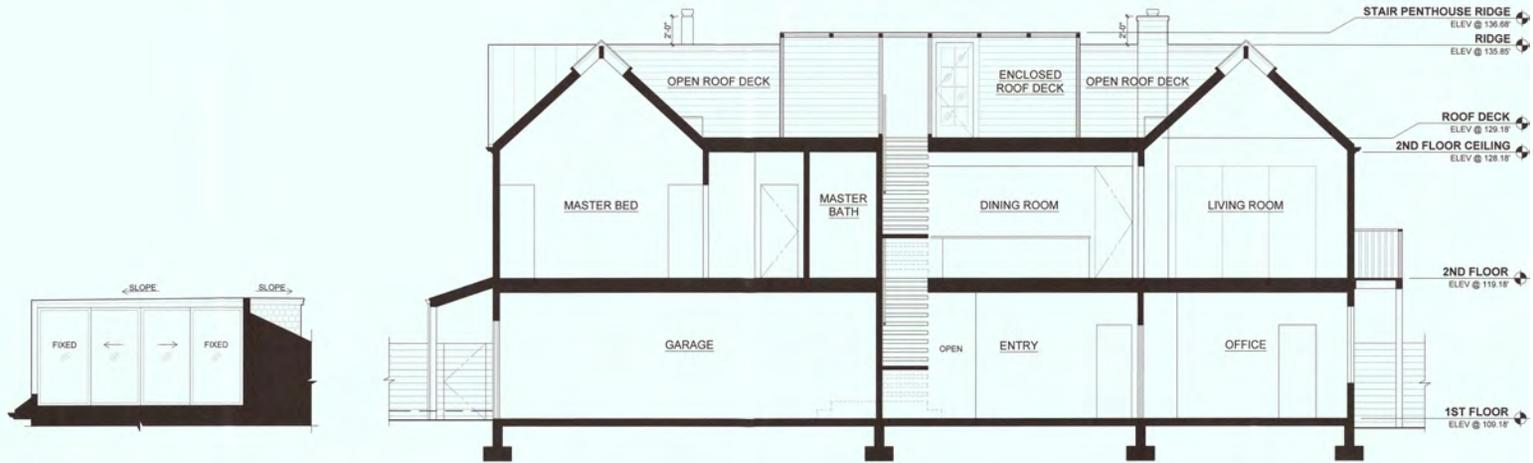
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2 WEST TO EAST SECTION - PROPOSED

1 WEST TO EAST SECTION - PROPOSED



4 ENCLOSED ROOF DECK - PROPOSED
(SOUTH ELEVATION, NORTH SIMILAR)

3 NORTH TO SOUTH SECTION - PROPOSED

San Mateo County Planning Commission Meeting

Owner/Applicant: _____

Attachment: _____

File Numbers: _____



Sigma Prime Geosciences, Inc.
Effective Solutions

GEOTECHNICAL STUDY

**PAIGE PROPERTY
146 LA GRANDE AVENUE
MOSS BEACH, CALIFORNIA**

**PREPARED FOR:
JULIA PAIGE
146 LA GRANDE AVENUE
MOSS BEACH, CA 94038**

**PREPARED BY:
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
HALF MOON BAY, CALIFORNIA 94019**

JULY 2017



Sigma Prime Geosciences, Inc.
Effective Solutions

July 5, 2017

Julia Paige
146 La Grande Avenue
Moss Beach, CA 94038

Re: Geotechnical Report for Proposed Construction at 146 La Grande Avenue, Moss Beach.

Dear Ms. Paige:

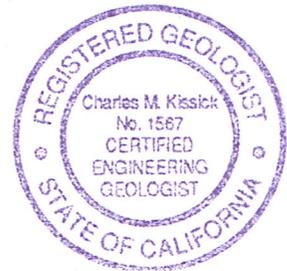
As per your request, we have performed a geotechnical study for the proposed construction at 146 La Grande Avenue in Moss Beach, California. The accompanying report summarizes the results of our field study and engineering analyses, and presents geotechnical recommendations for the planned improvements.

Thank you for the opportunity to work with you on this project. If you have any questions concerning our study, please call.

Yours,

Sigma Prime Geosciences, Inc.


Charles M. Kissick, P.E., CEG





**GEOTECHNICAL STUDY
146 LA GRANDE AVENUE
MOSS BEACH, CALIFORNIA**

**PREPARED FOR:
JULIA PAIGE
146 LA GRANDE AVENUE
MOSS BEACH, CA 94038**

**PREPARED BY:
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
HALF MOON BAY, CALIFORNIA 94019**

July 5, 2017



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FIGURE 2 - SITE MAP

FIGURE 3 - TRENCH LOG

FIGURE 4 - FAULT TRENCH EXPLANATION

FIGURE 5 - FAULT STUDIES IN AREA

FIGURE 6 - GEOLOGIC HAZARD MAP



1. INTRODUCTION

We are pleased to present this geotechnical study report for the proposed construction located at 146 La Grande Avenue in Moss Beach, California, at the location shown in the vicinity map in Figure 1. The purpose of this investigation was to evaluate the subsurface conditions at the site, and to provide geotechnical design recommendations for the proposed construction.

1.1 PROJECT DESCRIPTION

We understand that you plan to demolish the existing house and construct a new two-story home. Structural loads are expected to be relatively light as is typical for this type of construction.

1.2 SCOPE OF WORK

In order to complete this project we have performed the following tasks:

- Reviewed published and unpublished information on the geologic and seismic conditions in the site vicinity;
- Subsurface study consisting of a fault trench across the property
- Engineering analysis and evaluation of the subsurface data to develop geotechnical design criteria; and
- Preparation of this report presenting our recommendations for the proposed project.



2. FINDINGS

2.1 GENERAL

The site reconnaissance and fault trench investigation were performed in February, 2015. The fault trench was 86.5 feet long and about 9 feet deep. It's location is shown in Figure 2, with a trench log and explanation in Figures 3 and 4.

2.2 SITE CONDITIONS

At the time of our study, the lot was developed with the existing house that is to be demolished. There is an attached, vacant lot to the south of the house. The lot is very flat and covered with brush and grass.

2.3 REGIONAL AND LOCAL GEOLOGY

Based on Brabb et. al. (1998), the site vicinity is primarily underlain by Pleistocene-age marine terrace deposits. These deposits are described as poorly consolidated sand and gravel.

2.4 SITE SUBSURFACE CONDITIONS

Based on the fault trench, the subsurface conditions consist of 2 to 4 feet of soft to medium stiff clay topsoil, overlying about 3 feet of very stiff sandy clay. The topsoil has low plasticity, based on inspection of hand samples and field evidence, such as a lack of tension cracks in dry soil. Below the sandy clay, the soil becomes sandier, with about 2 to 2.5 feet of clayey sand, over silty sand with occasional cobbles. The stratigraphy is described in more detail in Section 3.2.1 below.

2.5 GROUNDWATER

No groundwater was encountered in the trench. Groundwater levels are not expected to have an impact on the construction.

2.6 FAULTS AND SEISMICITY

The site is in an area of high seismicity, with active faults associated with the San Andreas fault system. The closest active fault to the site is the San Gregorio-Seal Cove fault, located about 450 feet to the east. The site is mapped on the west boundary of the Special Studies Zone for this fault. The location of the fault



is well known in the area, and is marked by a pronounced break in slope. A fault trench study was performed along the fault, about a half mile to the south, with the fault being located in a narrow zone just above the base of the scarp. There are no indications that the fault is closer than about 400 feet from the property.

Other faults most likely to produce significant seismic ground motions include the San Andreas, Hayward, Rodgers Creek, and Calaveras faults. Selected historical earthquakes in the area with an estimated magnitude greater than 6-1/4, are presented in Table 1 below.

**TABLE 1
HISTORICAL EARTHQUAKES**

<u>Date</u>	<u>Magnitude</u>	<u>Fault</u>	<u>Locale</u>
June 10, 1836	6.5 ¹	San Andreas	San Juan Bautista
June 1838	7.0 ²	San Andreas	Peninsula
October 8, 1865	6.3 ²	San Andreas	Santa Cruz Mountains
October 21, 1868	7.0 ²	Hayward	Berkeley Hills, San Leandro
April 18, 1906	7.9 ³	San Andreas	Golden Gate
July 1, 1911	6.6 ⁴	Calaveras	Diablo Range, East of San Jose
October 17, 1989	7.1 ⁵	San Andreas	Loma Prieta, Santa Cruz Mountains
(1)	Borchardt & Topozada (1996)		
(2)	Topozada et al (1981)		
(3)	Petersen (1996)		
(4)	Topozada (1984)		
(5)	USGS (1989)		

2.7 2016 CBC EARTHQUAKE DESIGN PARAMETERS

Based on the 2016 California Building Code (CBC) and our site evaluation, we recommend using Site Class Definition D (stiff soil) for the site. The other pertinent CBC seismic parameters are given in Table 2 below.

**Table 2
CBC SEISMIC DESIGN PARAMETERS**

S_s	S₁	F_a	F_v	S_{MS}	S_{M1}	S_{DS}	S_{D1}
2.275	0.961	1.0	1.5	2.275	1.442	1.516	0.961

Because the S₁ value is greater than 0.75, Seismic Design Category E is recommended, per CBC Section 1613.5.6. The values in the table above were obtained from a USGS software program which provides the values based on the latitude and longitude of the site, and the Site Class Definition. The latitude and longitude were 37.5167 and -122.5114, respectively, and were accurately obtained from Google Earth™. These same values can be obtained directly from maps in the CBC, however the scale of the map makes it impractical to achieve satisfactory accuracy. The map in the CBC was derived from the same work that led to the USGS software. The remaining parameters were also obtained by the same USGS program.



3. CONCLUSIONS AND RECOMMENDATIONS

3.1 GENERAL

It is our opinion that, from a geotechnical viewpoint, the site is suitable for the proposed construction, provided the recommendations presented in this report are followed during design and construction. Detailed recommendations are presented in the following sections of this report.

Because subsurface conditions may vary from those encountered at the location of our trench, and to observe that our recommendations are properly implemented, we recommend that we be retained to 1) Review the project plans for conformance with our report recommendations and 2) Observe and test the earthwork and foundation installation phases of construction.

3.2 GEOLOGIC HAZARDS

We reviewed the potential for geologic hazards to impact the site, considering the geologic setting, and the soils encountered during our investigation. The results of our review are presented below:

- Fault Rupture – See discussion below.
- Ground Shaking - The site is located in an active seismic area. Moderate to large earthquakes are probable along several active faults in the greater Bay Area over a 30 to 50 year design life. Strong ground shaking should therefore be expected several times during the design life of the structure, as is typical for sites throughout the Bay Area. The improvements should be designed and constructed in accordance with current earthquake resistance standards.
- Differential Compaction - Differential compaction occurs during moderate and large earthquakes when soft or loose, natural or fill soils are densified and settle, often unevenly across a site. Due to the stiff and dense nature of the underlying soils, the likelihood of significant damage to the structure from differential compaction is very low.
- Liquefaction - Liquefaction occurs when loose, saturated sandy soils lose strength and flow like a liquid during earthquake shaking. Ground settlement often accompanies liquefaction. Soils most susceptible to



liquefaction are saturated, loose, silty sands, and uniformly graded sands. Loose silty sands were not encountered at the site. Therefore, in our opinion, the likelihood of liquefaction occurring at the site is very low.

- Slope Stability – The site is located near a large active landslide complex. Figure 6 shows the project site in relation to the nearest landslide features. The landslide map prepared by Cotton (1980) shows the subject property in Zone, 2, which is considered to have a moderate to high landslide potential. The map prepared in 1980 indicated a small graben crossing La Grande at the same location that we identified a small graben for this study. It is the graben that is closest to the subject property. While the landslide has been moving consistently for decades in some areas, it does not appear to have expanded in the vicinity of 146 La Grande. While it is difficult to predict future expansion of the landslide, the likelihood of the landslide complex impinging on the proposed house during its design lifetime is considered low to moderate. It does not appear to have encroached closer to the property in the last 37 years.

3.2.1 Fault Study

Fault Trench On Subject Property

We excavated an 86.5-foot long by 9-foot deep trench across the subject property, at the location shown in Figure 2. A log of the trench is shown in Figure 3. We did not find any evidence of faulting in the trench. The trench revealed a soil column entirely within the marine terrace deposit. There was a well-developed soil column, with a distinct dark brown A-horizon and a distinct orange-brown B-horizon (Units 1 and 2 in the trench log). Below the B-horizon (unit 2), the soil is generally sandy and gravelly, consistent with the marine terrace deposits.

Of most note in the trench is the slightly irregular contact between the A-horizon and the B-horizon. As the trench log indicates, the contact occasionally deviates, with some vertical structures. These are likely lurch-cracks that occur during seismic shaking. They are not representative of faults. In none of the cracks were any offsets noted. Nor were there any slickensides or any evidence of vertical offsets or lateral movement. Every crack died out within unit 2, several feet above the bottom of the trench. The cracks trend almost parallel to the trench, at an angle of North 30 degrees East. This trend differs greatly from the trend of the main trace of the Seal Cove fault, which is about North 40 degrees West. The contact between Unit 3 and 4 is undisturbed, and dips very gently toward the west.



The far eastern end of the trench revealed the only feature of interest, although we do not believe it to be a fault trace. It is a deep, prominent set of wide cracks, with Unit 1 reaching down to Unit 4. Unit 4 appears to be undisturbed. The fill material that overlies this area is probably unrelated. The Unit 1 soil is very soft, probably indicative of soil that fell into a crack, slowly filling the crack over time. There were no slickensides or clay gouge zones that are commonly associated with faulting. The trend of these features was difficult to measure, but it appeared to be approximately due east-west, which is about 45 degrees off of the trend of the main fault trace. Based on our observations, we conclude that this feature is representative of a prominent set of lurch cracks.

Based on our studies, there is no active trace of the Seal Cove fault on the property. The main trace is located 450 feet to the east.

Additional Fault Studies by Others

We were able to obtain the files for three additional fault studies in the area. Each is discussed below, and the locations are shown in Figure 5.

Michelucci, 1989 - 146 La Grande:

This study was performed for an addition on the subject property. Two fault trenches were excavated, as shown in Figure 5. Numerous lurch cracks were found, but no evidence of faulting. The conclusion was that there were no faults identified.

Michelucci, 1995 – 854 San Ramon:

This study was performed for a small addition. No fault trenches were excavated, due to accessibility issues. Instead, the author reviewed several reports from the 1970s that were not available to us. Based on the absence of faults on neighboring properties, the author concluded that the likelihood of faulting on the site is “highly questionable”.

Hallenbeck, 1988 - 155 La Grande:

This study was performed for an addition. Four fault trenches were excavated, as shown in Figure 5. Numerous lurch cracks were found, but no evidence of faulting. The conclusion was that there were no faults identified.



3.3 EARTHWORK

3.3.1 Clearing & Subgrade Preparation

All deleterious materials, including topsoil, roots, vegetation, designated utility lines, etc., should be cleared from the building area. The actual stripping depth required will depend on site usage prior to construction, and should be established by the Contractor during construction. Topsoil may be stockpiled separately for later use in landscaping areas.

3.3.2 Compaction

Scarified surface soils that will support foundations should be moisture conditioned to 3-5 percent above the optimum moisture content and compacted to at least 95 percent of the maximum dry density, as determined by ASTM D1557-78. All trench backfill should also be moisture conditioned to 3-5 percent above the optimum moisture content and compacted to at least 90 percent of the maximum dry density. The upper 3 feet of trench backfill below foundations or paved areas should be compacted to 95 percent of the maximum dry density.

3.3.3 Surface Drainage

The finish grades should be designed to drain surface water away from foundations and slab areas, to suitable discharge points. Slopes of at least 2 percent within 10 feet of the structures are recommended, as per the CBC. Ponding of water should not be allowed adjacent to the structure.

3.4 FOUNDATIONS

We recommend a mat slab foundation. The mat slab should be at least 5 inches thick and underlain by at least 12-inches of non-expansive granular fill. Where floor wetness would be detrimental, a vapor barrier, such as Stego wrap or equivalent should be used. The slabs should be structurally tied to the perimeter footings, either as a continuous pour or separate pours with dowels connecting the two, or an equivalent method.

The perimeter of the slab should be thickened with footings at least 15 inches wide and extending at least 6 inches below the cut for the interior slabs. Load bearing interior walls should also be founded on thicker slab sections of the same dimensions. The excavation for the footings may slope up to the interior slabs at a slope of 1:1. An allowable bearing capacity of 2500 psf may be used in design.



3.4.1 Lateral Loads

Resistance to lateral loads may be provided by passive pressure acting against the sides of the footings, below a depth of 1 foot. We recommend that an equivalent fluid pressure of 350 pcf be used in design. A skin friction value of 0.3 may be used.

3.4.2 Garage Slab-on-Grade

The garage slab-on-grade should be constructed as a free-standing slab, structurally isolated from surrounding grade beams or footings. We recommend that the slab-on-grade be underlain by at least 6 inches of non-expansive fill. The fill should consist of ½- to ¾-inch clean crushed rock. Where floor wetness would be detrimental, a vapor barrier, such as Stego wrap or equivalent should be used.

3.5 CONSTRUCTION OBSERVATION AND TESTING

The earthwork and foundation phases of construction should be observed and tested by us to 1) Establish that subsurface conditions are compatible with those used in the analysis and design; 2) Observe compliance with the design concepts, specifications and recommendations; and 3) Allow design changes in the event that subsurface conditions differ from those anticipated. The recommendations in this report are based on a limited number of borings. The nature and extent of variation across the site may not become evident until construction. If variations are then exposed, it will be necessary to reevaluate our recommendations.



4. LIMITATIONS

This report has been prepared for the exclusive use of the property owner for specific application in developing geotechnical design criteria for the currently planned construction at 146 La Grande Avenue in Moss Beach, California. We make no warranty, expressed or implied, except that our services were performed in accordance with geotechnical engineering principles generally accepted at this time and location. The report was prepared to provide engineering opinions and recommendations only. In the event that there are any changes in the nature, design or location of the project, or if any future improvements are planned, the conclusions and recommendations contained in this report should not be considered valid unless 1) The project changes are reviewed by us, and 2) The conclusions and recommendations presented in this report are modified or verified in writing.

The analyses, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of our study; the currently planned improvements; review of previous reports relevant to the site conditions; and laboratory results. In addition, it should be recognized that certain limitations are inherent in the evaluation of subsurface conditions, and that certain conditions may not be detected during a study of this type. Changes in the information or data gained from any of these sources could result in changes in our conclusions or recommendations. If such changes do occur, we should be advised so that we can review our report in light of those changes.



5. REFERENCES

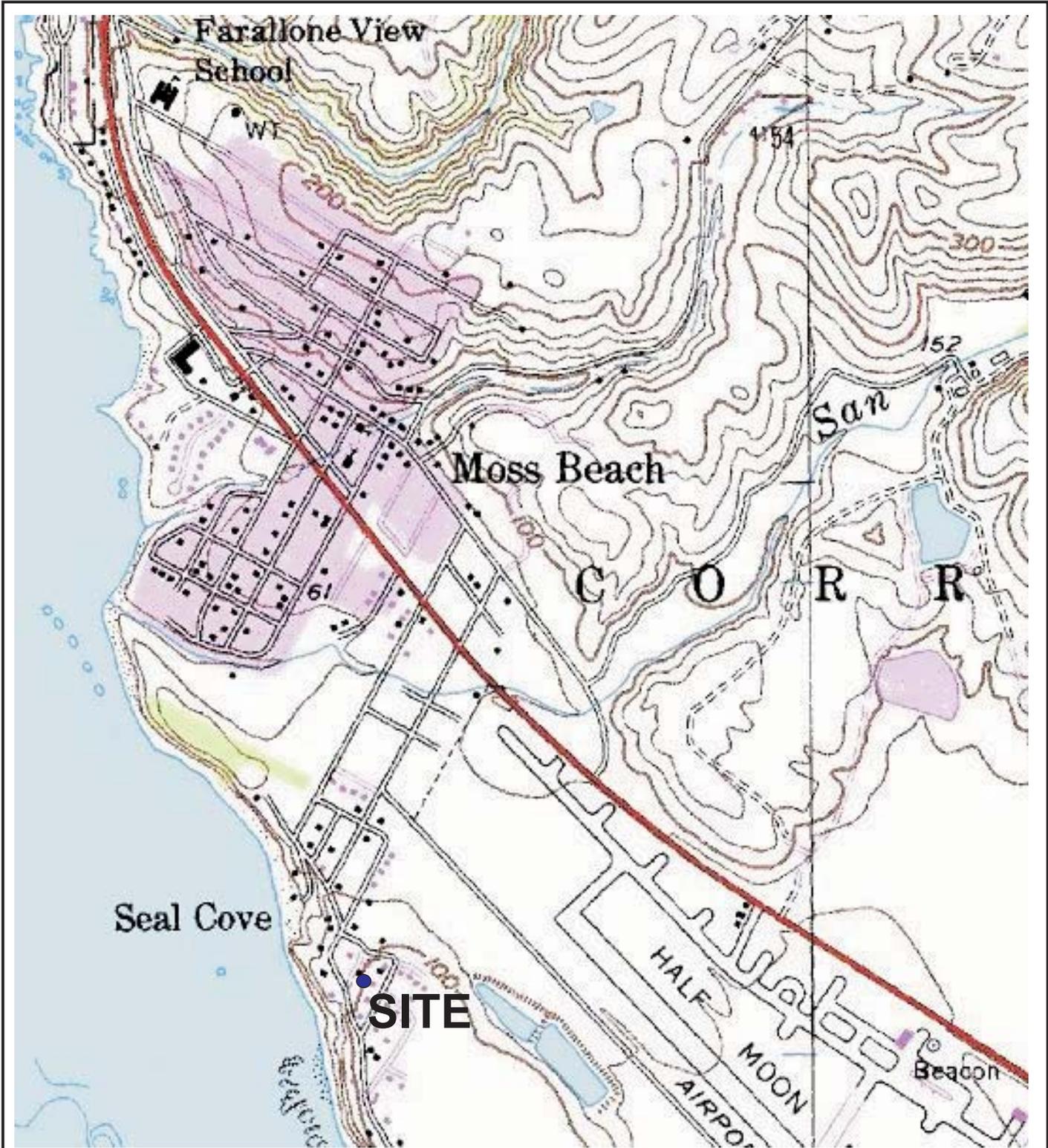
- Borchardt, G. and Topozada, T.R., 1996, Relocation of the “1836 Hayward Fault Earthquake” to the San Andreas Fault, Abstracts, American Geophysical Union Fall Meeting, December, San Francisco.
- Brabb, et. al., 1998, Geology of the Onshore Part of San Mateo County, San Mateo County, California, USGS OFR 98-137.
- California Building Code, 2016. California Code of Regulations. Title 24, Part 2 Volume 2, Effective January 1, 2017.
- Cotton and Associates, 1980, Geologic Analysis of the Seal Cove Area, Geotechnical Hazards Map, Scale: 1”=200’, August 5, 1980.
- Jennings, C.W., 1996, Preliminary Fault and Geologic Map, State of California, California Division of Mines and Geology, Scale 1:750,000.
- Hallenbeck and Associates, 1988, Fault Rupture Hazard Investigation, 155 La Grande Avenue, February 26.
- International Conference of Building Officials, April, 1997, 1997 Uniform Building Code, Volume 2 Structural Engineering Design Provisions.
- International Conference of Building Officials, February, 1998, Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada. (To be used with 1997 Uniform Building Code)
- Michelucci and Associates, 1989, Fault Hazard Investigation, 146 La Grande Avenue, July 24.
- Michelucci and Associates, 1995, Preliminary Report, 854 San Ramon Avenue, May 31.
- Petersen, M.D., Bryant, W.A., Cramer, C.H., Cao, T., Reichle, M.S., Frankel, A.D., Lienkaemper, J.J., McCrory, P.A., and Schwartz, D.P., 1996, Probabilistic Seismic Hazard Assessment for the State of California, USGS Open File Report 96-706, CDMG Open File Report 96-08, 33p.
- Topozada, T.R., Real, C.R., and Park, D.L., 1981, Preparation of Isoseismal Maps and Summaries of Reported Effects for pre-1900 California Earthquakes, CDMG Open File Report 81-11 SAC.
- Topozada, T.R., 1984, History of Earthquake Damage in Santa Clara County and Comparison of 1911 and 1984 Earthquakes.



United States Geological Survey, 1989, Lessons Learned from the Loma Prieta, California Earthquake of October 17, 1989, Circular 1045.

United States Geologic Survey, 11/20/2007, Earthquake Ground Motion Parameters, Version 5.0.8.

Working Group on California Earthquake Probabilities, 1999, Earthquake Probabilities in the San Francisco Bay Region: 2000 to 2030 – A Summary of Findings, U.S. Geological Survey Open File Report 99-517, version 1.

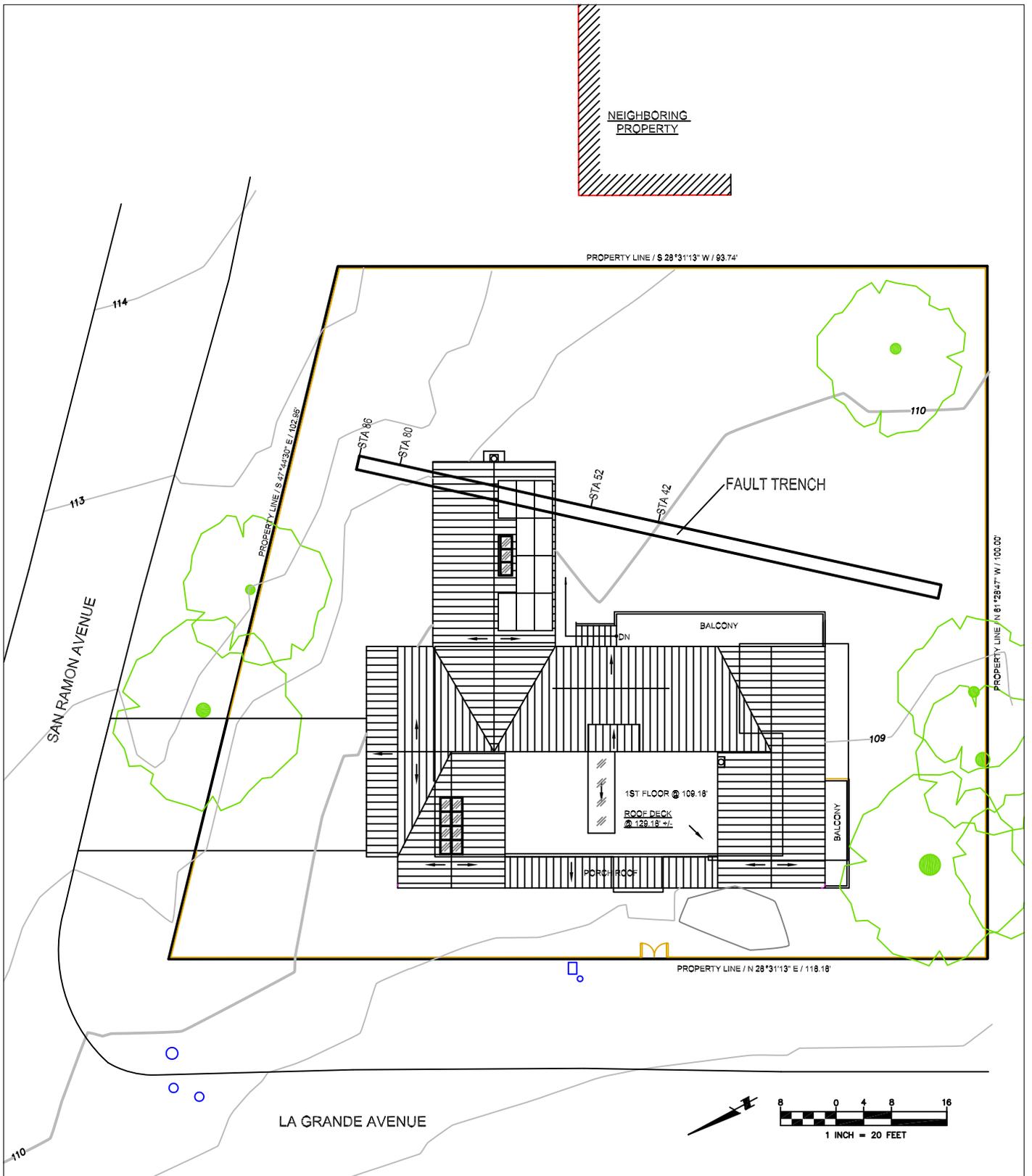


Sigma Prime Geosciences, Inc.

Figure	1
Date:	3/14/15
Job No.:	14-143

Location Map

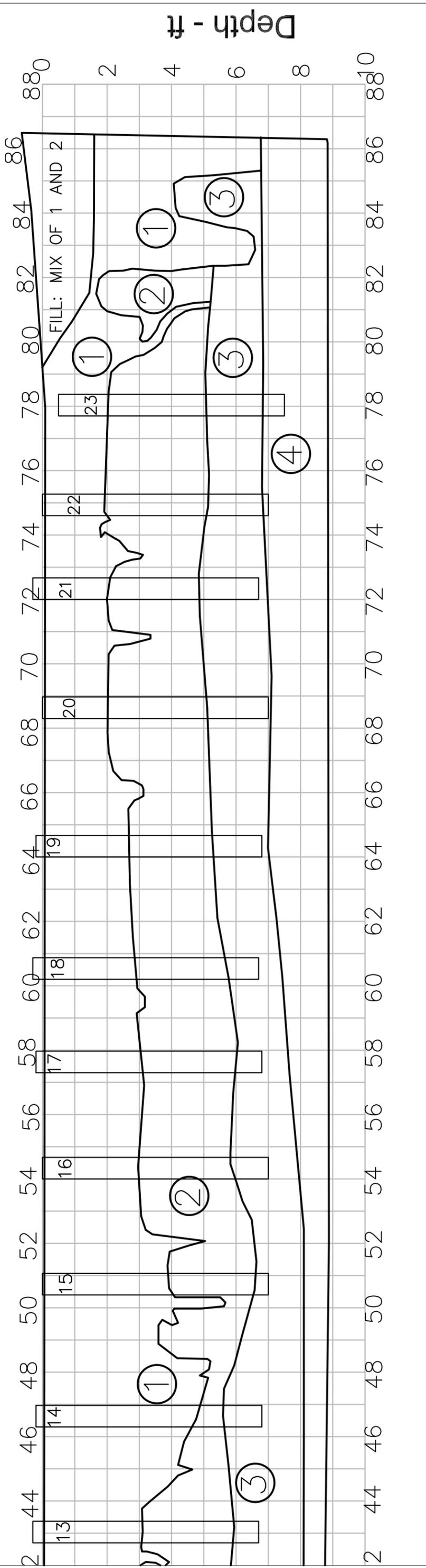
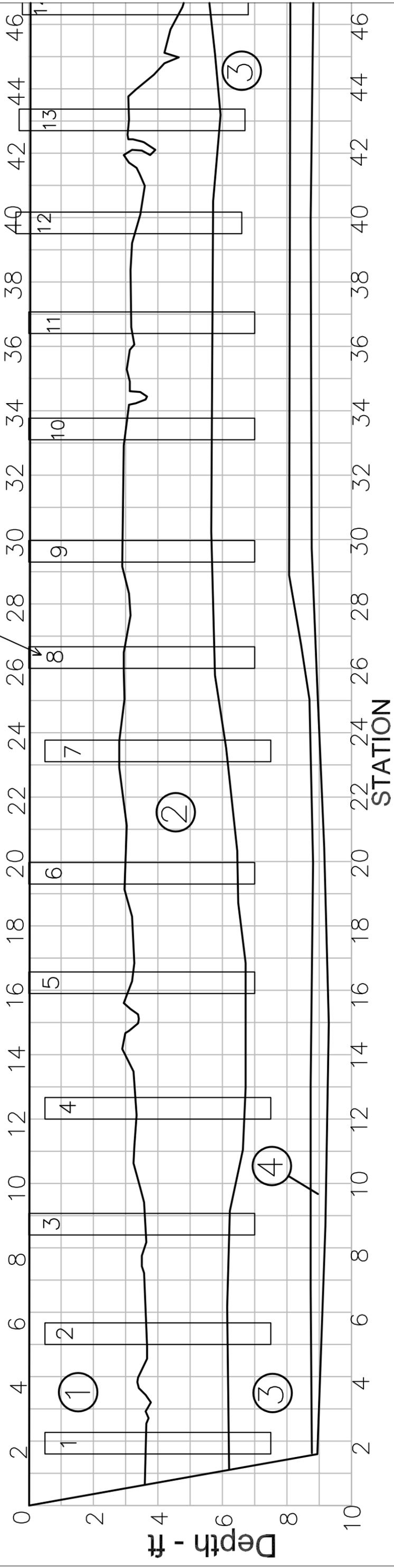
Paige Property, 146 La Grande Ave., Moss Beach



1"=20'

	Figure	2
	Date:	6/23/17
	Job No.:	15-143
Site Map Paige Property, 146 La Grande Ave., Moss Beach		

HYDRAULIC SHORE



1"=3' LOOKING AT NORTH WALL: TRENCH TRENDS N 30 E

EXPLANATION

- ① CLAY (CL) (Topsoil, A-Horizon): dark brown; soft to medium stiff; moist. Homogenous structure.
- ② SANDY CLAY (CL) (B-Horizon): orange-brown; very stiff; moist. Sand is angular, medium grained, arkosic with feldspars, derived from granitic basement rock.

Gradual contact between 2 and 3.

- ③ CLAYEY SAND (SP) : orange-brown; same as Unit 2, with less sand. Very dense.
- ④ SILTY SAND (SM): orange-brown; very dense; moist. Sand grains comprised of quartz, feldspar, biotite, mafic fragments; angular; medium to coarse grained. Occasional sub-rounded quartz cobbles. Faint horizontal laminations, some cross bedding. Lenticular bodies of different grain sizes.



Sigma Prime Geosciences, Inc.

Figure	4
Date:	3/14/15
Job No.:	14-143

Fault Trench Explanation

Paige Property, 146 La Grande Ave., Moss Beach



1"=50'

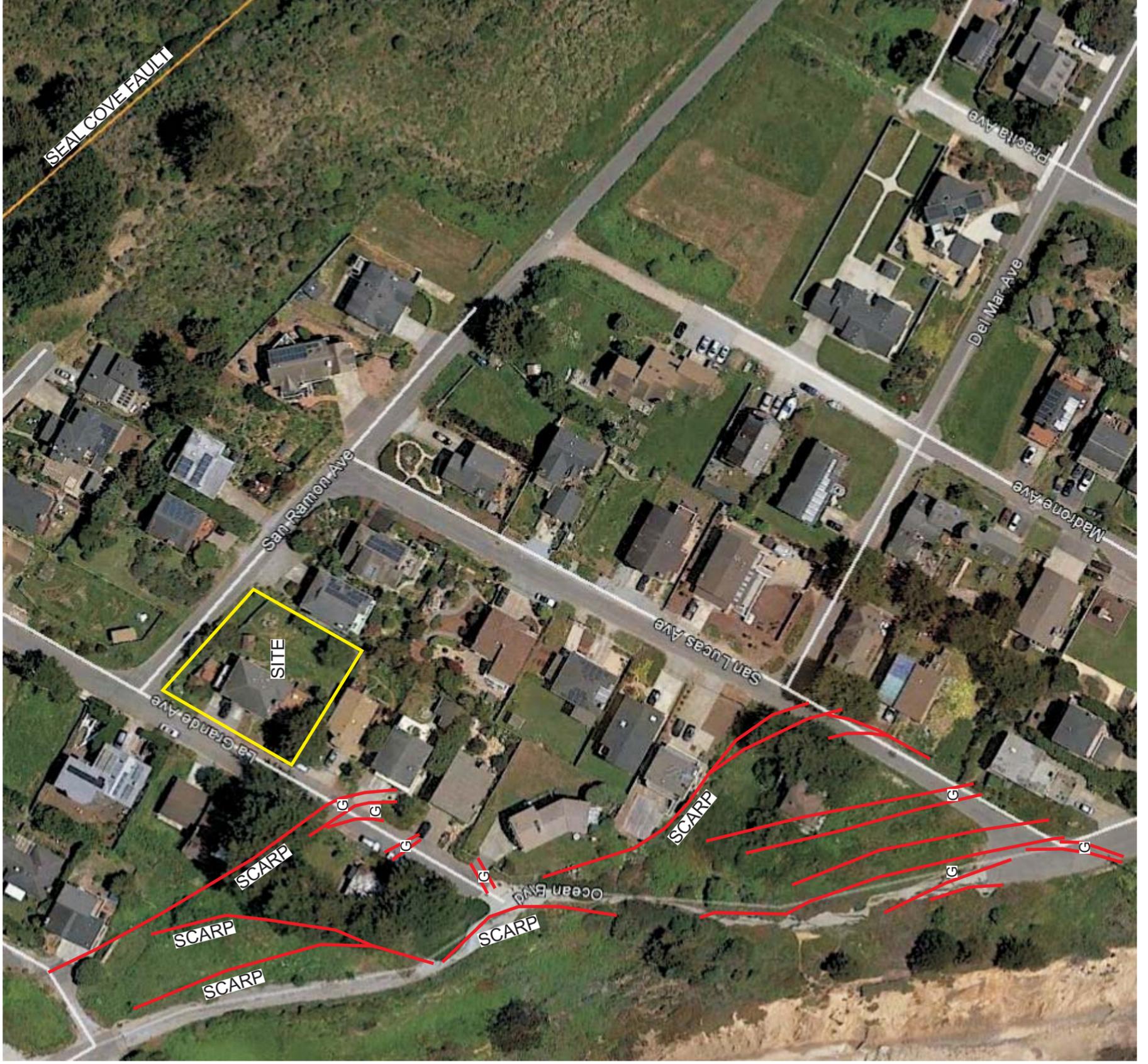


Sigma Prime Geosciences, Inc.

Figure	5
Date:	6/23/17
Job No.:	15-143

Fault Studies in Area

Paige Property, 146 La Grande Ave., Moss Beach



Note:
 "G"=Graben, typically less than 6 inches deep.



Not to Scale



Sigma Prime Geosciences, Inc.
 Paige Property, 146 La Grande Ave., Moss Beach

Figure 6
 Date: 7/1/17
 Job No.: 14-143

Geologic Hazard Map

July 21, 2017

ATTACHMENT E

Mark Reilly
163 Park Street
San Francisco, CA 94110

Dear Mr. Reilly:

SUBJECT: Coastside Design Review Recommendation of Approval
146 La Grande Avenue, Moss Beach
APN 037-258-260; County File No. PLN 2016-00317

At its meeting of May 11, 2017, the San Mateo County Coastside Design Review Committee (CDRC) considered your application for a Design Review Permit to allow construction of a new 4,742 sq. ft., two-story single-family residence, plus a 651 sq. ft. attached garage, subsequent to the demolition of the existing residence, as part of a hearing-level Coastal Development Permit (CDP) and Parcel Merger (Merger). The parcel merger has since been merged and recorded on July 20, 2017. The two parcels now constitute one legal 10,548 sq. ft. conforming parcel. No trees are proposed for removal and only minimal grading is involved. The project is appealable to the California Coastal Commission.

Based on the plans, application forms and accompanying materials submitted, the Coastside Design Review Committee recommended approval of your project based on and subject to the following findings and conditions of approval:

FINDINGS

The Coastside Design Review Officer found that:

1. For the Environmental Review

This project is exempt from environmental review pursuant to the California Environmental Quality Act (CEQA), Section 15303, Class 3(a), relating to the construction of a new single-family residence in an urban, residential zone.

The Coastside Design Review Committee found that:

2. For the Design Review

The project has been reviewed under and found to be in compliance with the Design Review Standards for One-Family and Two-Family Residential Development in the Midcoast, Section 6565.20 of the San Mateo County Zoning Regulations, specifically elaborated as follows:



- a. Section 6565.20(D) ELEMENTS OF DESIGN 1b. Building Mass, Shape and Scale: While the proposed home is 30% larger, and has greater lot coverage than any other home in the neighborhood, it respects the scale of other larger homes in the neighborhood through minimal grading/excavation at the front and side of the property, building dimensions, shape and form, and architectural details that are complimentary to other homes in the neighborhood
- b. Section 6565.20(D) ELEMENTS OF DESIGN 2d Elements of Design: The proposed project achieves a higher quality of design and construction than the current residence, and elevates the character of the neighborhood.
- c. Section 6565.20(D) ELEMENTS OF DESIGN 2d(1). Architectural Styles and Features: The proposed project remedies the current issue of the garage being the dominant feature of the home and blends it into the overall design of the home.
- d. Section 6565.20(F) ELEMENTS OF DESIGN 4. Lighting: The proposed project includes exterior lighting that is architecturally integrated with the home's design, style, material and colors, and is designed and located so light and glare are directed away from neighbors and confined to the site. Lighting is minimal and designed with specific activities in mind so outdoor areas will be illuminated no more than necessary to support the activity designated for that area.

RECOMMENDED CONDITIONS

Current Planning Section

1. The project shall be constructed in compliance with the CDP (once approved) and plans recommended for approval by the Coastsides Design Review Committee on May 11, 2017. Any changes or revisions to the approved plans shall be submitted to the Design Review Officer for review and approval prior to implementation. Minor adjustments to the project may be approved by the Design Review Officer if they are consistent with the intent of and are in substantial conformance with this approval. Alternatively, the Design Review Officer may refer consideration of the revisions to the Coastsides Design Review Committee, with applicable fees to be paid.
2. The applicant shall submit the following item and indicate the following on plans submitted for a building permit, as stipulated by the Coastsides Design Review Committee:
 - a. Lower the height of the covered glass roof deck to equal or less than the adjacent gable height.
 - b. Recommendation: Remove the roof and side doors on the covered glass roof deck.

3. During project construction, the applicant shall, pursuant to Chapter 4.100 of the San Mateo County Ordinance Code, minimize the transport and discharge of stormwater runoff from the construction site into storm drain systems and water bodies by:
 - a. Using filtration materials on storm drain covers to remove sediment from dewatering effluent.
 - b. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 1 and April 30.
 - c. Removing spoils promptly, and avoiding stockpiling of fill materials, when rain is forecast. If rain threatens, stockpiled soils and other materials shall be covered with a tarp or other waterproof material.
 - d. Storing, handling, and disposing of construction materials and wastes so as to avoid their entry to the storm drain system or water body.
 - e. Avoiding cleaning, fueling or maintaining vehicles on-site, except in an area designated to contain and treat runoff.
 - f. Limiting and timing application of pesticides and fertilizers to avoid polluting runoff.
4. The applicant shall include an erosion and sediment control plan to comply with the County's Erosion Control Guidelines on the plans submitted for the building permit. This plan shall identify the type and location of erosion control measures to be installed upon the commencement of construction in order to maintain the stability of the site and prevent erosion and sedimentation off-site.
5. All new power and telephone utility lines from the street or nearest existing utility pole to the project structures on the property shall be placed underground.
6. The applicant shall apply for a building permit and shall adhere to all requirements from the Building Inspection Section, the Department of Public Works and the Coastside Fire Protection District.
7. No site disturbance shall occur, including any grading or vegetation removal, until a building permit has been issued.
8. A Tree Protection Plan, in compliance with Sections 12,020.4 and 12,020.5 of the County's Significant Tree Ordinance, shall be submitted with the building permit plans for review and approval by the Current Planning Section.
9. To reduce the impact of construction activities on neighboring properties, comply with the following:

- a. All debris shall be contained on-site; a dumpster or trash bin shall be provided on-site during construction to prevent debris from blowing onto adjacent properties. The applicant shall monitor the site to ensure that trash is picked up and appropriately disposed of daily.
 - b. The applicant shall remove all construction equipment from the site upon completion of the use and/or need of each piece of equipment which shall include but not be limited to tractors, back hoes, cement mixers, etc.
 - c. The applicant shall ensure that no construction-related vehicles shall impede through traffic along the right-of-way on La Grande Avenue. All construction vehicles shall be parked on-site outside the public right-of-way or in locations which do not impede safe access on La Grande Avenue. There shall be no storage of construction vehicles in the public right-of-way.
10. The exterior color samples submitted to the CDRC are approved. Color verification shall occur in the field after the applicant has applied the approved materials and colors but before a final inspection has been scheduled.
11. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 5:00 p.m. Saturdays. Said activities are prohibited on Sundays, Thanksgiving and Christmas (San Mateo Ordinance Code Section 4.88.360).
12. Plans shall demonstrate compliance with the Water Efficient Landscape Ordinance (WELo). Installation of the approved landscape plan is required prior to final inspection.
13. The project site is located within the Fitzgerald Area of Special Biological Significance (ASBS) Watershed. Runoff and other polluted discharges from the site are prohibited. Development shall minimize erosion, treat stormwater from new/replaced impervious surfaces, and prevent polluted discharges into the ASBS or a County storm drain (e.g., car washing in a driveway or street, pesticide application on lawn).
14. The project site is located within the Fitzgerald Area of Special Biological Significance (ASBS) Watershed and is considered a Construction Stormwater Regulated Site. Weekly construction inspections are required throughout the duration of land disturbance during the rainy season (October 1 to through April 30) for sites within the ASBS Watershed, as required by the State Water Resources Control Board General Exceptions to the California Ocean Plan with Special Protections adopted on March 20, 2012.

Building Inspection Section

15. The applicant shall apply for a building permit.

Montara Water and Sanitary District

16. Prior to the issuance of a building permit, the applicant shall obtain Domestic Water/Fire Protection Connection and Sewer Permits, including the submittal of adequate fire flow calculations from a Certified Fire Protection Contractor.

Department of Public Works

17. Prior to the issuance of the building permit, the applicant shall have prepared, by a registered civil engineer, a drainage analysis of the proposed project and submit it to the Department of Public Works for review and approval. The drainage analysis shall consist of a written narrative and a plan. The flow of the stormwater onto, over, and off of the property shall be detailed on the plan and shall include adjacent lands as appropriate to clearly depict the pattern of flow. The analysis shall detail the measures necessary to certify adequate drainage. Post-development flows and velocities shall not exceed those that existed in the pre-developed state. Recommended measures shall be designed and included in the improvement plans and submitted to the Department of Public Works for review and approval.
18. Prior to the issuance of the building permit, the applicant shall submit a driveway "Plan and Profile," to the Department of Public Works, showing the driveway access to the parcel (garage slab) complying with County Standards for driveway slopes (not to exceed 20%) and to County Standards for driveways (at the property line) being the same elevation as the center of the access roadway. When appropriate, as determined by the Department of Public Works, this plan and profile shall be prepared from elevations and alignment shown on the roadway improvement plans. The driveway plan shall also include and show specific provisions and details for both the existing and the proposed drainage patterns and drainage facilities.
19. No proposed construction work within the County right-of-way shall begin until County requirements for the issuance of an encroachment permit, including review of the plans, have been met and an encroachment permit issued. Applicant shall contact a Department of Public Works Inspector 48 hours prior to commencing work in the right-of-way.
20. Prior to the issuance of the building permit, the applicant will be required to provide payment of "roadway mitigation fees" based on the square footage (assessable space) of the proposed building per Ordinance No. 3277.

Coastside Fire Protection District

21. Smoke detectors which are hardwired: As per the California Building Code, State Fire Marshal Regulations, and Coastside Fire Protection District Ordinance No. 2013-03, the

applicant is required to install State Fire Marshal approved and listed smoke detectors which are hardwired, interconnected, and have battery backup. These detectors are required to be placed in each new and reconditioned sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. In existing sleeping rooms, areas may have battery powered smoke alarms. A minimum of one detector shall be placed on each floor. Smoke detectors shall be tested and approved prior to the building final.

22. Add the following note to the plans: New residential buildings shall have internally illuminated address numbers contrasting with the background so as to be seen from the public way fronting the building. Residential address numbers shall be at least 6 feet above the finished surface of the driveway. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the Coastside Fire Protection District. This remote signage shall consist of a 6-inch by 18-inch green reflective metal sign with 3-inch reflective numbers/letters similar to Hy-Ko 911 or equivalent.
23. Roof covering: As per Coastside Fire Protection District Ordinance No. 2013-03, the roof covering of every new building or structure, and materials applied as part of a roof covering assembly, shall have a minimum fire rating of Class "B" or higher as defined in the current edition of the California Building Code.
24. Vegetation management: As per the Coastside Fire Protection District Ordinance No. 2013-03, the 2013 California Fire Code and Public Resources Code 4291:
 - a. A fuel break of defensible space is required around the perimeter of all structures to a distance of not less than 30 feet and may be required to a distance of 100 feet or to the property line. In SRA (State Responsible Area), the fuel break is 100 feet or to the property line.
 - b. Trees located within the defensible space shall be pruned to remove dead and dying portions, and limbed up 6 to 10 feet above the ground. New trees planted in the defensible space shall be located no closer than 10 feet to adjacent trees when fully grown or at maturity.
 - c. Remove that portion of any existing tree, which extends within 10 feet of the outlet of a chimney or stovepipe or is within 5 feet of any structure.
25. Add note to plans: Smoke alarms/detectors are to be hardwired, interconnected, or with battery backup. Smoke alarms to be installed per manufacturer's instruction and NFPA 72.
26. Add note to plans: Escape or rescue windows shall have a minimum net clear openable area of 5.7 sq. ft.; 5.0 sq. ft. allowed at grade. The minimum net clear openable height

dimension shall be 24 inches. The net clear openable width dimension shall be 20 inches. Finished sill height shall be not more than 44 inches above the finished floor.

27. Identify rescue windows in each bedroom and verify that they meet all requirements. Add this to plans.
28. Fire apparatus access roads to be an approved all weather surface. Grades 15% or greater to be surfaced w/ asphalt, or brushed concrete. Grades 15 % or greater shall be limited to 150 ft. in length with a minimum of 500 ft. between the next section. For roads approved less than 20 feet, 20-foot wide turnouts shall be on each side of 15% or greater section. No grades over 20%. (Plan and profile required) CFC 503.
29. Add the following note to the plans: The installation of an approved spark arrester is required on all chimneys, existing and new. Spark arresters shall be constructed of woven or welded wire screening of 12-gauge USA standard wire having openings not exceeding 1/2-inch.
30. Add the following note to the plans: A fuel break or defensible space is required around the perimeter of all structures, existing and new, to a distance of not less than 30 feet and may be required to a distance of 100 feet or to the property line. This is neither a requirement nor an authorization for the removal of living trees.
31. Add the following note to the plans: Trees located within the defensible space shall be pruned to remove dead and dying portions, and limbed up 6 feet above the ground. New trees planted in the defensible space shall be located no closer than 10 feet to adjacent trees when fully grown or at maturity.
32. Add the following note to the plans: Remove that portion of any existing tree, which extends within 10 feet of the outlet of a chimney or stovepipe or is within 5 feet of any structure. Maintain any tree adjacent to or overhanging a building free of dead or dying wood.
33. Fire Hydrant: As per 2013 CFC, Appendix B and C, a fire district approved fire hydrant (Clow 960) must be located within 250 feet of the proposed single-family dwelling unit measured by way of drivable access. As per 2013 CFC, Appendix B, the hydrant must produce a minimum fire flow of 1,000 gallons per minute at 20 pounds per square inch residual pressure for 2 hours. Contact the local water purveyor for water flow details.
34. Show location of fire hydrant on a site plan. A fire hydrant is required within 250 feet of the building and flow a minimum of 1000 gpm at 20 psi. This information is to be verified by the water purveyor in a letter initiated by the applicant and sent to San Mateo County Fire/CAL Fire or Coastside Fire District. If there is not a hydrant within 250 feet with the required flow, one will have to be installed at the applicant's expense.
35. Automatic Fire Sprinkler System: As per San Mateo County Building Standards and Coastside Fire District Ordinance Number 2013-03, the applicant is required to install an automatic fire sprinkler system throughout the proposed or improved dwelling and

garage. All attic access locations will be provided with a pilot head on a metal upright. All areas that are accessible for storage purposes shall be equipped with fire sprinklers including closets and bathrooms. The only exception is small linen closets less than 24 square feet with full depth shelving. The plans for this system must be submitted to the San Mateo County Planning and Building Division or The City of HMB. A building permit will not be issued until plans are received, reviewed and approved. Upon submission of plans, the County or City will forward a complete set to the Coastside Fire District for review. The fee schedule for automatic fire sprinkler systems shall be in accordance with Half Moon Bay Ordinance No. 2006-01. Fees shall be paid prior to plan review.

36. Unconditioned areas of first floor to have fire sprinklers or 1-hour separation from bedrooms on second floor i.e., outdoor kitchen, lounge.
37. Installation of underground sprinkler pipe shall be flushed and visually inspected by Fire District prior to hook-up to riser. Any soldered fittings must be pressure tested with trench open.
38. Exterior bell and interior horn/strobe: are required to be wired into the required flow switch on your fire sprinkler system. The bell, horn/strobe and flow switch, along with the garage door opener are to be wired into a separate circuit breaker at the main electrical panel and labeled.
39. All fire conditions and requirements must be incorporated into your building plans, (see attached conditions) prior to building permit issuance. It is your responsibility to notify your contractor, architect and engineer of these requirements.

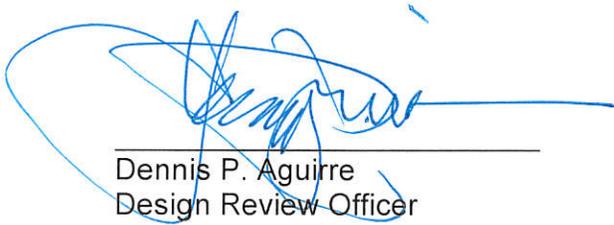
Geotechnical Section

40. Prior to the issuance of the building permit, approval of the development plans and applicable structural design criteria must be obtained from the Geotechnical Consultant of record as required by Section I of the "Geotechnical Consultant Approval" form.
41. Section II of the "Geotechnical Consultant Approval" form must be observed and completed by the Geotechnical Consultant of record prior to acceptance of the completed work by the Geotechnical Section of the Planning and Building Department.

Please note that the decision of the Coastside Design Review Committee is a recommendation regarding the project's compliance with design review standards, not the final decision on this project, which requires a hearing-level CDP. The decision on the CDP will take place at the August 9, 2017 Planning Commission meeting. For more information, please contact the project planner, Dennis P. Aguirre, at 650/363-1867 or daquirre@smc.gov.

To provide feedback, please visit the Department's Customer Survey at the following link: <http://planning.smcgov.org/survey>.

Sincerely,



Dennis P. Aguirre
Design Review Officer

DPA:aow – DPABB0421_WAN.DOCX

cc: Stuart Grunow, Member Architect
Kris Lannin-Liang, Moss Beach Community Representative
Beverly Garrity, Interested Member of the Public
Janet Didur, Interested Member of the Public
Carlyle Ann Young, Interested Member of the Public
Julia Paige and Dan Spangler

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105
PHONE: (415) 904-5260
FAX: (415) 904-5400
WEB: WWW.COASTAL.CA.GOV

ATTACHMENT F

July 28, 2017

Dennis Aguirre, Project Planner
County of San Mateo
Planning and Building Department
455 County Center, 2nd Floor
Redwood City, CA 94063

RE: Planning Permit Application Referral for PLN2016-00317 (Reilly) (APN037-258-260)

Dear Mr. Aguirre:

Thank you for forwarding the County of San Mateo's PLN2016-00317 permit referral form, dated and received (via e-mail) on July 21, 2017. The applicant is requesting Coastside Design Review and a Coastal Development Permit (CDP) for demolition of an existing residential structure and construction of a new, two-story, 4,742-square-foot residence with an attached 651-square-foot garage located on a recently-merged, legal 10,548-square-foot parcel. The proposed project includes the removal of non-native trees and grading in order to improve drainage of the site.

The proposed project at 146 La Grande Ave., Moss Beach, is located on a parcel within the Geologic Hazards Zone 2 area of Seal Cove. Local Coastal Program (LCP) Section 6296.2 describes Zone 2 as an area where risk to development is considered to be moderate to high; with the likelihood of eliminating such risk to be very low. We recommend that the County apply the necessary geotechnical investigations and development requirements outlined in Table 1 of LCP Section 6296.3 for development located within Zone 2. The County evaluation should consider and demonstrate that the site is reasonably stable in accordance with current professional standards consistent with the development requirements in Table 1 of LCP Section 6296.3.

LCP Policy 9.3 regulates Geological Hazards Areas. LCP Policy 9.10 requires review of all building and grading permits in designated geologic hazardous areas to evaluate any potential geotechnical problems and to review and approve the adequacy of all required geotechnical investigations. We suggest that the County analysis discuss whether or not the proposed development is consistent with the seismic and fault/fracture criteria provided in LCP Section 6326.3 and whether or not it meets the requirements of LCP Section 6295.4 for development in geologic hazard districts. LCP Section 6295.4, in addition to requiring that the County Geologist evaluate the proposed project to determine if it meets the criteria set forth in the district regulations, requires that no building permit be approved in a "GH" district until a deed

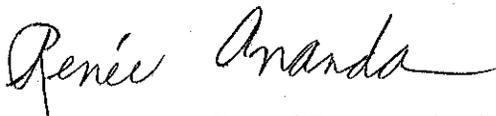
Dennis Aguirre, Project Planner
San Mateo County - Planning and Building Department
PLN2016-00317 (Reilly)
La Grande Avenue, Moss Beach
July 28, 2017

restriction on the parcel has been recorded. We recommend that the County require the applicant to record a deed restriction on the parcel as provided under LCP Section 6295.4.

The project referral indicates that the existing structure is not code compliant with respect to building setbacks and that the recent merger of two parcels has brought the parcel in conformity with LCP standards. We suggest that this be thoroughly discussed in the County analysis of the proposed project along with its consistency with LCP Section 6160 for single-family residences and LCP Section 6300.2 for the S-17 Combining District. The evaluation should discuss the proposed project's consistency with the design standards for R-1/S-17 zoning. The Planning Application form and Design Review application indicate that existing development on the parcel includes an illegal secondary unit; however, the applicant's project description narrative states no secondary unit is proposed for the site. We recommend that the County determine the permit status of the existing secondary unit and evaluate its consistency with the LCP; if unpermitted, we urge the County to require that the applicant remove the unpermitted structure or apply for a CDP to legally authorize it. We recommend that the evaluation include review and discussion of the site's compliance with the standards and requirements of LCP Section 6160 for single-family residences and LCP requirements for second units in the R-1 Zoning District.

Thank you for the opportunity to provide you with these comments. Please feel free to contact me at (415) 904-5292 or by email at renee.ananda@coastal.ca.gov if you have questions regarding the proposed project.

Sincerely,



Renée Ananda, Coastal Program Analyst
North Central Coast District



San Mateo County Planning Commission Meeting

Owner/Applicant: _____

Attachment: _____

File Numbers: _____



San Mateo County Planning Commission Meeting

Owner/Applicant: _____

Attachment: _____

File Numbers: _____



San Mateo County Planning Commission Meeting

Owner/Applicant: _____

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