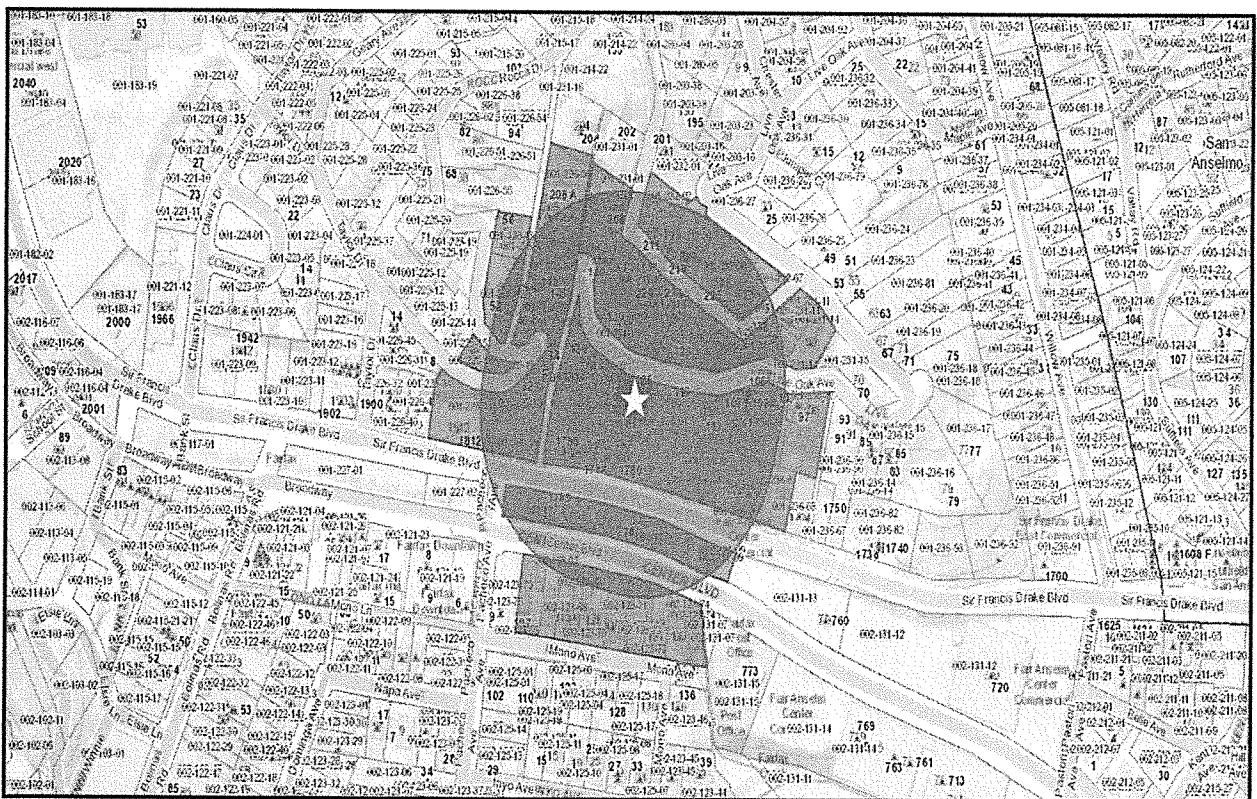


**TOWN OF FAIRFAX
STAFF REPORT
Department of Planning and Building Services**

TO: Fairfax Planning Commission
DATE: July 20, 2017
FROM: Linda Neal, Principal Planner
LOCATION: 125 Live Oak Avenue; Assessor's Parcel No. 001-236-03
ZONING: Residential RD 5.5-7 Zone
PROJECT: 50% remodel/expansion of single-family residence
ACTION: Move to Continue Action on Hill Area Residential Development permit, Parking Variance, Design Review and Encroachment Permit; Application # 17-13
APPLICANT: Dan Bettencourt
OWNER: DJB Property Solutions L.L.C
CEQA STATUS: Categorically exempt, § 15301(a)



125 LIVE OAK AVENUE

BACKGROUND

This project was continued during the April 26, 2017 and again during the July 29, 2017 meeting(s). At the April 26, 2017 meeting, the Planning Commission directed the applicants to have their surveyor verify the Live Oak Avenue right-of-way line in the area where their project plans propose locating the fire truck apparatus pull out along the frontage of 130 Live Oak Avenue. The location of a fire truck apparatus pull out is a condition the Ross Valley Fire Department has placed upon the proposed 50% remodel of the house at 125 Live Oak Avenue.

DISCUSSION

Staff and the Town Engineer met the project surveyor's crewmember who was tasked with setting the survey markers identifying the edge of the right-of-way in the field to verify the point locations on June 14, 2017. At that meeting, staff and the Town Engineer were advised by the crewmember that he was unable to set the survey markers because the survey markers that were set to survey the project site had been removed by some unknown person(s).

Removal of the survey markers meant that at least some of the original survey markers had to be reset before the edge of the right-of-way line could be accurately located. The accurate location of the edge of the right-of-way is necessary in order for the project surveyor to prepare, sign and seal a plat map showing the edge of the right-of-way in its proximity to the improvements on the 130 and 133 Live Oak Avenue properties. Along with the marking of the line in the field, a signed sealed plat map is needed in order for the Planning Commission to determine the impacts of the location of the fire truck pull out in front of 130 Live Oak on the public right-of-way and neighboring properties.

The Town Engineer and the Building Official met again with the surveyor's crewmember on July 24, 2017 and located the edge of the right-of-way. The applicants are working to provide the required plat map which will hopefully be ready before the meeting on July 20, 2017 and will show an acceptable location for the fire truck apparatus space.

The alternative would be for the Commission to take action on the project and if approved, include a condition that the fire truck pull out area be located within the right-of-way along the property frontage of the project site.

For the discussion of the house project, see the attached staff report dated April 26, 2017.

RECOMMENDATION

1. Conduct the public hearing.

2. Approve application # 17-13 by adopting Resolution No. 17-15 setting forth the findings and conditions for the project approval.

ATTACHMENTS

Attachment A – Resolution No. 17-15.

Attachment B – April 26, 2017 staff report and attachments including Geotechnical and Hydrologic report from Summit Engineering dated 4/17/15, 3/23/16, 12/8/16 and 2/25/17, Town Engineer's memorandums of 6/17/15, 11/22/16 and 4/6/17 and the record of survey

Attachment C - Minutes from the April 26, 2017 meeting

Attachment D – E-mail from owner and tenant of 130 Live Oak Avenue

RESOLUTION NO. 17-15

A Resolution of the Fairfax Planning Commission Approving Application No. 17-13 for a Hill Area Residential Development, Design Review and Encroachment Permits and for a Parking Variance for a 50% Remodel and Addition to an Existing Single-family Residence at 125 Live Oak Avenue

WHEREAS, the Town of Fairfax has received an application from Dan Bettencourt to expand and remodel an existing 1,112-square-foot, 3-bedroom, 2-bathroom residence converting it into a 1,962-square-foot, 3 bedroom, 3-bathroom residence; and

WHEREAS, the Planning Commission held a duly noticed Public Hearing on April 26, 2017, and on July 20, 2017, at which time the Planning Commission determined that the project complies with the Hill Area Residential Development Overlay Ordinance; and

WHEREAS, based on the plans and other documentary evidence in the record the Planning Commission has determined that the applicant has met the burden of proof required to support the findings necessary to approve the Hill Area Residential Development, Design Review and Encroachment Permits and a Parking Variance; and

WHEREAS, the proposed remodel addition has been designed to stay within the footprint of the existing structure, does not increase the visual mass of the building and minimizes additional disturbance to the hillside it has been found to comply with the following 2010-2030 Fairfax General Plan Policies and Goals:

Policy LU-1.2.3: New and renewed development shall be designed and located so as to minimize the visual mass. The Town will require exterior materials and colors that blend the exterior appearance of structures with the surrounding natural landscape, allowing for architectural diversity.

Policy LU-4.1.3: New and renewed development shall comply with all regulations encompassed in the California and Uniform Building Codes intended to reduce potential damage and threats to the public's health, safety and welfare in the event of an earthquake.

Policy LU4.1.4: New and renewed development shall be designed to minimize run-off in a manner that does not cause undue hardship on neighboring properties.

Policy LU 7.1.5; New and renewed residential development shall preserve and enhance the existing character of the Town's neighborhoods in diversity, architectural character, size and mass.

WHEREAS, the Commission has made the following findings:

Hill Area Residential Development

1. The proposed development is consistent with the General Plan and the Residential RD 5.5-7 Zone regulations.
2. The site planning preserves identified natural features as much as possible while also complying with other agency and department regulations.
3. Vehicular access and parking are adequate.
4. The proposed development harmonizes with surrounding residential development and meets the design review criteria contained in Town Code § 17.020.040.
5. The approval of the Hill Area Residential Development permit for 1 single-family residence on this 4,500-square-foot parcel shall not constitute a grant of special privilege and shall not contravene the doctrines of equity and equal treatment.
6. The development and use of the property as approved under the Hill Area Residential Development Permit will not cause excessive or unreasonable detriment to adjoining properties or premises, or cause adverse physical or economic effects thereto, or create undue or excessive burdens in the use and enjoyment thereof, or any or all of which effects are substantially beyond that which might occur without approval or issuance of the use permit.
7. Approval of the proposed Hill Area Residential Development permit is not contrary to those objectives, goals or standards pertinent to the particular case and contained or set forth in any Master Plan, or other plan or policy, officially adopted by the Town.
8. Approval of the Hill Area Residential Development permit will result in equal or better development of the premises than would otherwise be the case; and

WHEREAS, The Town Engineer has reviewed the following plans and reports and has determined the project can be constructed, with certain conditions of approval, without creating any hazards:

1. Development Plans, cover sheet A0, Engineering plan pages C1 and C2 by Alberto Masso, Registered Professional Engineer (plan certification date 33/17), topographical survey sheet SV-1 by Wiley J. Peirce, Land Surveyor, dated 1/12/17 and revised architectural plan pages A0.1, A2, A2B, A5 and A6 by Bacilia Macias, Architect, received October 13, 2016.

2. Geotechnical and Hydrologic reports from Summit Engineering dated 4/17/15, 3/23/16, 12/8/16 and 2/25/17 (Attachment B).

Based on the Town Engineer's review and recommendation that the project can be safely constructed, the Planning Commission finds that:

1. The health safety and welfare of the public will not be adversely affected;
2. Adjacent properties are adequately protected by project investigation and design from geologic hazards as a result of the work;
3. Adjacent properties are adequately protected by project design from drainage and erosion problems as a result of the work;
4. The amount of the excavation or fill proposed is not more than that required to allow the property owner substantial use of his or her property;
5. The visual and scenic enjoyment of the area by others will not be adversely affected by the project more than is necessary;
6. Natural landscaping will not be removed by the project more than is necessary; and
7. Town code § 17.072.090(c)(4) prohibits grading of hillside properties from October 1st through April 1st of each year. Therefore, the time of year during which construction will take place is such that work will not result in excessive siltation from storm runoff nor prolonged exposure of unstable excavated slopes.

WHEREAS, the Commission has approved the project subject to the applicant's compliance with the following conditions:

1. The project is approved as it is depicted on the development Plans, cover sheet A0, Engineering plan pages C1 and C2 by Alberto Masso, Registered Professional Engineer (plan certification date 33/17), topographical survey sheet SV-1 by Wiley J. Peirce, Land Surveyor, dated 1/12/17, revised architectural plan pages A0.1, A2, A2B, A5 and A6 by Bacilia Macias, Architect, received October 13, 2016 and the lighting plan, page LT-1 dated 10/9/15 with the exterior lighting fixture locations as shown subject to alternative fixtures being approved by the Planning Staff for the north side of the structure that are shielded and direct all light downward.
2. Prior to issuance of any of the building permits for the project the applicant or his assigns shall:
 - a. Submit a construction plan to the Public Works Department which may include but is not limited to the following:

- Construction delivery routes approved by the Department of Public Works.
- Construction schedule (deliveries, worker hours, etc.)
- Notification to area residents
- Emergency access routes

b. The applicant shall prepare, and file with the Public Works Director, a video tape of the roadway conditions on the public construction delivery routes (routes must be approved by Public Works Director).

c. Submit a bond or letter of credit to the Town in an amount that will cover the cost of grading, weatherization and repair of possible damage to public roadways. The applicant shall submit contractor's estimates for any grading, site weatherization and improvement plans for approval by the Town Engineer or Building Official. Upon approval of the contract costs, the applicant shall submit a cash deposit, bond or letter of credit equaling 100% of the estimated construction costs.

d. The foundation and retaining elements shall be designed by a structural engineer certified as such in the state of California. Plans and calculations of the foundation and retaining elements shall be stamped and signed by the structural engineer and submitted to the satisfaction of the Town Structural Engineer.

e. The grading, foundation, retaining, and drainage elements shall also be stamped and signed by the site geotechnical engineer as conforming to the recommendations made by the project Geotechnical Engineer.

f. Prior to submittal of the building permit plans, the applicant shall secure written approval from the Ross Valley Fire Authority, Marin Municipal Water District and the Ross Valley Sanitary District noting the development conformance with their recommendations.

g. Submit 3 copies of the record of survey with the building permit plans.

h. All retaining walls that are visible from the street and are constructed of concrete shall be heavily textures or be colorized in a manner approved by the planning staff prior to issuance of the building permit. This condition is intended to mitigate the visual impact of the proposed walls.

i. The applicant shall secure a tree cutting permit, if required, from the Town prior to removal of any on-site trees subject to a permit under Town Code Chapter 9.36.

3. During the construction process the following shall be required:

a. The geotechnical engineer shall be on-site during the grading process (if there is any grading remaining to be done) and shall submit written certification to the

Town Staff that the grading has been completed as recommended prior to installation of foundation and/or retaining forms and piers.

b. Prior to the concrete form inspection by the building official, the geotechnical and structural engineers shall field check the forms of the foundations and retaining elements and provide written certification to the Town staff that the work to this point has been completed in conformance with their recommendations and the approved building plans. The Building Official shall field check the concrete forms prior to the pour.

c. All construction-related vehicles including equipment delivery, cement trucks and construction materials shall be situated off the travel lane of the adjacent public right(s)-of-way at all times. This condition may be waived by the Building Official on a case-by-case basis with prior notification from the project sponsor.

d. Any proposed temporary closures of a public right-of-way shall require prior approval by the Fairfax Police Department and any necessary traffic control, signage or public notification shall be the responsibility of the applicant or his/her assigns. Any violation of this provision will result in a stop work order being placed on the property and issuance of a citation.

4. Prior to issuance of an occupancy permit, the following shall be completed:

a. The geotechnical engineer shall field check the completed project and submit written certification to the Town Staff that the foundation, retaining, grading and drainage elements have been installed in conformance with the approved building plans and the recommendations of the soils report.

b. The Planning Department and Town Engineer shall field check the completed project to verify that all and planning commission conditions and required engineering improvements have been complied including installation of landscaping and irrigation prior to issuance of the certificate of occupancy.

5. Excavation shall not occur between October 1st and April 1st of any year. The Town Engineer has the authority to waive this condition depending upon the weather.

6. The roadways shall be kept free of dust, gravel and other construction materials by sweeping them, daily, if necessary.

7. Any changes, modifications, additions or alterations made to the approved set of plans will require a modification of Application # 17-13. Any construction based on job plans that have been altered without the benefit of an approved modification of Application 17-13 will result in the job being immediately stopped and red tagged.

8. Any damages to the public portions of Oak Manor Drive or Sir Francis Drake Boulevard or other public roadway used to access the site resulting from construction

activities shall be the responsibility of the property owner.

9. The applicant and its heirs, successors, and assigns shall, at its sole cost and expense, defend with counsel selected by the Town, indemnify, protect, release, and hold harmless the Town of Fairfax and any agency or instrumentality thereof, including its agents, officers, commissions, and employees (the "Indemnitees") from any and all claims, actions, or proceedings arising out of or in any way relating to the processing and/or approval of the project as described herein, the purpose of which is to attack, set aside, void, or annul the approval of the project, and/or any environmental determination that accompanies it, by the Planning Commission, Town Council, Planning Director, Design Review Board or any other department or agency of the Town. This indemnification shall include, but not be limited to, suits, damages, judgments, costs, expenses, liens, levies, attorney fees or expert witness fees that may be asserted or incurred by any person or entity, including the applicant, third parties and the Indemnitees, arising out of or in connection with the approval of this project, whether or not there is concurrent, passive, or active negligence on the part of the Indemnitees. Nothing herein shall prohibit the Town from participating in the defense of any claim, action, or proceeding. The parties shall use best efforts, acting in good faith, to select mutually agreeable defense counsel. If the parties cannot reach agreement, the Town may select its own legal counsel and the applicant agrees to pay directly, or timely reimburse on a monthly basis, the Town for all such court costs, attorney fees, and time referenced herein, provided, however, that the applicant's duty in this regard shall be subject to the Town's promptly notifying the applicant of any said claim, action, or proceeding.

10. The applicant shall comply with all applicable local, county, state and federal laws and regulations. Local ordinances which must be complied with include, but are not limited to: the Noise Ordinance, Chapter 8.20, Polystyrene Foam, Degradable and Recyclable Food Packaging, Chapter 8.16, Garbage and Rubbish Disposal, Chapter 8.08, Urban Runoff Pollution Prevention, Chapter 8.32 and the Americans with Disabilities Act.

11. Conditions placed upon the project by outside agencies or by the Town Engineer may be eliminated or amended with that agency's or the Town Engineer's written notification to the Planning Department prior to issuance of the building permit.

Town Engineer

1. The encroachment permit for driveway-bridge and associated supporting retaining wall shall be recorded at the County of Marin Recorder's Office prior to issuance of the building permit for the project.

2. An excavation and fill permit from the Building Department in addition to the required building permit.

3. Frequent inspections of the foundation construction shall be made by the soils engineer and a final construction review letter must be provided from Alberto Gomez-

Masso of Summit Engineering stating that all the required stabilization work on the site has been completed prior to the project final inspection. This letter must also cover the stability of the 80% slope below the concrete drainage v-ditch at the rear of the site, a description of how the weak fill soils above the wooden retaining walls located along the west side of the site were stabilized and verification that the roof down-leader drainage pipe and other drainage improvements to direct site drainage to the v-ditch have been improved per the grading and drainage plans.

4. Sheet A3 of the project plans, previously submitted but not included in the final submittal for planning commission review, must be revised to state that the work must satisfy the project Geotechnical Report requirements prior to issuance of the building permit.

5. The applicant shall arrange for the Town Engineer to perform a field review during construction with the project engineer to determine if additional support, beyond the proposed 1-inch diameter vertical pipes at four feet on center, is necessary for the concrete v-ditch in steep slope areas.

Ross Valley Fire Department

1. Project has been deemed a "substantial remodel" and as such requires installation of a fire sprinkler system that complies with the National Fire Protection Association regulation 13-D and local standards. The system will require a permit from the Fire Department and the submittal of plans and specifications for a system submitted by an individual or firm licensed to design and/or design-build sprinkler systems.

2. The property is located within the Wildland Urban Interface Area for Fairfax and the new construction must comply with Chapter 7A of the California Building Code or equivalent.

3. All smoke detectors in the residence shall be provided with AC power and be interconnected for simultaneous alarm. Detectors shall be located in each sleeping room, outside of each sleeping room in a central location in the corridor and over the center of all stairways with a minimum of 1 detector on each story of the occupied portion of the residence.

4. Carbon monoxide alarms shall be provided in existing dwellings when a permit is required for alterations, repairs, or addition and the cost of the permit exceeds \$1,000.00. Carbon monoxide alarms shall be located outside of each sleeping area in the immediate vicinity of the bedrooms and on every level of the dwelling, including basements.

5. Address numbers at least 4 inches tall must be in place adjacent to the front door. If not clearly visible from the street, additional numbers must be placed in location that is visible from the street. The numbers must be internally illuminated or illuminated by and adjacent light controlled by a photocell that can be switched off only by a breaker so it

will remain illuminated all night.

6. Alternative materials or methods may be proposed for any of the above conditions in accordance with Section 104.9 of the Fire Code.

7. All approved alternatives requests, and their supporting documentation, shall be included in the plan sets submitted for final approval by the Fire Department.

Marin Municipal Water District

1. A high pressure water service permit is required for this project.

2. The plans must comply with all the indoor and outdoor requirements of District Code Title 13, Water Conservation. Plans must be submitted to the District and be approved.

3. The District's backflow prevention requirements must be met and if installation of a backflow device is required, the device shall be tested/inspected and be approved by a District Inspector prior to the project final inspection and issuance of the occupancy permit.

4. Comply with Ordinance No. 429, requiring the installation of gray water recycling systems, when practicable, for all projects required to install new water service and existing structures undergoing "substantial remodel" that necessitates an enlarged water service.

Ross Valley Sanitary District

1. A Sanitary District sewer connection permit is required to either replace the existing sewer lateral, or demonstrate to a District Inspector that the existing lateral meets current requirements, prior to the project final inspection and issuance of an occupancy permit for the residence.

NOW, THEREFORE BE IT RESOLVED, the Planning Commission of the Town of Fairfax hereby finds and determines as follows:

The approval of the Hill Area Residential Development, Design Review and Encroachment Permit and Parking Variance is in conformance with the 2010 – 2030 Fairfax General Plan and the Fairfax Zoning Ordinance, Town Code Title 17; and

Construction of the project can occur without causing significant impacts on neighboring residences and the environment.

The foregoing resolution was adopted at a regular meeting of the Planning Commission held in said Town, on the 20th day of July, 2017 by the following vote:

AYES:
NOES:
ABSTAIN:

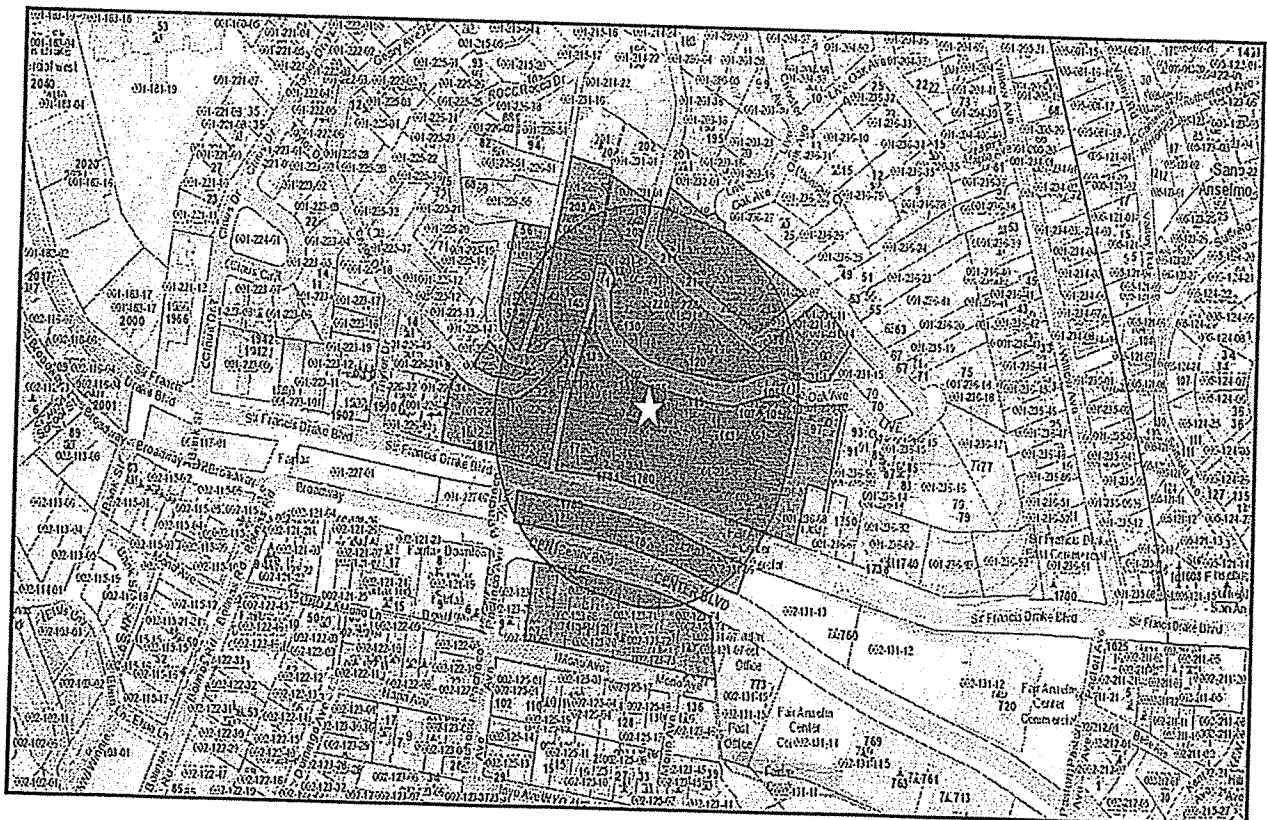
Chair, Fragoso

Attest:

Linda Neal, Principal Planner

**TOWN OF FAIRFAX
STAFF REPORT**
Department of Planning and Building Services

TO: Fairfax Planning Commission
DATE: April 26, 2017
FROM: Linda Neal, Principal Planner
LOCATION: 125 Live Oak Avenue; Assessor's Parcel No. 001-236-03
ZONING: Residential RD 5.5-7 Zone
PROJECT: 50% remodel/expansion of single-family residence
ACTION: Hill Area Residential Development permit, Parking Variance, Design Review and Encroachment Permit; Application # 17-13
APPLICANT: Dan Bettencourt
OWNER: Same
CEQA STATUS: Categorically exempt, § 15301(a)



125 LIVE OAK AVENUE

BACKGROUND

The 4,900-square-foot site slopes down from Live Oak Avenue at an average rate of 50%. The site was developed with a 1,689-square-foot, 3-bedroom, 2-bathroom residence in 1962.

On February 16, 2012, the Town issued a demolition permit to allow limited exploratory demolition to enable the owner to determine the extent of reconstruction necessary in order to remodel the structure and abate violations that had been created through construction done without permits by the previous owner. No subsequent permit was every filed to perform additional work on the structure.

In May 2014 the Building Official performed a resale inspection of the property documenting that extensive work had been done to the house that exceeded the exploratory demolition permit issued in 2012. The entire interior of the house had been gutted and excavation had occurred beneath the building. The resale report advised prospective buyers that in order to re-establish a single-family residence on the site a Hill Area Residential Development permit and possibly other discretionary permits would have to be approved by the Town of Fairfax.

In August 2012 a previous owner submitted an incomplete Hill Area Residential Development Permit application which he withdrew in October 2012.

In May 2015 The current owner applied for a Hill Area Residential Development permit to finish the work started by the previous owner which constituted a 50% remodel. Issues that delayed the application being deemed complete for 2-years included the Ross Valley Fire Department requirement for a fire truck pull-out, the need for an accurate and complete recorded survey and accurate topography for the site, the need for the plans to include repair of existing drainage facilities and the need tfor the Town to have adequate information to determine that the unpermitted excavation underneath the house had not destabilized the structure or the site.

This application was deemed complete on April 7, 2017.

Required Discretionary Permit

Town Code § 17.072.020 indicates that new homes and 50% remodels in hillside areas require a Hill Area Residential Development (HRD) Permit if they have any of a list of characteristics. Specifically, Town Code §17.072.020(B) requires that an HRD permit is required if a property falls within a landslide hazard zone as shown on Exhibit C, Open Space Element of the Fairfax General Plan and Town Code § 17.072-020(D) does not meet the minimum building site requirements. 125 Live Oak falls within a landslide hazard zone as shown on Exhibit 3, Open Space Element of the Fairfax General Plan; and, the property is only 4,900-square-feet in size and 70.81-feet wide while the Town

Code requires a parcel in the RD 5.5-7 Zone with a 50% slope to be 42,000-square-feet in size and 170-feet wide. Therefore, the project requires the approval of an HRD permit.

DISCUSSION

The project encompasses the reconstruction and remodel of the entire structure. The 850 square foot first floor would be remodeled into a den, a full bathroom, a master bedroom with a full bathroom and walk-in closet, while the 1,112-square-foot, second floor would be expanded by 52-square feet and be remodeled to provide a kitchen, living room, 2-bedrooms and 1-bathroom resulting in a 1,962-square-foot, 3-bedroom, 3-bathroom residence. The existing lower floor deck will be repaired while a new 256-square-foot deck will be constructed on the north side of the second floor. The deck would be accessed from the kitchen, living room and the northeast corner bedroom.

The project would include repair of the existing drainage v-ditch that runs across the rear of the property and construction of a 4 foot landscaping wall above it which would be back-filled with the unpermitted excavation spoils from underneath the house, eliminating the need to haul the material off-site.

The project does not change the setbacks maintained by the previously existing structure except a new deck will extend an additional 6 to 8-feet towards the rear property line. The development would comply with the Residential RD 5.5-7 Zone regulations as follows:

	Front Setback	Rear Setback	Combined Front/rear Setback	Side Setbacks	Combined Side Setbacks	FAR	Lot Coverage	Height
Required/ Permitted	6 ft.	12 ft.	35 ft.	5 ft. & 5 ft.	20 ft.	.40	.35	35 ft., 3 stories
Existing	9.5 ft.	38.5 ft.	48 ft.	6 ft. & 15.5 ft.	21.5 ft.	.38	.24	35.8 ft., 2 stories
Proposed	No change	No change	No change	6 ft. & 14 ft.	20 ft.	.40	.28	No change

The project meets the setback, height, lot coverage and floor area ratio regulations of the RD 5.5-7 Zone.

Hill Area Residential Development

The purpose of the HRD Ordinance, Town Code § 17.072.010(B) is to: 1) Encourage maximum retention of natural topographic features such as drainage ways, streams, slopes, ridgelines, rock outcroppings, vistas, natural plant formations and trees; 2) Minimize grading of hillside areas; 3) Provide a safe means of ingress and egress for vehicular and pedestrian traffic to and within hillside areas; 4) minimize water runoff and soil erosion problems during and after construction; 5) prevent loss of life, reduce injuries and property damage and minimize economic dislocations from geologic

hazards; and 6) Ensure that infill development on hillside lots is of a size and scale appropriate to the property and is consistent with other properties in the vicinity under the same zone classification.

The proposed development is consistent with the General Plan, other adopted codes and policies of the Town of Fairfax, and is consistent with the purpose and intent of the HRD Ordinance.

The site planning preserves identified natural features. The small 4-foot tall retaining wall proposed to be backfilled at the rear of the property will not significantly change the overall topography of the site and is a better solution for dealing with the unpermitted excavated material than trying to transport it up the hill for off-hauling.

Initially the Town Engineer was concerned about the broken condition of the v-ditch that runs across the rear of the property (which the applicant was not proposing to fix), the amount of material that had been excavated from beneath the structure and the effect of that excavation on the overall stability of the site and residence.

The applicants have provided the following plans, report and survey information to address the HRD Code requirements and the Town Engineer's comments and concerns:

Development Plans, cover sheet A0, Engineering plan pages C1 and C2 by Alberto Masso, Registered Professional Engineer (plan certification date 33/17), topographical survey sheet SV-1 by Wiley J. Peirce, Land Surveyor, dated 1/12/17 and revised architectural plan pages A0.1, A2, A2B, A5 and A6 by Bacilia Macias, Architect, received October 13, 2016.

Geotechnical and Hydrologic reports from Summit Engineering dated 4/17/15, 3/23/16, 12/8/16 and 2/25/17 (Attachment B).

The Town Engineer has reviewed the entire body of information and the plans and has performed 2 site inspections – one on 8/30/12 and a second on 6/15/16. He has prepared numerous memorandums in order to obtain the information he felt necessary for him to make the determination there is adequate information for him to recommend that the Planning Commission approve the project without creating or increasing geologic, hydrologic or seismic impacts on public or private improvements in the surrounding area.

Based on the soils report findings, the site can be developed without geologic, hydrologic or seismic hazards as long as the conditions of approval included in the attached proposed Resolution No. 17-16.

Vehicular access and parking are adequate. The proposed project does not increase the number of bedrooms in the house nor does it decrease the number of parking

spaces provided when the house was originally constructed. The need for a parking variance is discussed below.

Design Review

The exterior design of the house will not change much with the addition to the upper living room and kitchen. The proposed upper deck would emulate the previously existing upper deck and the lower deck would remain the same with wood railings.

The south-facing, rear of the structure would be articulated through the use of 2 different siding materials, with the exterior siding alternating between horizontal 8" hardie-board lap siding and stucco siding with a sand finish.

The upper hardie-board portions of each level will be painted a light grey (Kelly Moore – Parlor Games KM 3779-1) and the lower stucco siding of each level will be painted a darker grey (Benjamin Moore Steel Wool # 2121-20). The trim will be of hardie-board painted a dark steel grey (Benjamin Moore Judson Bay # 1680). The roofing material will dark grey (Timberline Ultra HD Charcoal colored) asphalt shingles.

The exterior would be further articulated with new mullioned vinyl windows of different shapes and sizes. The north-facing front of the structure would be articulated with the inclusion of a new front entry-door with side window panels covered with an expanded front porch roof.

Windows have been minimized on the west side of the house where the structure is 12-feet away from residence at 133 Live Oak Avenue with only 1 window proposed in the west wall of bedroom 2 and 1 window in the upper floor bathroom. A French door and would be installed in the east wall of the first floor den to access the existing deck and three new windows will be installed in the garage on the second floor where the house is over 35-feet from the residence at 119 Live Oak Avenue.

No trees will need to be removed to complete the project, the roof line will not be changed and no new living space is being proposed outside the footprint of the previously existing structure. Therefore, the proposed development harmonizes with the surrounding residential development, meets the design review criteria and does not result in the deterioration of significant view corridors.

Homes in this area of the Ridgeway Park Subdivision on similar sized parcels range in size from a 1,001-square foot, 2-bedroom, 1-bathroom residence on a 7,140-square-foot property (25 Live Oak Avenue) to a 2,176-square-foot, 5-bedroom, 2.5-bathroom residence on a 5,166-square-foot property (133 Live Oak Avenue). Therefore, this proposed 1,962-square-foot, 3-bedroom, 3-bathroom residence would not be out of character with the surrounding neighborhood which also is developed with numerous duplexes (41, 47, 85 and 139 Live Oak Avenue).

Page LT-1 of the plans, the lighting plan, shows where exterior lighting fixtures would be

located. While the locations are acceptable and comply with building code requirements, the fixtures shown will be very visible to the houses located across the valley on Forrest Avenue and Hillside Drive. Staff recommends and has included as a condition of approval that the all the light fixtures located on the north side of the structure, visible from Forrest Avenue and Hillside Drive, be replaced with fixtures that are shielded and that direct the lighting downward.

Encroachment

Town Code 12.32.020 allows the Planning Commission to grant encroachment permits for parking or other structures within the public right-of-way in areas not being used by the public.

The driveway bridge and associated foundation wall encroach into the public right-of-way and would require the approval and recordation of an encroachment permit. This permit application should have been submitted when the house was originally built. It is possible that neither the Town nor the original building contractor actually located the front property line when filing the original construction plan so it was not understood that the construction would project into the Town road easement.

The bridge is the only way to connect the garage to the edge of the paved road. Staff is recommending that this discretionary encroachment permit be granted by the Planning Commission subject to the recordation of a revocable encroachment document prior to issuance of the building permit for the project.

Parking Variance

Town Code sections 17.052.010(A) through (C) require that private parking be located on private property. In the hillside areas, where the public roadways are not developed to the full width of the roadway easement due to hillside topography, front property lines are often located either downhill or uphill of the edge of the public roadway easement sometimes at a considerable distance. The front property line of this project site is located 9 feet downhill of the edge of the paved road. Therefore, the original structure was built with 2 of the required parking spaces on the driveway/parking bridge being located partially within the public right-of-way. Requiring the entire house to be moved further away from the front property line to accommodate the required parking on private property would be very disruptive to this hillside site and would result in a taller structure or a complete redesign of the building. Therefore, staff is recommending that the Commission approve a parking variance to allow two of the required parking spaces to be partially located within the public road easement, which is similar to how the parking is provided for other down-sloping lots along this portion of Live Oak Avenue.

Other Agency Requirements/Comments

Ross Valley Fire Department

The Ross Valley Fire Department had requested that a fire truck pull-out be included in the plans before this project was presented to the Planning Commission for review. The applicant has proposed that the pull-out be provided partially within the driveway apron of the duplex at 130 Live Oak Avenue and partially within the Live Oak road bed, leaving 8-feet of roadway clear. This plan has been accepted by the Ross Valley Fire Department and is depicted on page A0.1 of the project plans. The fire truck pull out will need to be marked in the field by the applicant, include signage if deemed necessary by Ross Valley Fire Department and be approved by that department prior to delivery of any combustible construction materials to the site.

Ross Valley Fire Conditions

1. A proposed fire truck turn-around shall be installed and made serviceable prior to the delivery of combustible materials to the site.
2. The project requires installation of a fire sprinkler system that complies with the National Fire Protection Association regulation 13-D and local standards. The system would require a permit from the Fire Department and the submittal of plans and specifications for system submitted by an individual or firm licensed to design and/or design-build sprinkler systems.
3. The property is located within the Wildland Urban Interface Area for Fairfax and the new construction must comply with Chapter 7A of the California Building Code or equivalent.
4. All smoke detectors in the residence shall be provided with AC power and be interconnected for simultaneous alarm. Detectors shall be located in each sleeping room, outside of each sleeping room in a central location in the corridor and over the center of all stairways with a minimum of 1 detector on each story of the occupied portion of the residence.
5. Carbon monoxide alarms shall be provided in existing dwellings when a permit is required for alterations, repairs, or addition and the cost of the permit exceeds \$1,000.00. Carbon monoxide alarms shall be located outside of each sleeping area in the immediate vicinity of the bedrooms and on every level of the dwelling, including basements.
6. Address numbers at least 4 inches tall must be in place adjacent to the front door. If not clearly visible from the street, additional numbers must be placed in location that is visible from the street. The numbers must be internally illuminated or illuminated by and adjacent light controlled by a photocell that can be switched off only by a breaker so it will remain illuminated all night.
7. Alternative materials or methods may be proposed for any of the above

conditions in accordance with Section 104.9 of the Fire Code.

8. All approved alternatives requests, and their supporting documentation, shall be included in the plan sets submitted for final approval by the Fire Department.
9. A Vegetation Management plan designed in accordance with Ross Valley Fire Standard #220 is required. A separate deferred permit shall be required for this plan. Please note that permission from your neighbors may be required if the required clearance extends beyond the property lines. If permission cannot be obtained the structure may require exterior hardening to be in compliance with the intent of the code.

Marin Municipal Water District

1. A water service permit is required for this project.
2. The plans must comply with all the indoor and outdoor requirements of District Code Title 13, Water Conservation. Plans must be submitted to the District and be approved.
3. The District's backflow prevention requirements must be met and if installation of a backflow device is required, the device shall be tested/inspected and be approved by a District Inspector prior to the project final inspection and issuance of the occupancy permit.
4. Comply with ordinance No. 429, requiring the installation of gray water recycling systems when practicable for all projects required to install new water service and existing structures undergoing "substantial remodel" that necessitates an enlarged water service.

Ross Valley Sanitary District

A Sanitary District sewer connection permit is required prior to the project final inspection and issuance of an occupancy permit for the residence.

Fairfax Police, Public Works and Building Departments

The police, public works and the building department did not provide conditions of approval or comments on the project.

RECOMMENDATION

1. Conduct the public hearing.
2. Approve application # 17-13 by adopting Resolution No. 17-15 setting forth the findings and conditions for the project approval.

ATTACHMENTS

Attachment A – Resolution No. 17-15.

Attachment B – Geotechnical and Hydrologic reports from Summit Engineering dated 4/17/15, 3/23/16, 12/8/16 and 2/25/17

Attachment C - Town Engineer's memorandums of 9/5/12, 6/17/15, 11/22/16 and 4/6/17

Attachment D – Record of Survey

RESOLUTION NO. 17-15

A Resolution of the Fairfax Planning Commission Approving Application No. 17-13 for a Hill Area Residential Development, Design Review and Encroachment Permits and for a Parking Variance for a 50% Remodel and Addition to an Existing Single-family Residence at 125 Live Oak Avenue

WHEREAS, the Town of Fairfax has received an application from Dan Bettencourt to expand and remodel an existing 1,112-square-foot, 3-bedroom, 2-bathroom residence converting it into a 1,962-square-foot, 3 bedroom, 3-bathroom residence; and

WHEREAS, the Planning Commission held a duly noticed Public Hearing on April 26, 2017, at which time the Planning Commission determined that the project complies with the Hill Area Residential Development Overlay Ordinance; and

WHEREAS, based on the plans and other documentary evidence in the record the Planning Commission has determined that the applicant has met the burden of proof required to support the findings necessary to approve the Hill Area Residential Development, Design Review and Encroachment Permits and a Parking Variance; and

WHEREAS, the proposed remodel addition has been designed to stay within the footprint of the existing structure, does not increase the visual mass of the building and minimizes additional disturbance to the hillside it has been found to comply with the following 2010-2030 Fairfax General Plan Policies and Goals:

Policy LU-1.2.3: New and renewed development shall be designed and located so as to minimize the visual mass. The Town will require exterior materials and colors that blend the exterior appearance of structures with the surrounding natural landscape, allowing for architectural diversity.

Policy LU-4.1.3: New and renewed development shall comply with all regulations encompassed in the California and Uniform Building Codes intended to reduce potential damage and threats to the public's health, safety and welfare in the event of an earthquake.

Policy LU4.1.4: New and renewed development shall be designed to minimize run-off in a manner that does not cause undue hardship on neighboring properties.

Policy LU 7.1.5; New and renewed residential development shall preserve and enhance the existing character of the Town's neighborhoods in diversity, architectural character, size and mass.

WHEREAS, the Commission has made the following findings:

Hill Area Residential Development

1. The proposed development is consistent with the General Plan and the Residential RD 5.5-7 Zone regulations.
2. The site planning preserves identified natural features as much as possible while also complying with other agency and department regulations.
3. Vehicular access and parking are adequate.
4. The proposed development harmonizes with surrounding residential development and meets the design review criteria contained in Town Code § 17.020.040.
5. The approval of the Hill Area Residential Development permit for 1 single-family residence on this 4,500-square-foot parcel shall not constitute a grant of special privilege and shall not contravene the doctrines of equity and equal treatment.
6. The development and use of the property as approved under the Hill Area Residential Development Permit will not cause excessive or unreasonable detriment to adjoining properties or premises, or cause adverse physical or economic effects thereto, or create undue or excessive burdens in the use and enjoyment thereof, or any or all of which effects are substantially beyond that which might occur without approval or issuance of the use permit.
7. Approval of the proposed Hill Area Residential Development permit is not contrary to those objectives, goals or standards pertinent to the particular case and contained or set forth in any Master Plan, or other plan or policy, officially adopted by the Town.
8. Approval of the Hill Area Residential Development permit will result in equal or better development of the premises than would otherwise be the case; and

WHEREAS, The Town Engineer has reviewed the following plans and reports and has determined the project can be constructed, with certain conditions of approval, without creating any hazards:

1. Development Plans, cover sheet A0, Engineering plan pages C1 and C2 by Alberto Masso, Registered Professional Engineer (plan certification date 33/17), topographical survey sheet SV-1 by Wiley J. Peirce, Land Surveyor, dated 1/12/17 and revised architectural plan pages A0.1, A2, A2B, A5 and A6 by Bacilia Macias, Architect, received October 13, 2016.

2. Geotechnical and Hydrologic reports from Summit Engineering dated 4/17/15, 3/23/16, 12/8/16 and 2/25/17 (Attachment B).

Based on the Town Engineer's review and recommendation that the project can be safely constructed, the Planning Commission finds that:

1. The health safety and welfare of the public will not be adversely affected;
2. Adjacent properties are adequately protected by project investigation and design from geologic hazards as a result of the work;
3. Adjacent properties are adequately protected by project design from drainage and erosion problems as a result of the work;
4. The amount of the excavation or fill proposed is not more than that required to allow the property owner substantial use of his or her property;
5. The visual and scenic enjoyment of the area by others will not be adversely affected by the project more than is necessary;
6. Natural landscaping will not be removed by the project more than is necessary; and
7. Town code § 17.072.090(c)(4) prohibits grading of hillside properties from October 1st through April 1st of each year. Therefore, the time of year during which construction will take place is such that work will not result in excessive siltation from storm runoff nor prolonged exposure of unstable excavated slopes.

WHEREAS, the Commission has approved the project subject to the applicant's compliance with the following conditions:

1. The project is approved as it is depicted on the development Plans, cover sheet A0, Engineering plan pages C1 and C2 by Alberto Masso, Registered Professional Engineer (plan certification date 33/17), topographical survey sheet SV-1 by Wiley J. Peirce, Land Surveyor, dated 1/12/17, revised architectural plan pages A0.1, A2, A2B, A5 and A6 by Bacilia Macias, Architect, received October 13, 2016 and the lighting plan, page LT-1 dated 10/9/15 with the exterior lighting fixture locations as shown subject to alternative fixtures being approved by the Planning Staff for the north side of the structure that are shielded and direct all light downward.
2. Prior to issuance of any of the building permits for the project the applicant or his assigns shall:
 - a. Submit a construction plan to the Public Works Department which may include but is not limited to the following:

- Construction delivery routes approved by the Department of Public Works.
- Construction schedule (deliveries, worker hours, etc.)
- Notification to area residents
- Emergency access routes

b. The applicant shall prepare, and file with the Public Works Director, a video tape of the roadway conditions on the public construction delivery routes (routes must be approved by Public Works Director).

c. Submit a bond or letter of credit to the Town in an amount that will cover the cost of grading, weatherization and repair of possible damage to public roadways. The applicant shall submit contractor's estimates for any grading, site weatherization and improvement plans for approval by the Town Engineer or Building Official. Upon approval of the contract costs, the applicant shall submit a cash deposit, bond or letter of credit equaling 100% of the estimated construction costs.

d. The foundation and retaining elements shall be designed by a structural engineer certified as such in the state of California. Plans and calculations of the foundation and retaining elements shall be stamped and signed by the structural engineer and submitted to the satisfaction of the Town Structural Engineer.

e. The grading, foundation, retaining, and drainage elements shall also be stamped and signed by the site geotechnical engineer as conforming to the recommendations made by the project Geotechnical Engineer.

f. Prior to submittal of the building permit plans, the applicant shall secure written approval from the Ross Valley Fire Authority, Marin Municipal Water District and the Ross Valley Sanitary District noting the development conformance with their recommendations.

g. Submit 3 copies of the record of survey with the building permit plans.

h. All retaining walls that are visible from the street and are constructed of concrete shall be heavily textured or be colorized in a manner approved by the planning staff prior to issuance of the building permit. This condition is intended to mitigate the visual impact of the proposed walls.

i. The applicant shall secure a tree cutting permit, if required, from the Town prior to removal of any on-site trees subject to a permit under Town Code Chapter 9.36.

3. During the construction process the following shall be required:

a. The geotechnical engineer shall be on-site during the grading process (if there is any grading remaining to be done) and shall submit written certification to the

Town Staff that the grading has been completed as recommended prior to installation of foundation and/or retaining forms and piers.

b. Prior to the concrete form inspection by the building official, the geotechnical and structural engineers shall field check the forms of the foundations and retaining elements and provide written certification to the Town staff that the work to this point has been completed in conformance with their recommendations and the approved building plans. The Building Official shall field check the concrete forms prior to the pour.

c. All construction-related vehicles including equipment delivery, cement trucks and construction materials shall be situated off the travel lane of the adjacent public right(s)-of-way at all times. This condition may be waived by the Building Official on a case-by-case basis with prior notification from the project sponsor.

d. Any proposed temporary closures of a public right-of-way shall require prior approval by the Fairfax Police Department and any necessary traffic control, signage or public notification shall be the responsibility of the applicant or his/her assigns. Any violation of this provision will result in a stop work order being placed on the property and issuance of a citation.

4. Prior to issuance of an occupancy permit, the following shall be completed:

a. The geotechnical engineer shall field check the completed project and submit written certification to the Town Staff that the foundation, retaining, grading and drainage elements have been installed in conformance with the approved building plans and the recommendations of the soils report.

b. The Planning Department and Town Engineer shall field check the completed project to verify that all and planning commission conditions and required engineering improvements have been complied including installation of landscaping and irrigation prior to issuance of the certificate of occupancy.

5. Excavation shall not occur between October 1st and April 1st of any year. The Town Engineer has the authority to waive this condition depending upon the weather.

6. The roadways shall be kept free of dust, gravel and other construction materials by sweeping them, daily, if necessary.

7. Any changes, modifications, additions or alterations made to the approved set of plans will require a modification of Application # 17-13. Any construction based on job plans that have been altered without the benefit of an approved modification of Application 17-13 will result in the job being immediately stopped and red tagged.

8. Any damages to the public portions of Oak Manor Drive or Sir Francis Drake Boulevard or other public roadway used to access the site resulting from construction

activities shall be the responsibility of the property owner.

9. The applicant and its heirs, successors, and assigns shall, at its sole cost and expense, defend with counsel selected by the Town, indemnify, protect, release, and hold harmless the Town of Fairfax and any agency or instrumentality thereof, including its agents, officers, commissions, and employees (the "Indemnitees") from any and all claims, actions, or proceedings arising out of or in any way relating to the processing and/or approval of the project as described herein, the purpose of which is to attack, set aside, void, or annul the approval of the project, and/or any environmental determination that accompanies it, by the Planning Commission, Town Council, Planning Director, Design Review Board or any other department or agency of the Town. This indemnification shall include, but not be limited to, suits, damages, judgments, costs, expenses, liens, levies, attorney fees or expert witness fees that may be asserted or incurred by any person or entity, including the applicant, third parties and the Indemnitees, arising out of or in connection with the approval of this project, whether or not there is concurrent, passive, or active negligence on the part of the Indemnitees. Nothing herein shall prohibit the Town from participating in the defense of any claim, action, or proceeding. The parties shall use best efforts, acting in good faith, to select mutually agreeable defense counsel. If the parties cannot reach agreement, the Town may select its own legal counsel and the applicant agrees to pay directly, or timely reimburse on a monthly basis, the Town for all such court costs, attorney fees, and time referenced herein, provided, however, that the applicant's duty in this regard shall be subject to the Town's promptly notifying the applicant of any said claim, action, or proceeding.

10. The applicant shall comply with all applicable local, county, state and federal laws and regulations. Local ordinances which must be complied with include, but are not limited to: the Noise Ordinance, Chapter 8.20, Polystyrene Foam, Degradable and Recyclable Food Packaging, Chapter 8.16, Garbage and Rubbish Disposal, Chapter 8.08, Urban Runoff Pollution Prevention, Chapter 8.32 and the Americans with Disabilities Act.

11. Conditions placed upon the project by outside agencies or by the Town Engineer may be eliminated or amended with that agency's or the Town Engineer's written notification to the Planning Department prior to issuance of the building permit.

Town Engineer

1. The encroachment permit for driveway-bridge and associated supporting retaining wall shall be recorded at the County of Marin Recorder's Office prior to issuance of the building permit for the project.

2. An excavation and fill permit from the Building Department in addition to the required building permit.

3. Frequent inspections of the foundation construction shall be made by the soils engineer and a final construction review letter must be provided from Alberto Gomez-

Masso of Summit Engineering stating that all the required stabilization work on the site has been completed prior to the project final inspection. This letter must also cover the stability of the 80% slope below the concrete drainage v-ditch at the rear of the site, a description of how the weak fill soils above the wooden retaining walls located along the west side of the site were stabilized and verification that the roof down-leader drainage pipe and other drainage improvements to direct site drainage to the v-ditch have been improved per the grading and drainage plans.

4. Sheet A3 of the project plans, previously submitted but not included in the final submittal for planning commission review, must be revised to state that the work must satisfy the project Geotechnical Report requirements prior to issuance of the building permit.
5. The applicant shall arrange for the Town Engineer to perform a field review during construction with the project engineer to determine if additional support, beyond the proposed 1-inch diameter vertical pipes at four feet on center, is necessary for the concrete v-ditch in steep slope areas.

Ross Valley Fire Department

1. Project has been deemed a "substantial remodel" and as such requires installation of a fire sprinkler system that complies with the National Fire Protection Association regulation 13-D and local standards. The system will require a permit from the Fire Department and the submittal of plans and specifications for a system submitted by an individual or firm licensed to design and/or design-build sprinkler systems.
2. The property is located within the Wildland Urban Interface Area for Fairfax and the new construction must comply with Chapter 7A of the California Building Code or equivalent.
3. All smoke detectors in the residence shall be provided with AC power and be interconnected for simultaneous alarm. Detectors shall be located in each sleeping room, outside of each sleeping room in a central location in the corridor and over the center of all stairways with a minimum of 1 detector on each story of the occupied portion of the residence.
4. Carbon monoxide alarms shall be provided in existing dwellings when a permit is required for alterations, repairs, or addition and the cost of the permit exceeds \$1,000.00. Carbon monoxide alarms shall be located outside of each sleeping area in the immediate vicinity of the bedrooms and on every level of the dwelling, including basements.
5. Address numbers at least 4 inches tall must be in place adjacent to the front door. If not clearly visible from the street, additional numbers must be placed in location that is visible from the street. The numbers must be internally illuminated or illuminated by and adjacent light controlled by a photocell that can be switched off only by a breaker so it

will remain illuminated all night.

6. Alternative materials or methods may be proposed for any of the above conditions in accordance with Section 104.9 of the Fire Code.

7. All approved alternatives requests, and their supporting documentation, shall be included in the plan sets submitted for final approval by the Fire Department.

Marin Municipal Water District

1. A high pressure water service permit is required for this project.

2. The plans must comply with all the indoor and outdoor requirements of District Code Title 13, Water Conservation. Plans must be submitted to the District and be approved.

3. The District's backflow prevention requirements must be met and if installation of a backflow device is required, the device shall be tested/inspected and be approved by a District Inspector prior to the project final inspection and issuance of the occupancy permit.

4. Comply with Ordinance No. 429, requiring the installation of gray water recycling systems, when practicable, for all projects required to install new water service and existing structures undergoing "substantial remodel" that necessitates an enlarged water service.

Ross Valley Sanitary District

1. A Sanitary District sewer connection permit is required to either replace the existing sewer lateral, or demonstrate to a District Inspector that the existing lateral meets current requirements, prior to the project final inspection and issuance of an occupancy permit for the residence.

NOW, THEREFORE BE IT RESOLVED, the Planning Commission of the Town of Fairfax hereby finds and determines as follows:

The approval of the Hill Area Residential Development, Design Review and Encroachment Permit and Parking Variance is in conformance with the 2010 – 2030 Fairfax General Plan and the Fairfax Zoning Ordinance, Town Code Title 17; and

Construction of the project can occur without causing significant impacts on neighboring residences and the environment.

The foregoing resolution was adopted at a regular meeting of the Planning Commission held in said Town, on the 26th day of April, 2017 by the following vote:

AYES:

NOES:

ABSTAIN:

Chair, Fragoso

Attest:

Linda Neal, Principal Planner

SUMMIT ENGINEERING

- General Civil Engineering.
- Land Surveying, Parcel Maps, Subdivisions.
- Storm Drain, Sanitary Sewer Design.
- Hydrology and Creek Protection Studies.
- Grading Drainage Plans.
- Soil Reports.

5855 Castle Drive
Oakland, CA 94611
Tel: (510) 842-8064
Fax: (510) 482-5848
agmasso@comcast.net

Linda Neal - Senior Planner
Ray Wrisinski - Town Engineer
TOWN OF FAIRFAX
142 Bolinas Road
Fairfax CA 94930

February 25, 2017

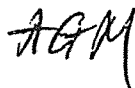
RE: **Proposed Residence Addition and Remodel, 125 Live Oak Avenue, Fairfax, California.**

Dear Lady / Sir :

This letter is to provide you with an update of the revisions completed on the documents for our upcoming submittal, as well as observations from a recent site visit.

1. The Topographic and Boundary Survey has been updated by, first, revising the ground contours near the driveway, and second, by using the customary 2-foot contours that makes the plan more realistic and easier to work with. The "no easement" note is also included.
2. The 2-foot rock retaining wall and the wood steps and 2-foot wood retaining wall to the west of the driveway have also been added to the topographic survey. Several recent photos of the rock wall and wood steps are attached. All those items appear stable, as well as the unsupported slope between the steps and the driveway.
3. We took another a look at the V-ditch and took additional attached photos. For the most part, the V-ditch is in good shape, mainly needing maintenance and cleaning. If repairs or addition are needed, the work will follow Marin County details as shown in the attachment and in the Grading Plan.
4. The thick vegetation in the backyard keeps protecting the slope against erosion. See attached photo.

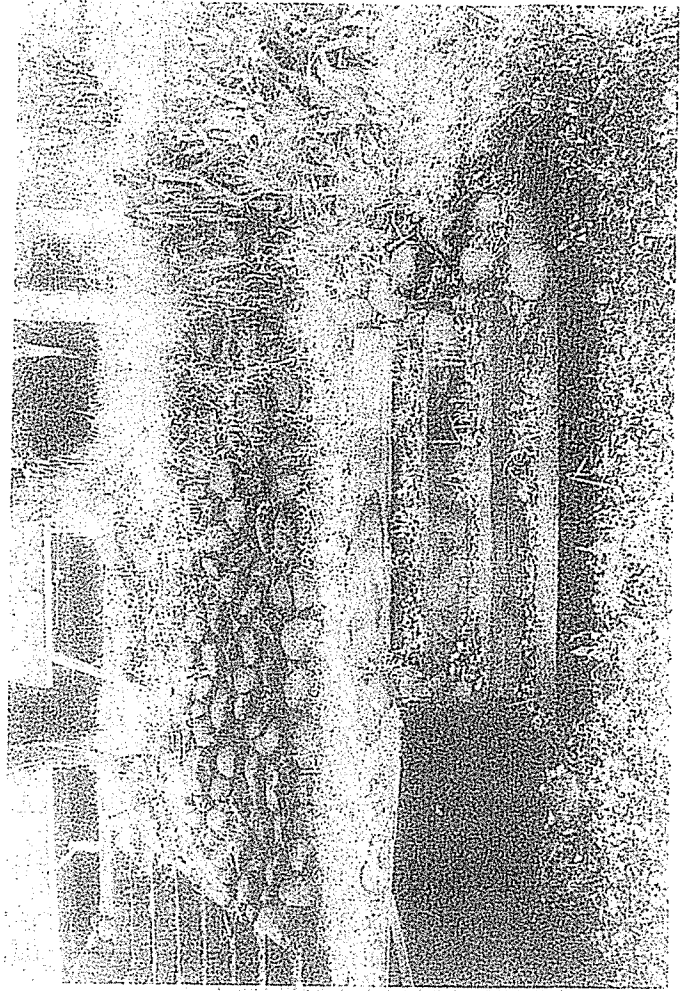
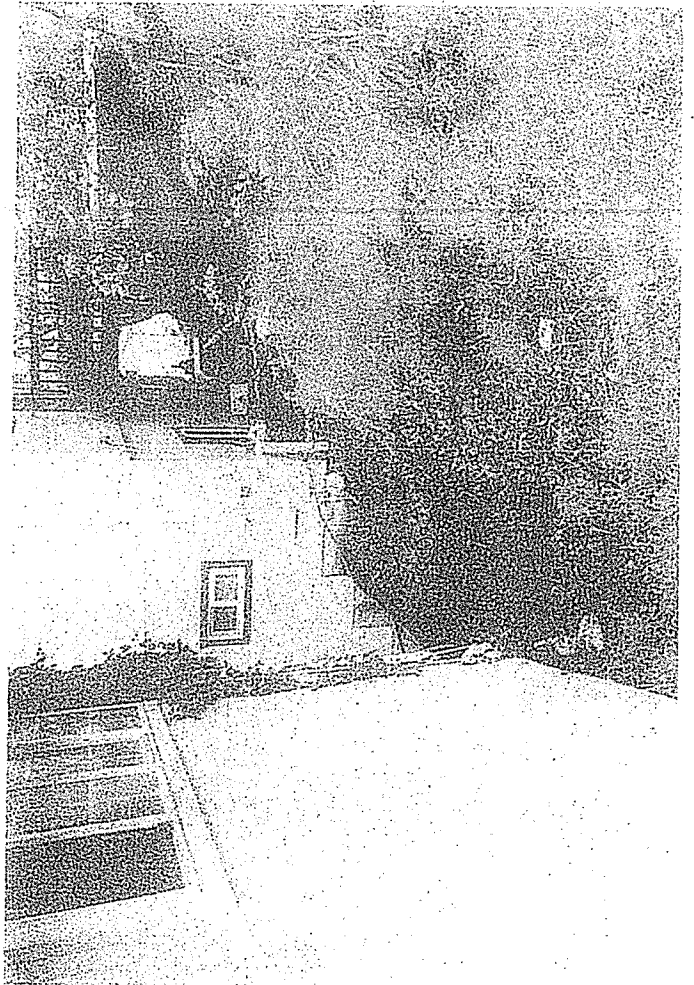
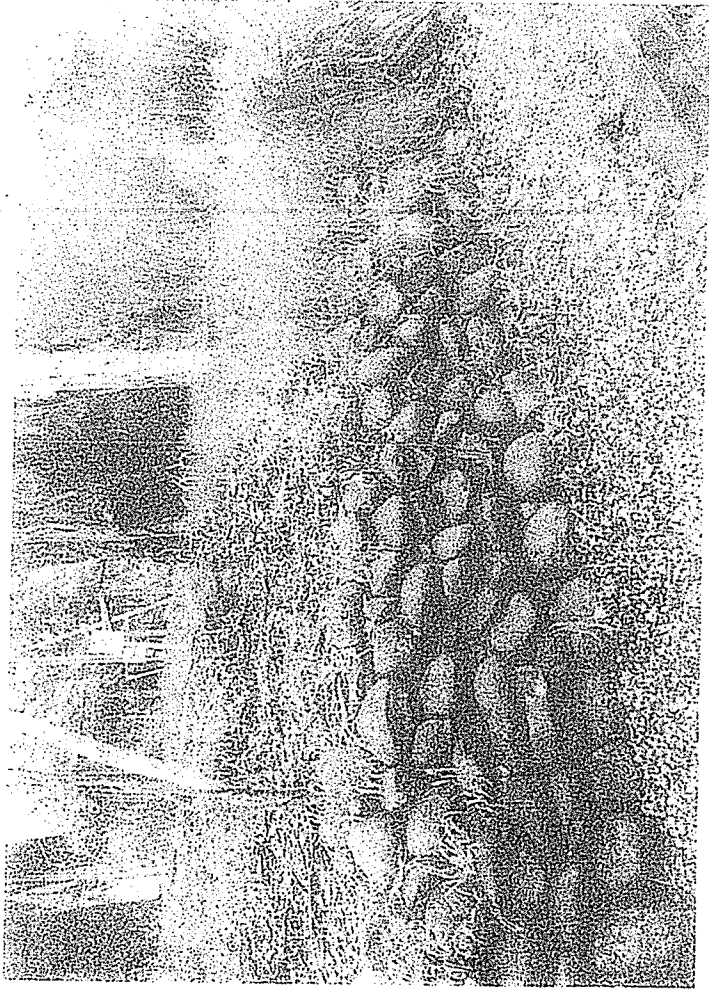
Sincerely,



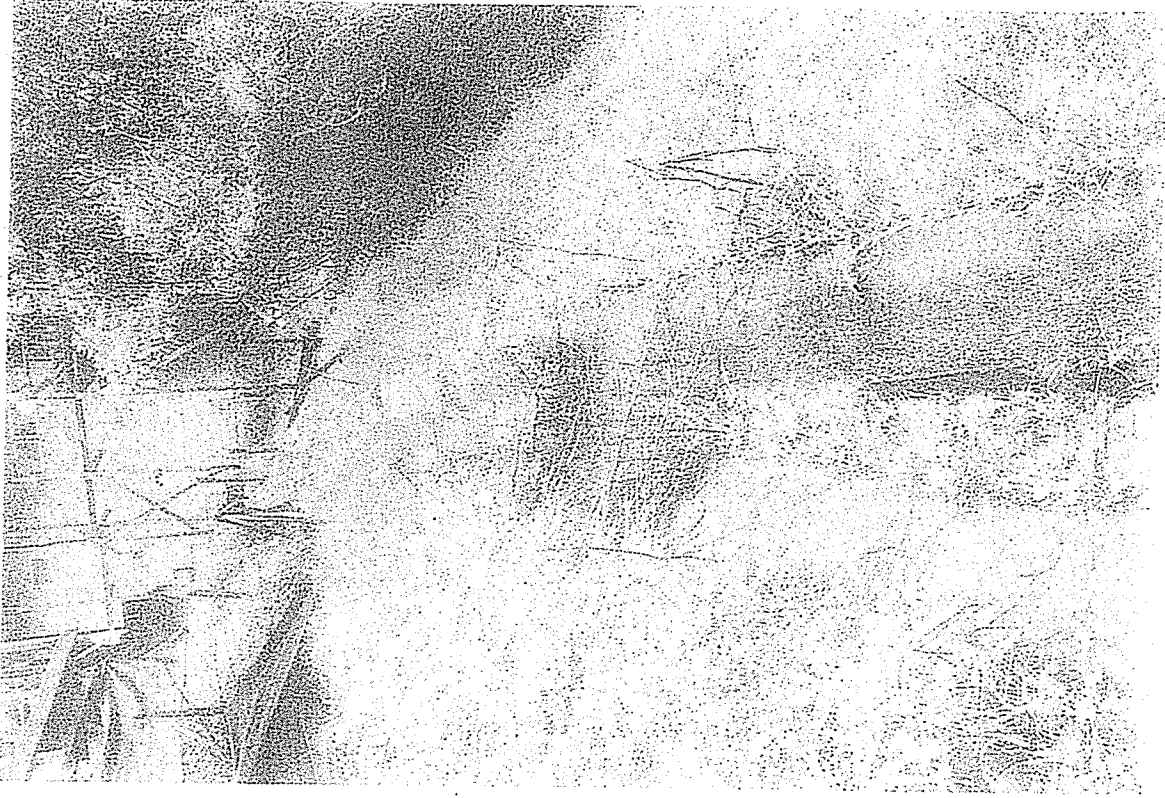
Al G. Masso
RCE-30442
GE-2089

Attachments

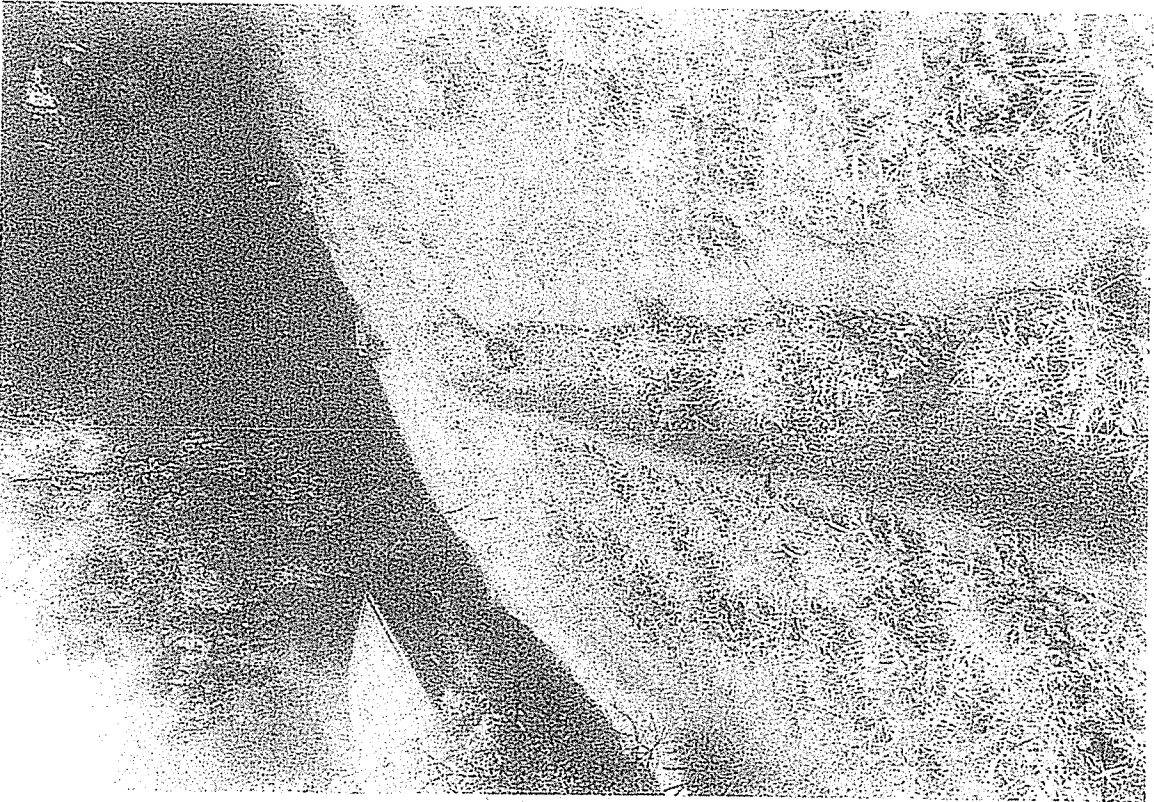
ROCK WALL AND WOOD STEPS VIEWS

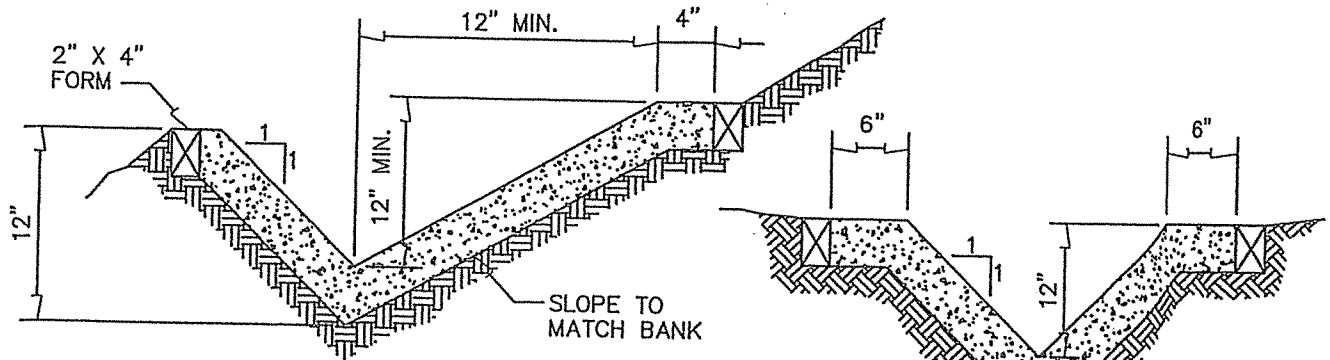


V-ditch Looking East



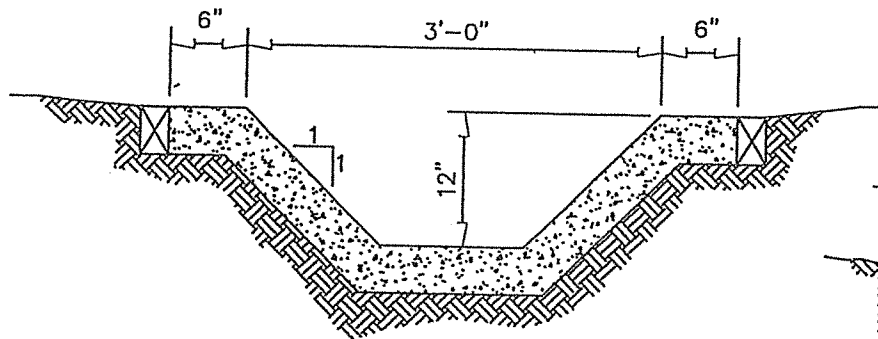
V-ditch Looking West



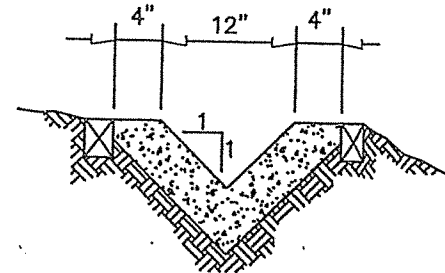


TYPE "A"

TYPE "B"



TYPE "C"



TYPE "D"

NOTES:

1. ALL SECTIONS SHALL BE AT LEAST 4" THICK.
2. CONCRETE SHALL BE CLASS "B" (5 SACK).
3. BOTH SIDES OF THE DITCH SHALL BE FORMED WITH 2" X 4" LUMBER, AS SHOWN UNLESS OMITTED BY THE AGENCY ENGINEER.
4. CONCRETE FINISH SHALL CONFORM TO ORDINARY SURFACE FINISH PER SECTION 51 OF THE STATE STANDARD SPECIFICATIONS.
5. DITCH SIDES SHALL BE BACKFILLED AND COMPACTED IMMEDIATELY AFTER THE REMOVAL OF SIDE FORMS.
6. NO CONCRETE SHALL BE PLACED PRIOR TO FORM INSPECTION BY THE AGENCY ENGINEER.
7. ON FILLED GROUND, NO DITCH IS TO BE CONSTRUCTED UNTIL CERTIFICATION OF COMPACTION IS PROVIDED TO THE AGENCY BY THE GEOTECHNICAL ENGINEER.
8. NO EXPANSION JOINTS SHALL BE REQUIRED.

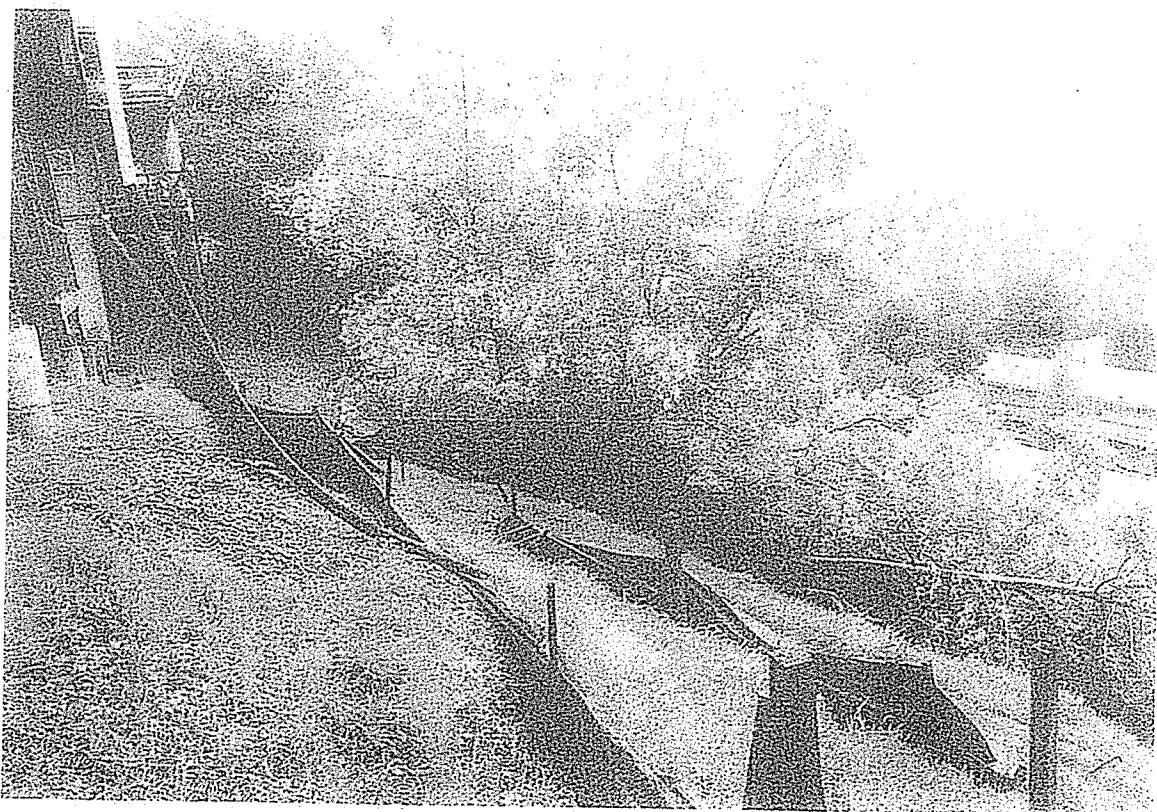
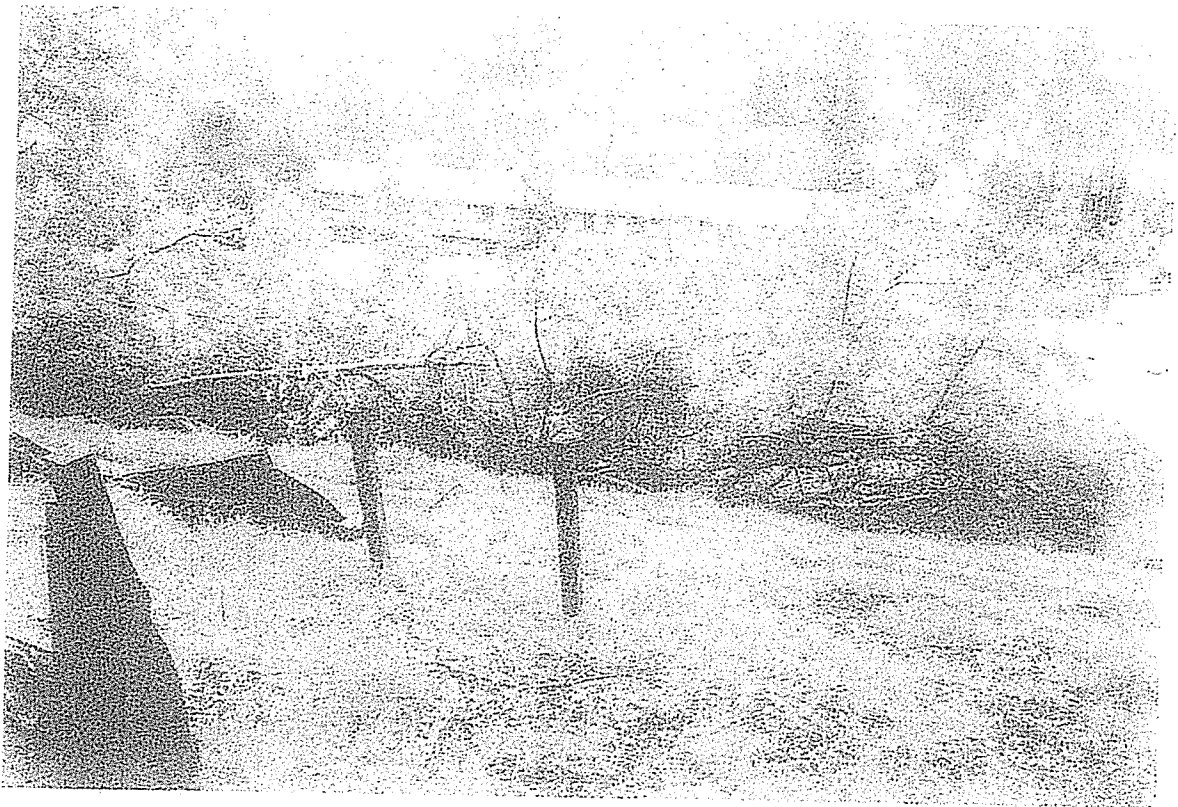
M:\Standards\County Standards (UCS)\2008 Updated County Standards

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

CONCRETE LINED
DITCHES

			MAY 2008
			DWG. NO.
			290
REV.	DATE	BY	

Thick Vegetation Protecting Backyard Slope



SUMMIT ENGINEERING

- General Civil Engineering.
- Land Surveying, Parcel Maps, Subdivisions.
- Storm Drain, Sanitary Sewer Design.
- Hydrology and Creek Protection Studies.
- Grading Drainage Plans.
- Soil Reports.

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Linda Neal - Senior Planner
Ray Wrisinski - Town Engineer
TOWN OF FAIRFAX
142 Bolinas Road
Fairfax CA 94930

December 8, 2016

RE: Proposed Residence Addition and Remodel, 125 Live Oak Avenue, Fairfax, California.

Dear Lady / Sir :

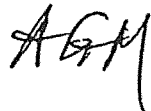
This letter is to summarize our phone conversation regarding your November 22, 2016 letter addressed to Dan Bettencourt.

1. The R/S showed the list of all referenced documents which indicated no easements on the subject property. The "no easement" note will be included in the topographic survey.
2. The stepped wood and rock retaining walls to the west of the driveway will be added to the topographic survey.
3. And 4. It appears that the surveyor likely has all the field information. So, the map will be redrafted to show the specific items needed.
5. The SUMMIT ENGINEERING Geotechnical Report, dated 4/17/2015, provided design recommendations for the unsupported fill as well as foundation reinforcement and new foundation supports. The excavated fill will be stabilized by retaining walls shown in the Grading Plan submitted. Foundation reinforcement is shown in the proposed Foundation Plans as part of the structural package for the building permit, but not yet submitted.
6. The R/S is only concerned with property boundary determination based on monuments and documents of record. The R/S does not show the north street boundary mostly for lack of space, although this boundary plays no role in the R/S objective, the 40-ft right of way is clearly (and firmly) shown under the street name.

Furthermore, the topographic survey (not the R/S) is the appropriate instrument to establish the fire truck turn around on the north side of the street. The turn around area, the neighbor's driveway, and closest building points across the street, were shown as requested.

7. The proposed V-ditch repair was suggested as a relatively simple method to re-align the existing concrete swale, using portable tools to close gaps of a few inches, or to provide a continuous flow line. The idea is also to pack existing voids under the V-ditch for support and stability using available surface rocky soil. We shall consult County Standards in this regard. However, we shall avoid the use of heavy equipment and further disturb the steep slopes by unnecessary additional excavation.

Sincerely,



Al G. Masso
RCE-30442
GE-2089

SUMMIT ENGINEERING

- General Civil Engineering.
- Land Surveying, Parcel Maps, Subdivisions.
- Storm Drain, Sanitary Sewer Design.
- Hydrology and Creek Protection Studies.
- Grading Drainage Plans.
- Soil Reports.

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Fairfax CA 94930

5855 Castle Drive
Oakland, CA 94611
Tel: (510) 842-8064
Fax: (510) 482-5848
agmasso@comcast.net

TOWN OF FAIRFAX

OCT 13 2016

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APR 25 2016

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March 23, 2016

RE: **Proposed Residence Addition and Remodel, 125 Live Oak Avenue, Fairfax, California.**

Dear Lady / Sir :

This letter answers the questions raised in the plan review memorandum (Ref. 1). The memorandum required some modifications of the original topographic map, as well as a preparation of a record of survey which must also be recorded. Our understanding is that both tasks have been completed and are submitted to the Town of Fairfax under a separate cover. Our answers to the geotechnical questions raised in the plan review memorandum are as follows :

Uncompacted Fill

Our office has verified the existence of uncompacted fill on the sides and directly downhill from the existing house. This fill mostly consists of the same silty clay matrix at the top, and shale/ sandstone fragments obtained several feet below during geotechnical exploration (Ref. 2). The fill, therefore, appears to originate directly from previous crawl space excavations.

Our measurements of the areas excavated, added to the projected volume of soil cuttings due to pier drilling, tie- or grade-beam construction, and post drilling for the proposed 3-foot retaining wall in the backyard, yields a volume of some 600 cubic feet, i.e. 22 cubic yards. Fill removal seems impractical. Instead, we recommend in-place stabilization by placing the loose fill and soil resulting from grading behind a 3-foot retaining wall replacing the existing 1-foot wood wall in the backyard (See Grading Plan C1 and details).

Foundation Stabilization

As shown in the proposed foundation plans (Sheets S1 and S2), a new framing support is proposed along line E, behind the original foundation along line F. Furthermore, the old shallow footing foundation is stabilized by perimeter drilled piers directly connected



5.2. In the event the contractor elects to use a dumpster, it will be located in the subject property, adjacent to the construction area. Dumpster will be emptied and replaced as needed.

6. Fire protection

6.1. There will be fire extinguishers located on each floor.

7. Materials

7.1. Building materials will be stored on site within the property lines or in the driveway area.

7.2. Building materials will be delivered to the site via Live Oak Avenue from the freeway.

8. Site Security

9. Construction fencing & proper safety signage:

10. Storm Water Pollution Prevention


10.1. Contractor and subcontractors shall adhere to all requirements of the Marin County Clean Water Program. There shall be no prohibited discharges into the storm drain system

10.2. The designated areas for clean up of concrete, tile slurry and the like shall be a temporary sludge basin located in the rear patio area.

10.3. The Contractor shall inform each worker and subcontractor of their obligations to comply with the Marin County Clean Water Program.

Erosion and Sediment Control Plan

2. Applicant Information

Official Use Only Yes No Comments	Applicant Complete this Section
A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Project Owner Name: <u>DAN BETTENCOURT</u> Address: <u>1110 BURNETT AVE, SUITE 'E'</u> <u>CONCORD, CA 95420</u> Phone: <u>925 - 595 - 5625</u>
B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Contractor Name: <u>R.E. RENOVATIONS, INC.</u> Address: <u>1110 BURNETT AVE, #E</u> <u>CONCORD CA 94520</u> Phone: (247 Number) <u>(925) 825-1970</u>
C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Applicant Certification <u>LICENCE No. 206215 B/C15</u> <p>I certify that the information provided in the Erosion and Sediment Control Plan is, to the best of my knowledge and belief, true, accurate, and complete and that it will be implemented throughout the project. I further certify that I will notify the <u>CO. OF MARIN PUBLIC WORKS</u> and submit revised information if any of the information or conditions documented in this Erosion and Sediment Control Plan change. I understand there are significant penalties for submitting false information or for not implement the Erosion and Sediment Control Plan per <u>SUMMIT ENGINEERING</u>. I will retain a copy of the Erosion and Sediment Control Plan at the project site.</p> <p>Signature: <u></u></p> <p>Print/Type Name: <u>DAN BETTENCOURT</u></p> <p>Title: <u>OWNER</u></p> <p>Date: <u>11/17/2015</u></p>

Continued on next page

Erosion and Sediment Control Plan

3. Identify Other Permits Required

Identify whether other permits that affect water courses or water quality are required. Attach proof the necessary permits have been applied for and obtained. Grading/Building permits will not be issued until proof is submitted that these other permits have been obtained.

Official Use Only			Applicant Complete this Section		
Yes	No	Comments	Permit/Agreement	Attached	
A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Construction General Permit (CGP) <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Applicable - Submit SWPPP instead of ESCP	<input type="checkbox"/> Proof of submission <input type="checkbox"/> Proof permit was obtained
B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Section 404 Permit <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Applicable	<input type="checkbox"/> Proof of submission <input type="checkbox"/> Proof permit was obtained
C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Section 401 Permit <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Applicable	<input type="checkbox"/> Proof of submission <input type="checkbox"/> Proof permit was obtained
D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streambed/Lake Alteration Agreement (1600 Agreements) <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Applicable	<input type="checkbox"/> Proof of submission <input type="checkbox"/> Proof permit was obtained
E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other: (Identify) List any specific permits required by the local, state, federal, or regional agencies <hr/> <p style="text-align: center;"><i>NONE REQUIRED</i></p> <hr/> <hr/>	<input type="checkbox"/> Proof of submission <input type="checkbox"/> Proof permit was obtained

Continued on next page

Erosion and Sediment Control Plan

5. BMP Information

Identify the BMPs that will be implemented for the project. At minimum the ESCP must include the MCSTOPPP minimum erosion control, sediment control, and good housekeeping BMPs must be implemented. Provide a rationale for the selected BMPs, including if needed, soil loss calculations. Use the rationale to demonstrate that the selected control measures are appropriate site specific BMPs.

Official Use Only		Applicant Complete this Section	
Yes	No	BMP	Rationale
Erosion Control BMPs			
Preserve Existing Vegetation			
A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Existing or nearby oak trees will be preserved. Existing trees & vegetation below will be maintained for fire safety & preserved to protect slope from erosion.	Existing or nearby oak trees will be preserved. Existing trees & vegetation below will be maintained for fire safety & preserved to protect slope from erosion.
Track Walk Slopes (Required on graded slopes prior to installation of other BMPs as well as for final slope stabilization.)			
B	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not Applicable		can you left justify this box
Soil Cover (Required, at a minimum, for graded or disturbed areas that are inactive for more than 14 days.)			
C	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Not Applicable		During work, excavated soil will be temporarily retained, until permanent retaining walls are completed. Then, the newly excavated soil & the uncompacted fill will be used as retaining wall backfill.

Continued on next page

Erosion and Sediment Control Plan

Official Use Only		Applicant Complete this Section	
Yes	No	Comments	Rationale
H	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<p>BMP</p> <p>Silt Fence</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> Not Applicable</p> <p style="font-size: small;">INCLUDED IN THE EROSION CONTROL PLAN, SHEET C-2.</p>
I	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<p>Drain Inlet Protection</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not Applicable</p>
J	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<p>Trench Dewatering</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not Applicable</p>
K	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<p>Good Housekeeping BMPs</p> <p>Concrete Washout</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> Not Applicable</p> <p style="font-size: small;">A 5-FT X 5-FT X 1-FT BASIN WILL BE PROVIDED AS SHOWN IN THE EROSION CONTROL PLAN, DETAIL 'B', SHEET C-2.</p>

Continued on next page

Erosion and Sediment Control Plan

Official Use Only		Applicant Complete this Section	
Yes	No	BMP	Rationale
Other BMPs List:			
P	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> Yes	<p>A WATER HOSE WILL BE USED FOR DUST CONTROL DURING GRADING AND FOUNDATION WORK, AS SHOWN IN NOTE P, IN THE BMP'S, PLAN C1.</p>
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> Yes	
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> Yes	
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> Yes	

Duplicate this page if needed to describe additional BMPs

SUMMIT ENGINEERING

- House and Vacant Lot Inspection
- Soils Reports
- Surveying, Parcel Maps, Subdivisions
- Storm Drain Design
- Hazardous Waste Studies

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Oakland, CA 94611
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TOWN OF FAIRFAX

MAY 19 2015

RECEIVED

Dan Bettencourt, President
RE RENOVATIONS
1110 Burnett Avenue, Suite E
Concord CA 95420

April 17, 2015

RE: **Geotechnical Report for the Proposed Residence Remodeling, 125 Live Oak Avenue, Fairfax, California.**

Dear Mr. Bettencourt :

The attached geotechnical report is based on a detailed engineering study by the undersigned of the above property, where it is planned to remodel the existing two-storey, single family residence. We conclude that from a geotechnical standpoint, the land is suitable for the new construction, provided that our recommendations are implemented and good building practices are followed.

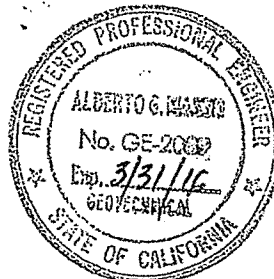
As in every project located on a sloping topography, this report includes consideration of the potential hazards of seepage, seismic shock, seismic liquefaction, and differential foundation movement. Therefore, we ask that this report be carefully studied and taken into account for the engineering design which is to follow.

Upon request, we will review foundation plans, and inspect earthwork construction and foundation installation on a regular basis while the work is performed. We will also discuss construction procedures, and field changes if needed in a Final Report.

Please feel free to contact us at anytime in the future if there are questions about this report, or we may be of further service.

Sincerely,

AGM
Al G. Masso
GE-2089



GEOTECHNICAL INVESTIGATION
FOR
THE PROPOSED RESIDENCE REMODEL
125 LIVE OAK AVENUE
FAIRFAX, CA 94930

FOR

DAN BETTENCOURT, PRESIDENT
RE RENOVATIONS
1110 BURNETT AVENUE, SUITE E
CONCORD, CALIFORNIA 95420

SUMMIT ENGINEERING
5855 CASTLE DRIVE
OAKLAND, CALIFORNIA 94611

APRIL 17, 2015

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REPORT SUMMARY

The present geotechnical study can be summarized as follows :

- The subject site consists of a developed parcel containing a two-storey, single family home on a downslope topography in the town of Fairfax, California. The owner plans to remodel the structure and expand the lower house level.
- The soil profile consists of a 3- to 4-foot thick clayey sand and gravel, some fill some native underlain by soft, weathered, friable shale/ sandstone rapidly becoming stronger with depth to Hard consistency below 4 feet.
- Ground water was not found during drilling.
- The nearest active fault is the San Andreas Fault, located some 7.5 miles SW of the property. Adequate seismic foundation design and reinforcement is, therefore, recommended.
- The proposed building should be built allowing positive drainage, i.e. allowing the storm runoff to travel by gravity away from foundation walls. Lead drain pipes should discharge in the existing concrete drainage channel in the back area.
- The new foundation in the back should consist of a pier and grade beam system. The interior retaining wall may be supported on shallow footings resting on excavated bedrock

INTRODUCTION

This report presents the results of an investigation of the soil and geologic conditions of a developed land parcel containing a single-family home. The property address is 125 Live Oak Avenue in the town of Fairfax, Marin County, California (Figures 1 and 3).

PROPOSED CONSTRUCTION

The owner plans to expand the lower house level and upgrade the foundation which supports the deck structure in the house back area. The interior expansion will be supported on shallow footing foundations resting on the exposed local bedrock. The exterior foundations will consist of a drilled pier and grade beam systems with a 8-foot minimum length of embedment in the Hard sandstone bedrock with a total length of 12 feet. Grading will include building the house foundation, and to provide drainage, and runoff disposal.

SCOPE

The scope of this investigation included:

1. A geologic reconnaissance of the surrounding area;
2. A review of pertinent geologic maps and reports relevant to the site;
3. The drilling of two soil borings, collecting representative soil samples; and
4. The examination of collected soil samples and correlation of drilling resistance with shear strength.

SITE TOPOGRAPHY AND VEGETATION

The subject parcel is located on down-sloping terrain with an approximate average slope of 2.0H:1.0V, i.e 50% on the building site. The parcel has a frontage and direct access on Live Oak Avenue. Site vegetation consists of native hillside oak woodlands with a number of oak trees and acacias (See Figure 3).

GEOLOGY

Geologic maps covering the area (Ref. 1) locate the lot within the KJfs melange unit of the Franciscan Assemblage (Jurassic and Cretaceous). The KJfs unit consists of a tectonic mixture of variably sheared shale and sandstone containing (1) hard tectonic inclusions largely of greenstone, chert, graywacke, and their metamorphosed equivalents plus exotic "high grade" metamorphic rocks and serpentinite, and (2) variably resistant masses of graywacke, greenstone, and serpentinite up to several miles in longest dimension; and including minor discrete masses of limestone. The degree of shearing in the unit ranges from gouge to unshaped rock with resistant masses relatively unshaped and matrix shaped; sandstone is graywacke, grayish green where

fresh, weathering to brown, commonly medium to coarse grained, containing abundant angular lithic grains (Figure 2A).

Available land stability maps (Figure 2B) show no landslides or other instabilities at the subject site or in the immediate area. The site is mapped in Zone 2 (Ref. 2c) which is described as "including narrow ridges and spur crests underlain by relatively competent bedrock and are flanked by steep, potentially unstable slopes".

The seismically-active San Andreas Fault is located 7.5 miles (12 Km) SW of the site, which lies outside the Alquist-Priolo Special Studies Zone. The equally active Hayward/Rodgers-Creek Fault and the Concord/Green Valley Fault are located 12 miles (19 Km) NE of the site, and 23 miles NE of the site respectively (Figure 2C).

FIELD INVESTIGATION

Field investigation consisted of a detailed site inspection and sub-surface exploration, both conducted on April 4th, 2015. During the detailed site inspection, the existing structure and adjacent residence were observed. The existing building foundation shows no noticeably signs of distress, excessive settlement, or other instabilities. However, the deck supports in the back show a downhill rotation, likely due to a combination of insufficient foundation depth and soil creep action. The adjacent residence to the right shows no signs of distress or differential settlement, and a good drainage system. Subsurface exploration, consisted of drilling two soil borings at the locations shown in Figure 3. The borings were drilled by driving a steel probe until refusal in sandstone bedrock was reached.

SOILS

Soil borings B-1 and B-2 found a 3- to 4-foot thick clayey sand and gravel, including some un-compacted fill and some of native origin, underlain by soft, weathered, friable shale/ sandstone rapidly becoming stronger with depth below 4 feet. For engineering design purposes, the following layers will be considered :

0- 4 feet, Fill and Shallow Soils, their resistance
will be disregarded for design (Creep Depth);

≥ 4 feet, harder-with-depth, weathered shale/ sandstone.

No groundwater was encountered during drilling. Detailed descriptions of the materials encountered in the borings are shown on the boring logs in the Appendix. The boring logs show subsurface conditions at the approximate locations shown on the Site Plan in Figure 3. At the building site, shallow soils are mostly silty in nature with likely moderate plasticity, and probably a low to moderate expansion potential.

SEISMICITY

The lot is located in the San Francisco Bay Area which is one of the most seismically active regions of the United States. The nearest active fault is the NW-trending San Andreas Faults 7.5 miles (12 Km) SW of the site. The Rogers-Creek Fault which is aligned with the Hayward Fault is mapped 12 miles (19 Km) NE of the property and capable to generate M6.5 events. In addition, the Calaveras and Green Valley/Concord Faults are located 30 miles SE, and 23 miles NE of the site, respectively. The lot lies outside the Alquist-Priolo Special Studies Zone.

All these faults are currently exhibiting creep movements and micro-seismic activity, and are capable of generating major earthquakes with the capacity for widespread damage to both man-made and natural structures. Major Bay Area earthquakes last occurred on the Hayward, San Andreas and Calaveras Faults in the year 1868, 1989 and 1861, respectively. Other small faults are mapped in the immediate area, although none are considered seismically active.

Although it is not yet possible to accurately predict when and where an earthquake will occur on the basis of current technology, it is reasonable to expect that, during its useful life, the proposed structure will suffer at least one moderate to severe earthquake. During such earthquake, the danger from fault offset through the site is remote, but strong shaking of the site is likely to occur.

However, foundations built on competent strata, although may suffer damage, should perform satisfactorily during a strong event. In addition, wood-framed buildings are generally flexible enough to sustain some seismic deformations with minor or moderate structural damage. An effective surface drainage keeping soil moisture stable will contribute to maintaining higher shear strength, and hence more stable slopes.

Additional 2013 California Building Code Seismic Parameters.

The CBC requires the determination of spectral acceleration curves for the local soil conditions (Ref. 13). The existing soil profile is classified as a C soil type, i.e. 'Very Dense Soil and Soft Rock' (CBC, Ref. 13). Site coordinates are 37.987517 degrees N, 122.586039 degrees W (NAD27). The obtained USGS horizontal and vertical spectral curves are shown in the next page. The proposed building will have a II occupancy category. Hence, it will have a D seismic design category.

CONCLUSIONS

Based on our field and office studies, it is our opinion that from a geotechnical engineering standpoint, the site is suitable for the proposed residence, provided that the recommendations presented in this report are incorporated into the design and construction of the proposed structure.

USGS Design Maps Summary Report

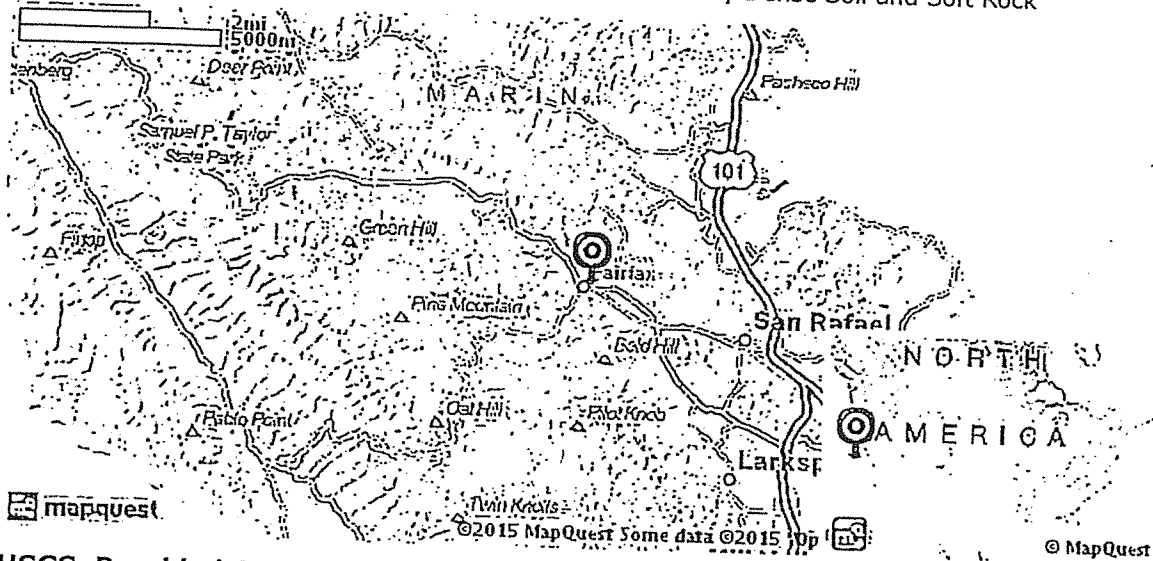
User-Specified Input

Report Title 125 Live Oak Ave, Fairfax CA
Thu April 16, 2015 09:46:19 UTC

Building Code Reference Document ASCE 41-13 Retrofit Standard, BSE-2N
(which utilizes USGS hazard data available in 2008)

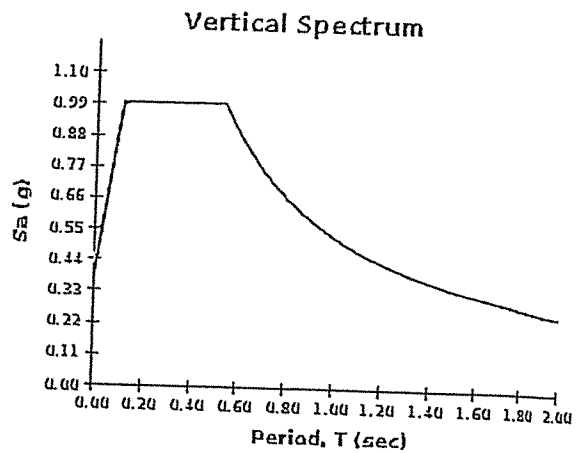
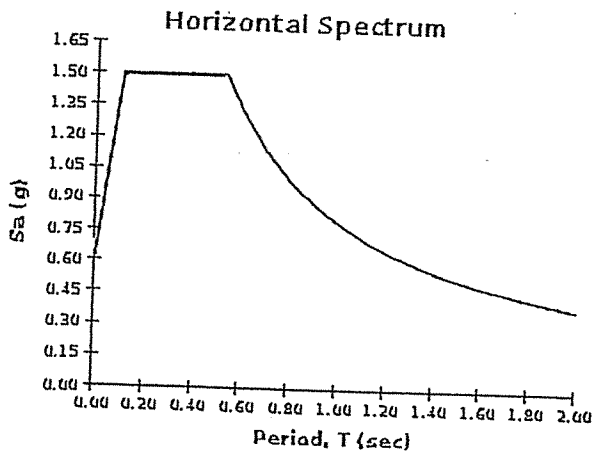
Site Coordinates 37.98752°N, 122.58604°W

Site Soil Classification Site Class C - "Very Dense Soil and Soft Rock"



USGS-Provided Output

$S_{S,BSE-2N}$	1.500 g	$S_{XS,BSE-2N}$	1.500 g
$S_{1,BSE-2N}$	0.613 g	$S_{X1,BSE-2N}$	0.797 g



Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

In order to minimize differential settlements, and provide greater seismic stability, the new foundation on the back slope for the remodeled area should consist of concrete, drilled pier and grade beam systems with a 8-foot minimum length of embedment in the Hard sandstone bedrock. This will require pier lengths of at least 12 feet for the primary foundation. Piers for secondary structures (decks, stairways, etc.) may be 8 foot long.

The pier foundation must be designed and built to provide adequate vertical and horizontal restraint. The vertical restraint will be provided by combined skin-friction and end-bearing effects. The horizontal restraint will be provided by passive bedrock resistance. Foundations for primary retaining walls in cuts reaching the weathered sandstone bedrock may consist of shallow footings being supported on weathered, soft to hard shale/ sandstone bedrock.

Ground shaking will be the major cause of earthquake damage. The controlling seismic event will be produced by the San Andreas Fault. The building period for a two-storey structure may fall within range of maximum spectral values, and therefore, the structure will be subject to high base shear and high shear stresses. Seismic CBC (2013) spectral values for design are shown in the previous page.

RECOMMENDATIONS

The following are recommendations for the successful completion and maintenance of the project. Because the recommendations are partly general and partly specific to certain items of concern identified above, recommendation implementation should be discussed with SUMMIT ENGINEERING, including :

- Review the foundation, grading, and drainage plans prior to construction.
- Update this report if necessary because of observed changes or delays.
- Inspect the excavation operations, particularly those for drilled pier foundations; the placement of fill and backfill materials; and the installation of surface drains and sub-drains behind retaining walls.
- Prepare a Final Soils Engineer's Report that indicates whether construction was done according to expected soils characteristics, or new features were encountered which required special engineering considerations.

These recommendations are contingent upon SUMMIT ENGINEERING being allowed to inspect and test the grading work, drainage work, and foundation construction. This will allow comparison of the exposed subsurface soil conditions with those assumed in preparation of this report.

A. Site Preparation and Grading

The area of the proposed improvements should be cleared and stripped so sufficient

depth to remove any obstructions, debris, and all surface vegetation. These materials should be removed from the site. If any obstructions (such as tree root systems) are removed below the planned finished grades, the resulting holes should be backfilled with approved materials that are compacted to the requirements given below.

Due to low soil plasticity, on site soils below 1 foot are suitable for use as fill or backfill materials (except where impermeable material is required). Any imported fill used at the site should be a non-expansive soil with a plasticity index of 12 or less. Fill and backfill materials placed at the site should not contain rocks or lumps greater than 6 inches in their greatest dimension, with not more than 15% larger than 2.5 inches.

Permanent cuts in soil and all fills should be no steeper than 2(H):1(V), and preferably 3(H):1(V) or flatter wherever practical. All sub-grade surfaces that will receive fill, should be scarified to a depth of 6 inches, moisture-conditioned wet of optimum, and compacted to the following requirements : All structural fill and backfill materials placed at the site should be keyed into dense soil compacted to at least 90% relative compaction by mechanical means only in lifts not exceeding 12 inches as determined by ASTM Test Designation D1557-70.

We recommend that any soil areas disturbed by the construction operations be protected with jute-netting and heavily planted to minimize sloughing and erosion (Ref. 14). All finished grades should slope at least 2% in such a manner that surface water will not run over exposed ground or collect against obstructions. For other grading details, the reader is referred to local regulations, OSHA Regulations, and the California Building Code (Ref. 13).

B. Drainage

Plastic soils may be affected by drying-and-wetting cycles, and must be protected by a carefully planned drainage system to avoid water percolation near the foundations. Surface runoff should be collected by installing small catch basins for proper disposal. Crawl spaces beneath floors can collect seepage if the rough interior grade is lower than the finish grade around the outside. In addition, there is always the risk of a slide occurring in sloping terrain, and a good drainage plan will decrease such risk.

Slope runoff should be intercepted behind retaining walls by installing swales that empty into small catch basins for proper disposal. Drainage must not be allowed to collect and pond anywhere on the site. Further, finished ground surfaces must be sloped 2% away from foundation walls.

Roof runoff should also be directed away from foundations. Do not allow down-spouts to deposit roof runoff where it can saturate foundation soil or to discharge into retaining walls perforated sub-drains. All down-spouts around the house should be connected

by solid pipe and extended downslope to discharge into the V-shaped, concrete channel running along the back of the house and must be maintained unobstructed.

Installation and operation of automatic sprinkler systems must be conducted carefully to avoid producing excessive amounts of water. Further, irrigation either manual or automatic, should be kept to a minimum. Landscaping should be limited to drought-, fire-resistant species of trees and bushes.

Proper house maintenance including annual flushing with a garden hose of all sub-drains, catch basins and down-spout piping is recommended. If any pipes become clogged, they should be cleared so that hydrostatic water pressures do not lessen the shear strength of the soils. Likewise, ground surfaces should be maintained to promote good drainage, and to prevent erosion and foundation soil saturation.

C. Drilled Pier Foundations

All piers should have a minimum diameter of 12 inches. Piers should be embedded in Hard, weathered shale/ sandstone, with a minimum pier length of 12 feet for the primary foundation and 8 feet for secondary structures (decks, stairways, etc). Final pier depths should be determined in the field by the project geotechnical (soils) engineer. Use the following table for pier design :

Table 1 - Soil Parameters for Foundation Design

Depth (ft)	Soil Charact.	Skin Friction (psf)	Pullout Resist.(psf)	Pass Resist. (pcf) (*)	Bearing Pres.(ksf)
0				
	Shallow Soils				
	Disregard	0	0	0	
	(Creep Depth)				
4				
	Soft, Weathd.				
	Sandstone	600	300	500	
≥ 8				5+
	Denser, Weathd.				
	Sandstone	600	300	600	

where (*) means applied to 1.5 pier diameters, and the allowable bearing pressure, q_a , inside the Hard sandstone mass is given by :

$$q_a = 5 (1 + 0.1 (L - 8)) \text{ ksf}$$

and L = pier length (ft) below the original ground

When embedded in Hard sandstone, and provided that the pier boreholes will be clean from all debris, piers may be designed to account for the end-bearing effect, with an allowable bearing pressure of 5 kips per square foot, plus 10 % per foot of penetration starting from the depth of 8 feet below the ground surface, to a maximum of 15 ksf for dead plus live load, with a one-third increase for all loads including wind or seismic. If the end-bearing effects are added, the total pile capacity will be calculated as follows :

$$\text{Pier capacity} = \text{Shaft resistance} + \text{Tip resistance} / 3 \quad (\text{for lengths } \geq 8 \text{ ft})$$

The following pier capacities have been calculated to facilitate foundation design. For given pier spacings, and hence pier loads provided by the structural engineer, pier lengths may be obtained quickly from this table :

Table 2 - Vertical Pier Capacities in kips (1 kip = 1,000 lbs)

D (in)	L (ft)						
	8	10	12	14	16	18	20
12	9	13	17	21	25	29	33
16	12	17	23	28	34	39	45

where :

D = Pier diameter in inches

L = Pier length (ft) below original ground

Creep Pressures on Piers

Creep pressures will be accounted for by designing piers to resist a rectangular lateral pressure diagram of 200 psf/ per foot of pier width thru the 4-ft Creep Depth. Our preliminary calculations (to be verified by the project structural engineer) result in the following :

- Total Creep Force = 4 x 200= 0.8 kips/ foot of pier width, applied 2 feet below ground.
- Point of zero shear = 2.13 feet below creep depth = 6.13 feet below ground surface.
- Creep Bending Moment = 3.3 foot x kip/ foot of pier width applied 6.13 feet deep.

Creep pressures will be applied over one pier diameter. Passive Soil Resistance, (acting only below the Creep Depth of 4 feet), will be applied over 1.5 diameters and are given on Table 1 above and in Section H below (See Figure 5 for a pier force diagram).

Pier Construction

Piers must be installed deeply or firmly enough to gain fixity at their bottoms in order to act as vertical cantilever beams. If a minimum pier length of 8 feet is provided, fixed-end effects at pier bottoms may be assumed for structural design.

All piers must be tied together with tie beams connecting pier heads between piers and to the house foundation wall as shown in Figure 3. We recommend to design pier-grade beam connections to resist bending. The spacing of the piers and their required loadings should be determined by the Structural Engineer, but pier center-to-center spacing should not be closer than five pier diameters.

All pier holes should be dry and reasonably free of loose cuttings and falling debris prior to installing reinforcing steel and placing concrete. Some of the pier holes may encounter different soil conditions than assumed through their design depths; such piers will be evaluated individually by the soils engineer at the time of construction.

In addition, care must be taken during the pier hole drilling operation to verify that boulders or locally unconfined rock outcrops are avoided. Pier boreholes should preferably not be left un-poured over 24 hours and by no means over 48 hours. If water is encountered in any of the pier excavations, pumping may be required to remove the mud from the holes. If open boreholes are caving-in, a drill-and-pour technique should be implemented.

D. Shallow Foundations

Shallow footings should only be used for landscaping walls or for secondary elements in the main structure (stairways, landings, etc.). The footings should be built in excavated trenches of at least 18 inches deep. The trench bottoms should be thoroughly compacted. The footings may be designed for maximum allowable bearing pressures of 1,500 psf.

Retaining walls supported on bedrock like the one under the lower house level, may be designed using an allowable pressure of 2,500 psf. Horizontal forces may be resisted by friction under the footings by using a friction coefficient of 0.35 applied to the dead weight on the footing. For added resistance, a pier/ keyway combination may be used with a passive stress of 250 psf. The keyway must be at least 12 inches thick.

Allowable pressures may be applied to dead and live loads, with a one-third increase for all loads including wind and seismic. Footing allowable pressures are net values; therefore, the weight of the footings can be neglected for design purposes. All foundation bearings must be reasonably dry and free of cuttings and debris prior to installing steel bars and pouring concrete. In addition, any visible cracks in the bottom of the footing excavations should be closed by soil compaction prior to pouring concrete.

E. Concrete Slabs on Grade

Framed wood flooring is preferable for the living areas of buildings. However, where slabs are to be used, the following is recommended :

At least the top 6 inches should be crushed rock. Over-excavated sub-grades should be filled with densely compacted crushed rock or other non-expansive material. Use of a vapor barrier under slabs is recommended. Post-tensioned slabs may not need vapor barriers if the concrete is permanently in compression. An efficient vapor barrier is achieved by installing a 10-mil plastic membrane over the layer of gravel or crushed rock. A two-inch layer of sand must be placed over the plastic membrane before pouring in order to avoid puncturing damage and help the concrete during the curing process.

Concrete slabs should be at least 4 inches thick and well reinforced, preferably with at least number 4 steel re-bar reinforcement. Exterior slabs, garage, carport slabs, and driveways may be free-floating and separate from foundations. Weakened-plane contraction joints should be provided in exposed, non-structural slabs at about 10-foot intervals. Reinforcing should be continuous through contraction joints. An average value for the modulus of sub-grade reaction for the entire foundation system may be taken as 150 Tons/ft³.

Concrete walks should be reinforced concrete over sand or gravel. If truck traffic passes over concrete walks, they should be 6-inch reinforced slabs over 6 inches of rock. Similar concrete pads should be placed wherever a debris box or a trailer storage is anticipated.

F. Pavement

The usual driveway section consists of a 4-inch, reinforced-concrete slab as described above, or a 2-inch cover of plant-mixed asphalt. A thicker "engineered" R-Value design can be prepared upon request. Either pavement should be placed over at least 4 inches of CalTrans Class II Aggregate Base rock.

Install pavement according to CalTrans Standard Specifications, Sections 16, 19, 26, and 39. Compact the sub-grade to 95% relative compaction (ASTM D1557) at a moisture content of 2% over optimum moisture, and then rock tack, and pave immediately to keep the soil from drying and subject to swell heave the following winter. Base rock should be CalTrans Class II aggregate, asphalt should be plant-mixed Type B. Base rock should also be compacted to 95% and tacked. Asphalt should be sealed after paving.

G. Lateral Earth Pressures

Back-drained retaining walls must be designed to resist the following active lateral soil pressures :

<u>Wall Type</u>	<u>Active Pressure(pcf-efw)*</u>
Unrestrained, Slope \leq 4:1	35
Unrestrained, Slope = 2:1	45
Unrestrained, Slope = 1/5:1	55
Restrained	Add an additional uniform lateral pressure equal to $8 \times H$ (psf), where H = height of backfill above retaining wall foundation in feet.

(*) Pounds per cubic foot-equivalent fluid weight

- A 30% pressure increase should be used for shoring design.
- For unrestrained walls, add an additional uniform pressure equal to one-third the maximum surcharge load applied to the wall backfill.
- For restrained walls this additional uniform design pressure should be one-half the maximum surcharge.

The above pressures assume that sufficient drainage will be provided behind the walls to prevent the build-up of hydrostatic pressures from surface and subsurface water infiltration. Adequate drainage may be provided by a sub-drain system consisting of 4-inch diameter perforated pipes bedded in filter-wrapped, free-draining material. Do not discharge roof runoff into retaining walls perforated sub-drains.

The free-draining material should consist preferably of clean, uniform, 1- to 2-inch gravel or drain rock, it should be wrapped with a synthetic filter fabric, and it should be placed behind the wall with at least 1 foot of thickness and should extend to within 2 feet of finished grade (See Section A for backfill placement and compaction).

Compaction of wall backfill should be conducted carefully to avoid damage to the wall. The upper 1 foot of backfill should consist of compacted on-site or imported clayey materials (See Figure 6).

Construction equipment and transport vehicle surcharges should also be anticipated in design, and the construction specifications should provide for adequate concrete curing time before allowing the backfill to be compacted. Sliding friction and passive resistance should be taken as discussed in Section H below.

Retaining walls behind non-living spaces should have a wall drainage system including conventional drain material (such as Miradrain), and a sub-drain installed as a "drainage burrito" (i.e., perforated pipe, gravel, and filter fabric) as said earlier. The perforated sub-drain pipes should be connected to a system of closed pipes that discharges in the

paved street gutter. Besides being provided with proper sub-drains, all retaining walls behind living spaces must be thoroughly water-proofed, preferably by hot-mopping, or better yet, with sealing synthetic membranes such as PermaSeal, Bituthene, Miradri, HLM 5000, or equivalent. Water-proofing is an art. Therefore, a specialized contractor should be consulted in this regard.

Lined surface ditches must be provided behind any wall having an exposed sloping surface draining towards the wall. These ditches will collect runoff water from the slopes and should be sloped to drain to suitable discharge facilities. The top of the walls should extend at least 6 inches of free board above the ditch in order to retain minor erosion or sloughing materials.

The walls can be best supported on pier/ footing combinations designed for bending stresses in accordance with the recommendations presented previously under Section C, "Drilled Piers" and Section D, "Shallow Foundations". Lateral load resistance can be developed in accordance with the recommendations presented below.

H. Lateral Load Resistance

Lateral loads on piers may be resisted by passive pressures acting against the sides of the piers. Equivalent passive pressures as shown on Table 1 :

Between 0 and	4 feet, use	0 pcf-efw;
Between 4 and	8 feet, use	500 pcf-efw;
Below	8 feet, use	600 pcf-efw to a max. value of 9,000 psf.

Passive resistance of drilled piers will be calculated by applying passive stresses on 1.5 pier diameters. Lateral loads on footing foundations may be resisted by friction, with a friction coefficient of 0.35 times the dead load when footings are on either soft or hard, weathered bedrock.

We recommend that the factor of safety against sliding and overturning for all open-ended retaining walls be at least 1.5. We wish to note that when calculating the weight of soil on the portion of the protruding wall footing where backfill will be placed (i.e., the weight of soil that will resist over-turning forces), an imaginary line at an inclination of 10 degrees from vertical can be used starting at the top of the wall footing. In addition, the backfill materials can be assumed to have a unit weight of at least 110 lbs / ft³.

LIMITATIONS

The recommendations presented herein are based on the soil conditions revealed by our test borings and laboratory procedures according to generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied.

It must be understood that for this report to be valid, the owner/ developer should ensure that necessary steps are taken to carry out the recommendations of the report in the field. Any added risk incurred by the choice of alternative construction methods which depart from our recommendations will be borne by the owner/ developer. Further, this report must not be construed as any guarantee or insurance against any type of soil failure.

The recommendations in this report are general in nature and are subject to adaptation or revision as the construction circumstances warrant. We should be notified for supplemental recommendations should unusual situations be encountered during construction. We may be consulted for supplemental advice, or to provide assistance in interpreting our findings and recommendations, or to inspect various aspects of construction.

Our recommendations are valid as of the present time. However, future conditions may change conditions due to legislation, improvement of engineering knowledge, natural process, or man's works. Therefore, this report is subject to review and its validity may decrease with the passage of time.

Finally, careful design and construction cannot guarantee that damage will not occur if a disaster strikes. Disaster may strike in the form of a destructive, nearby earthquake, or a large unforeseeable landslide. Therefore, the owner should obtain home insurance if available against earthquake and landslide damage.

REFERENCES

1. USGS (Blake et al), 1974, Preliminary Geologic Map of Marin and San Francisco Counties and parts of Alameda, Contra Costa and Sonoma Counties, California.
- 2a. USGS (Ellen, S. et al), 1982, Map Showing Areas Susceptible to Different Hazards from Shallow Landsliding, Marin County and Adjacent Parts of Sonoma County, California.
- 2b. USGS (Rice, S. J.), 1976, Geology for Planning in Central and Southeast Marin County, California. OFR 76-2, 1976.
- 2c. USGS (Rice, S. J. and T. C. Smith), 1976, Interpretation of the Relative Stability of Upland Slopes in the Lower Ross Valley, Corte madera, Homestead Valley, Tamalpais Valley, and Tennessee Valley Areas, Marin County, California, CDMG, 1976.
3. State of California, 1983, Revised Official Map, Special Studies Zone, San Rafael Quadrangle, July 1st, 1983.

4. USGS (Frizzell et al), 1977, Map Showing Recently Active Breaks Along the Rodgers-Creek Fault, Sonoma County, California. MF-744.
5. USGS (Rantz), 1971, Mean Annual Precipitation Data for the San Francisco Bay Region, BDC 32.
6. USGS (Radbruch et), 1966, Tectonic Creep in the Hayward Fault Zone, Circular 525.
- 7a. California Division of Mines & Geology (Hart), 1976, Fault Hazard Zones in California, Special Publication 42.
- 7b. USGS (Borcherdt), 1975, Studies for Seismic Zonation of the San Francisco Bay Region, Professional Paper 941-A.
8. USGS (Herd), 1979, Seismic Zonation of the San Francisco Bay Region, Circ. 807, p. 10.
9. Seed & Idriss, 1982, Ground Motions and Soil Liquefaction During Earthquakes, Earthquake Engineering Research Institute.
10. U.S. Soil Conservation Service, 1983, Soil Survey of Western Marin County.
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12. Site Plan Sketch by SUMMIT ENGINEERING, April, 2015.
13. California Building Code, 2013 Edition.
14. ABAG, 2005, Manual of Standards for Erosion and Sediment Control Measures.
15. SUMMIT ENGINEERING, 1991, Geotechnical Report for the Proposed New Residence at 78 Toyon Drive, Fairfax, California. September 13th, 1991.

APPENDIX

SUMMIT ENGINEERING

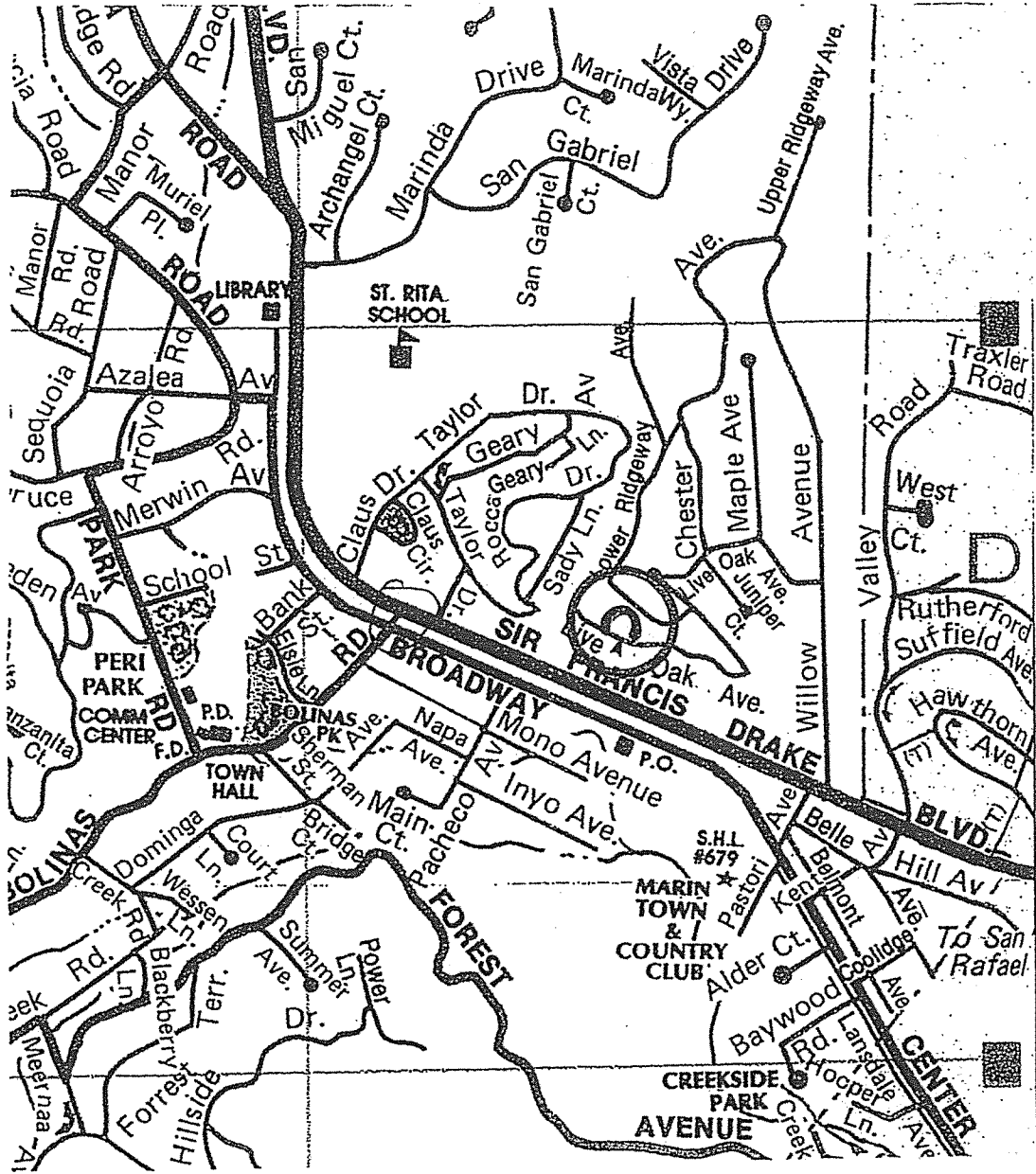
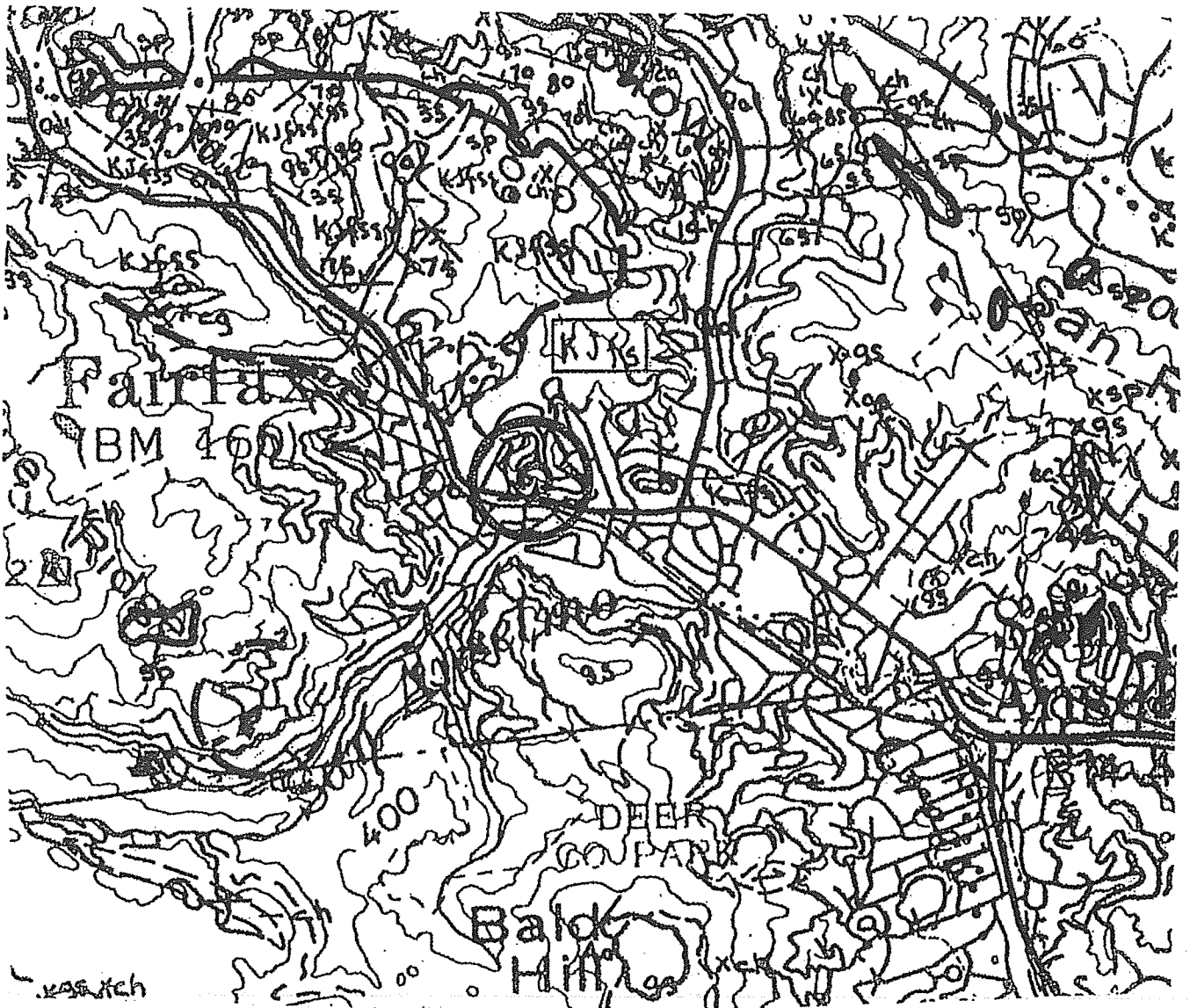


FIGURE 1 - SITE LOCATION

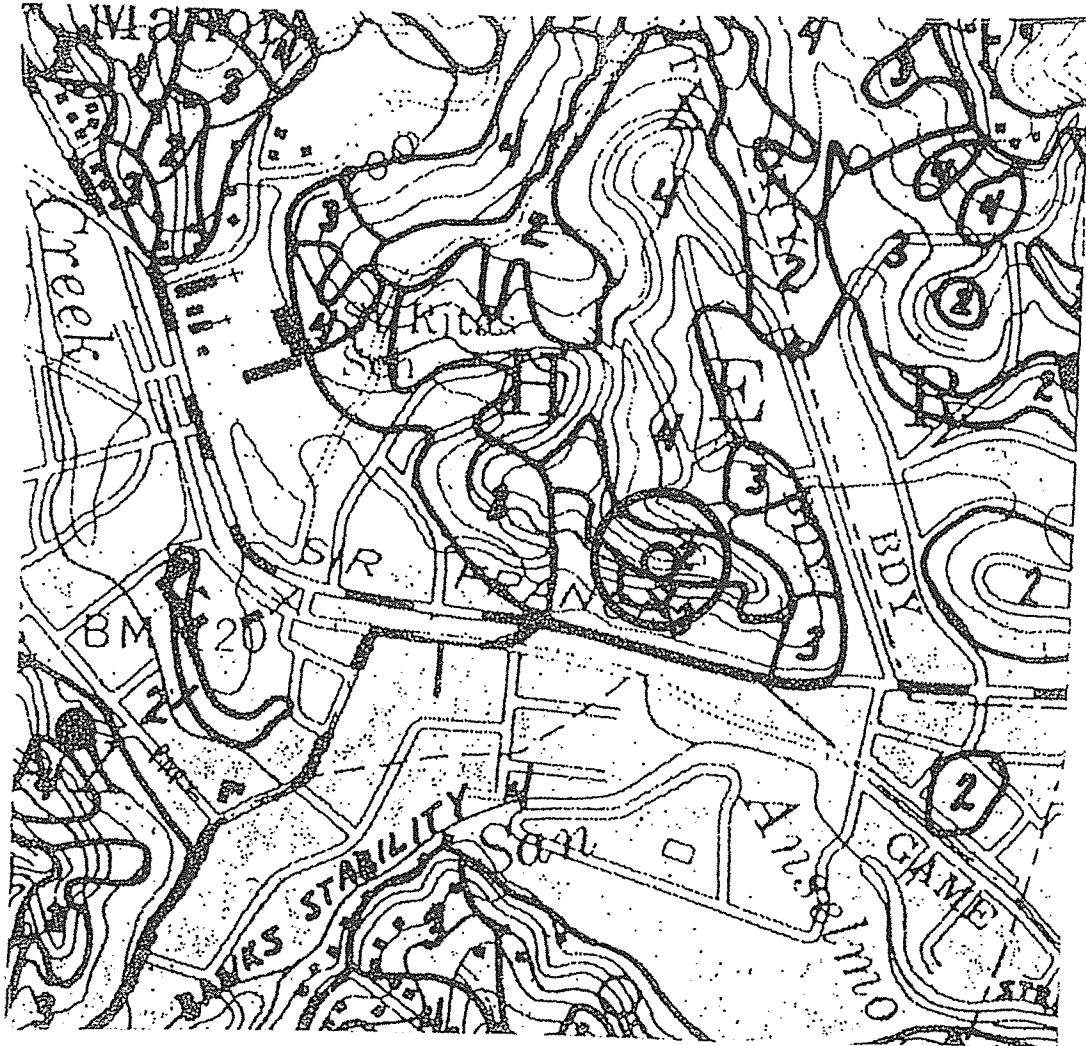
SUMMIT ENGINEERING



Ref. : Blake, et al (1974)
 Scale 1" = 1/2 mile

KJfs = Franciscan Melange ; a tectonic mixture of variably sheared shale and sandstone containing hard tectonic inclusions or variably resistant masses of other rocks as graywacke, chert, greenstone and their metamorphosed equivalents, serpentinite etc

FIGURE 2A - REGIONAL GEOLOGY



Ref. : USGS (), 1976

FIGURE 2B - REGIONAL LAND STABILITY

SUMMIT ENGINEERING

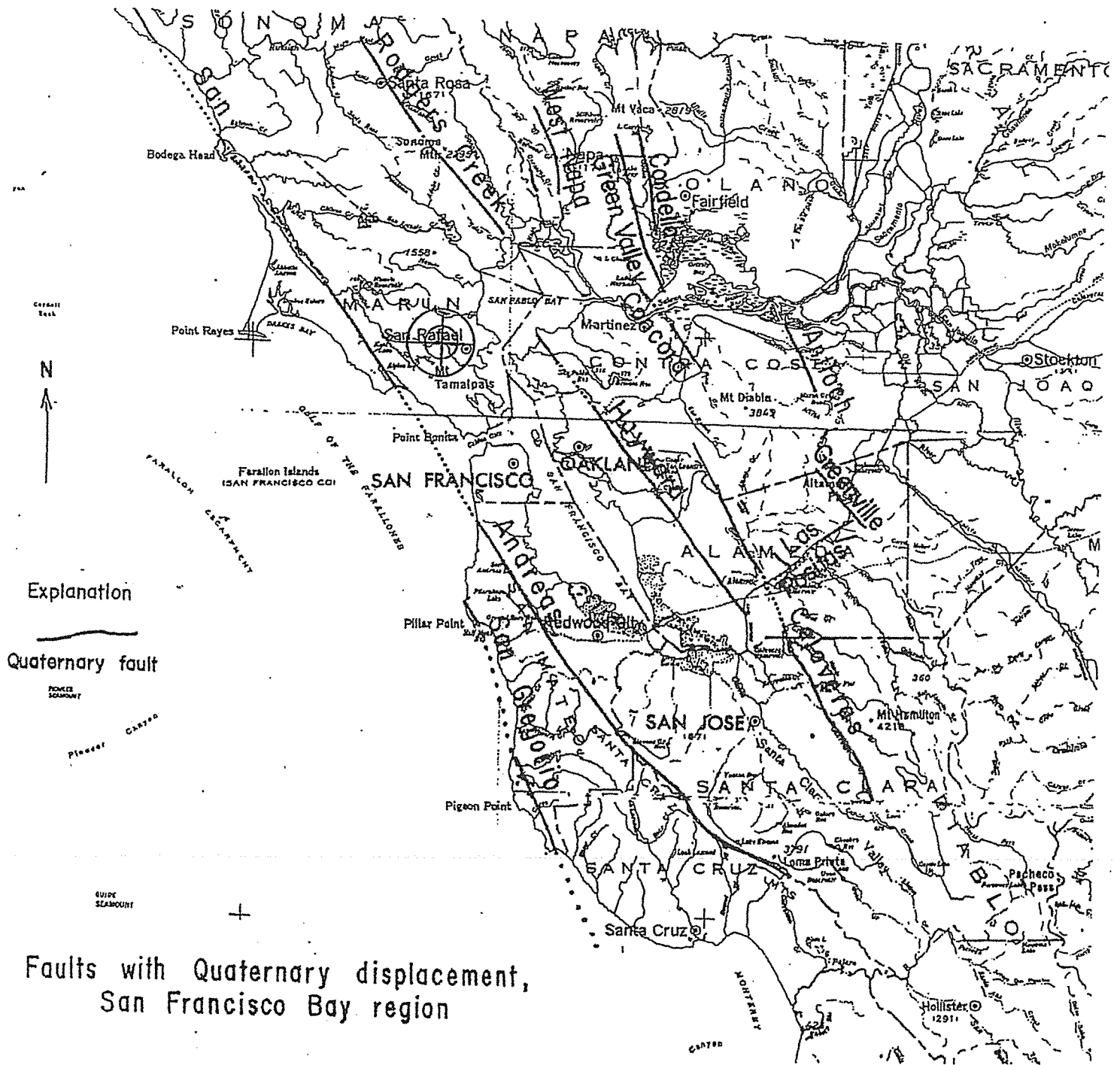


FIGURE 2-C - ACTIVE FAULT ZONES

SUMMIT ENGINEERING

(E)

Two-st. Residence 125 Live Oak Av

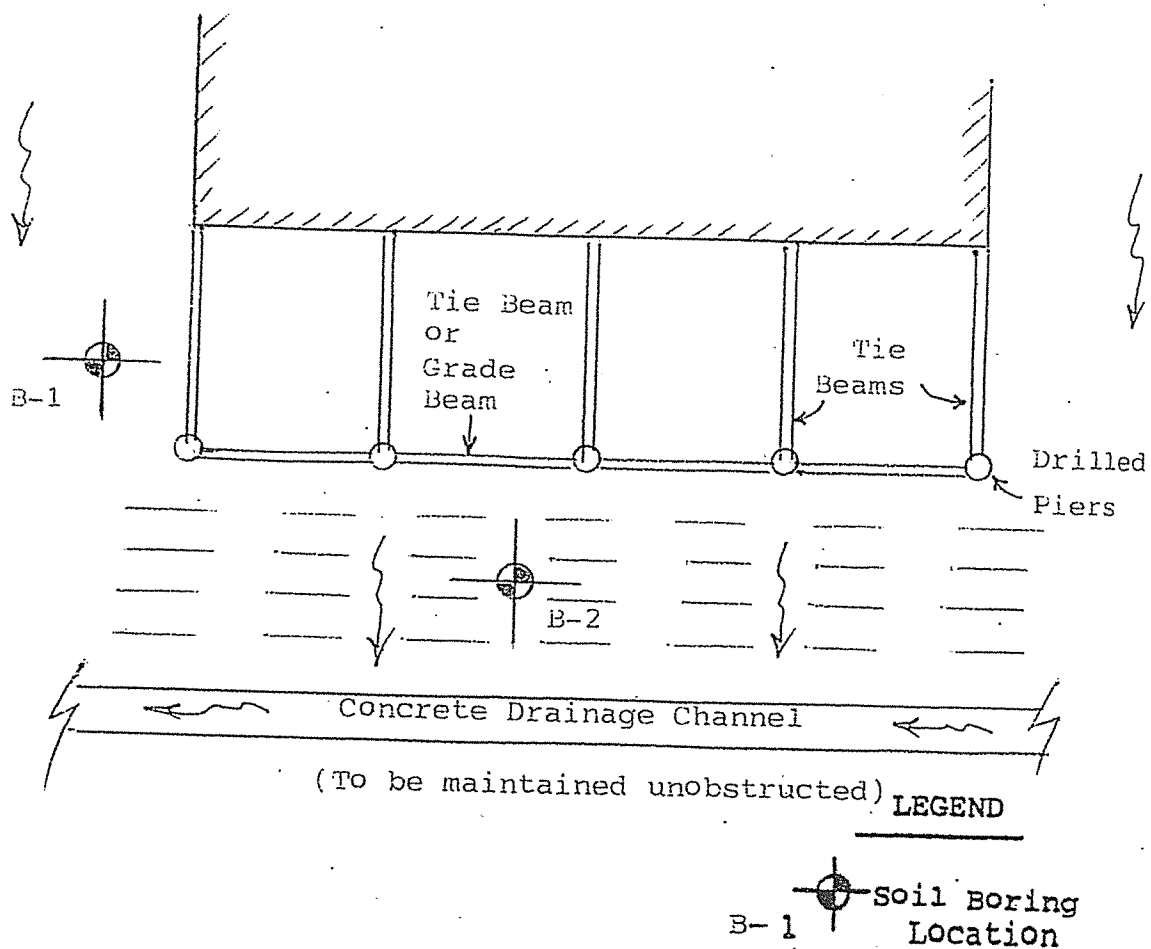


FIGURE 3 - SITE PLAN AND SOIL BORING LOCATIONS (Not to Scale)

PROJECT No. 150401		BORING No. B-1		DATE: 4/04/2015				
PROJECT NAME: Residence Remodeling				PAGE 1 OF 1				
LOCATION: 125 Live Oak Avenue, Fairfax, CA				GWL DEPTH: N.E.				
DRILLING METHOD: Percussion Steel Probe				HOLE DIAM: 3/4 in				
DRILLING CONTRACTOR: Geo Drill Services				DRILLER: Jose				
DEPTH (FT)	SAMPLE TYPE & NUMBER	BLOW/FT	SPT	MATERIAL DESCRIPTION	USCS SYMBOL	MOISTURE CONTENT %	DRY DENSITY (PCF)	SHEAR STRENGTH (PSF)
0				light-brown to mid-brn, clayey gravel and coarse sand. Fill and native soil. Loose at top, moist grading to Med. Dense and Dense below 3 ft. Abundant rock fragmts in weathered sandstone. Hard. Refusal at 4.5 feet	GC			
2					GC			
4				BOH = 4.5 feet				
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
NOTES: N.E. = Not Encountered <input type="checkbox"/> 2.5" x 6" brass tube sample <input type="checkbox"/> SPT sample <input checked="" type="checkbox"/> Grab sample					SUMMIT ENGINEERING 5855 Castle Drive Oakland, CA 94611			



TOWN OF FAIRFAX

142 BOLINAS ROAD, FAIRFAX, CALIFORNIA 94930
PHONE (415) 453-1584 / FAX (415) 453-1618

MEMORANDUM

To: Linda Neal – Principal Planner

Date: April 6, 2017

From: Ray Wrysinski
Town Engineer

Page 1 of 3

Subject: Proposed Addition and Remodel
125 Live Oak Avenue
Fairfax, CA

A.P. 001-236-03

I have reviewed the plans and documents that were enclosed with your 3/09/16 (3/09/17) transmittal. The items reviewed included a plan set by HM Design, dated 11/11/2015 and with various other sheet dates, consisting of 10 sheets and included in that plan set, a one sheet topographic survey, with the boundary shown, by KCP, INC., dated 3/3/2017. There were two sheets, in the set, titled Grading Plan and Drainage Plan from Summit Engineering, dated 3/3/17 and a lighting plan with no author, dated 10/9/15. Also there was a recorded record of survey by KCP, INC. of this site. There was a site plan from HM Design, dated 3/8/17. There were letters, by Summit Engineering, dated 4/17/15, 3/23/16, 12/8/16 and 2/25/17.

This information was reviewed to determine if it satisfied the requirements in the 11/22/16 Principal Planner letter and the 11/22/16 Town Engineer review Memorandum.

The submitted recorded record of survey of the boundary of this site satisfied the requirement for that document except it did not resolve the street right of way. Two copies of the current fee title deed for this site were required to be submitted for Town use in review of this proposed project and they were not provided. With review of the noted recorded record of survey and the previously submitted title report, I feel we have fairly complete boundary information. I will leave it to you to decide if this project should come back to me for review of the fee title deed after that is submitted.

The submitted topographic survey of the site provides the information required to be on that document. The survey was required to include the note called for by the Code that all easement are shown and that has been done. This easement note is also on the recorded record of survey. On the westerly side of the site, west of the driveway, there are some stepped areas created by wood and rock retaining walls. These features appear to relate to the adjoining property but they do come onto this property and were required to be shown. They are on the topographic survey and they are shown on the sheet AO.1 and they are on the grading and drainage plans. There were corrections needed on the westerly and easterly sides of the driveway bridge topography and those are shown. The existing retaining walls on the easterly and westerly sides of the driveway were required to be shown so their height can be correctly read and that has been done adequately.

Those, above noted, structures will need to be covered by an encroachment permit. The extent of the existing driveway bridge in this area was required to be shown and it was not shown. The location of the existing foundation retaining wall that holds up the street side of the driveway and supports the driveway bridge was required to be shown. It was not shown. This wall, as it appears relative to the house, is in the street right of way, as far as I can tell and so will have to be covered by an encroachment permit, noted above, as will the side retaining walls. This abutment is along the street right of way line and you will have to use these comments to know it is there.

The area of the Fire Fighter Turn-around was required to be added to the topographic survey including the surveyed (record of survey) right of way lines, trees, fences, sign, existing utilities and paving. The provided record of survey does not show the street right of way lines on the northerly side of the Fire Fighter Turn-around so we have fairly weak information on where the right of way or property line is in this area. The sheet A0.1 and the topography show the right of way at about 40' wide which may be correct and the turn-around area is shown based on that. It looks okay. I will leave it to you to decide if we should go through another plan review to get the accurate property line location that was previously required for the turn around area.

During the site review, uncompacted fill soil, placed at the sides and directly downhill of the existing building, were observed on the very steep hillside there. Apparent excavation, covered by light plywood and 2x4 shoring, in the building crawl space was observed. The fill and excavation work was done without the required Town Permit. Satisfying the Town Permit requirements for that work must be done. That can be a condition of the permit. It is my opinion that the fill is somewhat unstable in a dry condition and that it is potentially much more unstable when it is wet from winter rains. The excavation in the building crawl space appears to have created a condition of taking support away from the building foundation in that area. This potential foundation problem gets worse when the hillside soil gets wet in the winter. This application must include resolving the unpermitted excavation and fill work and foundation support loss. The project geotechnical engineer was required to submit a letter or a revised report that provides a detailed description of the existing fill and excavation work. The 3/23/16 letter from Summit Engineering responds to these problems. There is information on the plans generally dealing with these items. The project permit must require frequent review of the construction by the project soils engineer and it must require a final construction review letter from the soils engineer stating that all required soil stabilization work on the site has been completed. This will include erosion control. There is a very steep slope (more than 80%) below the concrete ditch below the building on this site. That slope may adversely affect the stability of this site and its stability must be covered in the above, final letter.

The Geotechnical Engineer provided comments on this steep slope in the 3/23/16 letter. The existing concrete ditch, below the building on this site, is cracked with some displacement at the cracks and there is some subsidence of soil under the ditch leaving it partially unsupported. Leakage through the cracks may wash soil support out from under the ditch and that along with the existing unsupported areas may lead to collapse of the ditch. The plans show some repairs for the ditch including County Standard concrete ditch and one inch diameter vertical pipes at four feet on center to support the ditch. The one inch pipes will not provide much support. Field review during construction will be needed to determine if substantial support will be needed for the ditch in steep slope areas.

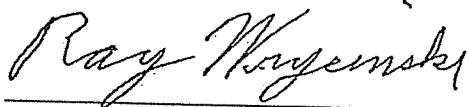
There are a number of poorly constructed wood retaining walls that support small to medium quantities of soil fill. This fill is expected to become a problem source of downhill soil sloughing or landslides as these walls and fill areas fail. The final letter from the soils engineer must describe how these weak fills and wood walls were stabilized. The grading and drainage plan shows, as required, bringing roof downleader drainage and other appropriate site drainage to the concrete ditch below the site as called for in the Geotechnical Report.

The building plans, sheet A3 received previously, stated there is no soils report. I did not receive that sheet, this time, so I do not know if that was corrected. This must be revised to state that the work must satisfy the project Geotechnical Report requirements prior to building permit approval.

A Stormwater Pollution Prevention plan for this project has been provided. If any trees are to be removed, a Fairfax Tree Committee report and permit must be obtained.

A construction management plan has been submitted. That work must function so that the Town Code Section 12.28, prohibition of obstructing roads, can be satisfied so that construction activities, vehicles and materials do not block the road.

If the above noted conditions are placed on this project, I recommend that the processing of this project move forward.



Ray Wrynski, P. E.
Town Engineer



TOWN OF FAIRFAX

142 BOLINAS ROAD, FAIRFAX, CALIFORNIA 94930
PHONE (415) 453-1584 / FAX (415) 453-1618

RECEIVED

NOV 28 2016

TOWN OF FAIRFAX

MEMORANDUM

To: Linda Neal – Principal Planner

Date: November 22, 2016

Page 1 of 3

From: Ray Wrynski
Town Engineer

Subject: Proposed Addition and Remodel
125 Live Oak Avenue
Fairfax, CA

A.P. 001-236-03

I have reviewed the plans and documents that were enclosed with your 10/18/16 and 10/26/16 transmittals. The items reviewed included a plan set by HM Design, dated 11/11/2015 and with various other sheet dates, consisting of 10 sheets and included in that plan set, a one sheet topographic survey, with the boundary shown, by KCP, INC., dated 3/3/2016. There were two sheets, in the set, titled Grading Plan and Drainage Plan from Summit Engineering, dated 3/23/16 and a lighting plan with no author, dated 10/9/15. Also there was a recorded record of survey by KCP, INC. of this site. There was a site plan, with the 10/26/16 transmittal, from HM Design, dated 9/15/16. There was a letter, by Summit Engineering, dated 3/23/16.

This information was reviewed to determine if it satisfied the requirements in the 6/17/15 Town Engineer review Memorandum.

The submitted recorded record of survey of the boundary of this site satisfied the requirement for that document. Two copies of the current fee title deed for this site were required to be submitted for Town use in review of this proposed project and they were not provided. With review of the noted recorded record of survey and the previously submitted title report, I feel we have fairly complete boundary information. I will leave it to you to decide if this project should come back to me for review of the fee title deed after that is submitted.

The submitted topographic survey of the site provides much of the information required to be on that document. The survey was required to include the note called for by the Code that all easements are shown. If there are no easements, a note stating there are no easements, must be placed on the map. Wording for the no easements note could be "Based on a review of the recent title report (give the name of the title company and the date of the report and submit copies) and based on this surveyor's knowledge of this site, there are no easements". This easement note was not shown and is still required. On the westerly side of the site, west of the driveway, there are some stepped areas created by wood and rock retaining walls. These features appear to relate to the adjoining property but they do come onto this property and were required to be shown. They are not on the topographic survey but they are sort of shown on the sheet AO.1 received by the Town 10/26/16 (the previous AO.1 of the same date do not show these steps). I will leave it to you to decide if we need to go through another plan review to get those steps shown on the survey. On the westerly side of the existing driveway, the topographic survey shows the

ground elevation to be about 203 near the driveway elevation of 204. The ground is actually about 7 feet lower than the driveway at this location so the topographic survey was required to be corrected here. It was not corrected but it does show the ground sloping up very steeply, where there is no ground, to the edge of the driveway bridge slab. With this second try, it appears the surveyor does not know how to show ground coming under a bridge slab. The existing retaining walls on the easterly and westerly sides of the driveway were required to be shown so that their height can be correctly read. This was not really done but you will know these items exist from these notes. These structures will need to be covered by an encroachment permit. The extent of the driveway bridge in this area was required to be shown. This was not shown. The driveway bridge support abutment on the north side, in the street right of way must be covered by an encroachment permit. On the easterly side of the driveway, the retaining wall, maximum exposed height is about 7 feet and the ground elevation shown there nearly matches the top of wall so a guess, with the information on the survey, would indicate the wall is about one foot high. The topography information near this wall was required to be corrected. The topography, in this area, was changed but you really can't identify the height and location of the existing retaining wall so you will need to rely on these notes to know what is there. The location of the existing foundation retaining wall that holds up the street side of the driveway and supports the driveway bridge was required to be shown. It was not shown. This wall, as it appears relative to the house, is in the street right of way, as far as I can tell and so will have to be covered by an encroachment permit, noted above, as will the side retaining walls.

The area of the Fire Fighter Turn-around was required to be added to the topographic survey including the surveyed (record of survey) right of way lines, trees, fences, sign, existing utilities and paving. The provided record of survey does not show the street right of way lines on the northerly side of the Fire Fighter Turn-around so we have fairly weak information on where the right of way or property line is in this area. The sheet A0.1 shows the right of way at about 40' wide which may be correct and the turn-around area is shown based on that. It looks okay. I will leave it to you to decide if we should go through another plan review to get the accurate property line location that was previously required for the turn around area.

During the site review, uncompacted fill soil, placed at the sides and directly downhill of the existing building, were observed on the very steep hillside there. Apparent excavation, covered by light plywood and 2x4 shoring, in the building crawl space was observed. The fill and excavation work was done without the required Town Permit. Satisfying the Town Permit requirements for that work must be done. It is my opinion that the fill is somewhat unstable now in its dry condition and that it will become much more unstable when it gets wet after the winter rains start. The excavation in the building crawl space appears to have created a condition of taking support away from the building foundation in that area. This foundation problem is likely to get worse when the hillside soil gets wet in the winter. This application must include resolving the unpermitted excavation and fill work and foundation support loss. The project geotechnical engineer was required to submit a letter or a revised report that provides a detailed description of the existing fill and excavation work. The 3/23/16 letter from Summit Engineering responds to these problems but that letter is not reflected on the plans. The project permit must require frequent review of the construction by the project soils engineer and it must require a final construction review letter from the soils engineer stating that all required soil stabilization work on the site has been completed. This will include erosion control. There is a very steep slope (more than 80%) below the concrete ditch below the building on this site. That slope may adversely affect the stability of this site.

The Geotechnical Engineer provided comments on this steep slope in the 3/23/16 letter. The existing concrete ditch, below the building on this site, is cracked with some displacement at the cracks and there is some subsidence of soil under the ditch leaving it partially unsupported. Leakage through the cracks may wash soil support out from under the ditch and that along with the existing unsupported areas may lead to collapse of the ditch. The plans show some extremely weak repairs for the ditch including two inch thick concrete and one inch diameter vertical pipes at four feet on center to support the ditch. The construction plans must show something that should last such as a minimum of the County Standard Drawing concrete ditch and the support of a County Standard retaining wall modified to provide support on a steep hillside to get the ditch into good working condition so it can provide area drainage as intended.

The required estimate of the quantity of the excavation and the quantity of fill, in cubic yards, has been provided. Cut of 22 cubic yards and fill of 22 cubic yards with no soil import or export is shown on the C1 plan. The proposed project plans were required to include the work needed to resolve the above cut and fill grading problems this included a grading, drainage and paving plan prepared by a licensed civil engineer. The submitted grading and drainage plans, with the noted soils engineer review work, satisfies this requirement. Paving for the turn-around area must satisfy fire department load requirements. This can be done on the permit plans.

There are a number of poorly constructed wood retaining walls that support small to medium quantities of soil fill. This fill is expected to become a problem source of downhill soil sloughing or landslides as these walls and fill areas fail. The final letter from the soils engineer must describe how these weak fills and wood walls were stabilized. The grading and drainage plan shows, as required, bringing roof downleader drainage and other appropriate site drainage to the concrete ditch below the site as called for in the Geotechnical Report. This plan must show repair and cleaning of the existing concrete ditch below the house so that it will be in good functional condition.

The site plan in the building plans must show the property boundary as it is shown on the recorded record of survey. The building plans state there is no soils report. This must be revised to state that the work must satisfy the project Geotechnical Report requirements.

A Stormwater Pollution Prevention plan for this project has been provided. If any trees are to be removed, a Fairfax Tree Committee report and permit must be obtained.

A construction management plan has been submitted. That work must function so that the Town Code Section 12.28, prohibition of obstructing roads, can be satisfied so that construction activities, vehicles and materials do not block the road.

If the above noted conditions are placed on this project, I recommend that the processing of this project move forward.



Ray Wrynski, P. E.
Town Engineer



TOWN OF FAIRFAX

142 BOLINAS ROAD, FAIRFAX, CALIFORNIA 94930
PHONE (415) 453-1584 / FAX (415) 453-1618

MEMORANDUM

To: Linda Neal – Senior Planner

Date: June 17, 2015

From: Ray Wrynski
Town Engineer

TOWN OF FAIRFAX

Page 1 of 3

JUN 22 2015

Subject: Proposed Addition and Remodel
125 Live Oak Avenue
Fairfax, CA

RECEIVED

A.P. 001-236-03

I have reviewed the plans and documents that were enclosed with your 5/20/15 transmittal. The items reviewed included a plan set by HM Design, dated 5/6/2015 consisting of 9 sheets, a one sheet topographic survey, with the boundary shown, by RW Freeman Consultant, dated 4/23/2015, a Geotechnical report, by Summit Engineering, dated April 17, 2015 and a title report by North American Title Company, dated February 17, 2015.

A site review was done 6/15/2015.

Town Code Section 17.072.080 provides a list of submittal requirements for this type of proposed project.

A recorded record of survey of the boundary of this site must be submitted. A minimum of two copies of this recorded record of survey must be submitted for Town use in review of this proposed project. The submitted title report covering this site satisfies the requirement for that document. Two copies of the current fee title deed for this site must be submitted for Town use in review of this proposed project.

The submitted topographic survey of the site provides much of the information required to be on that document. This survey must show the site boundary as it is shown on the above, required, recorded record of survey. The revised topographic survey must be in the same format as the one that has been submitted. This format is showing existing site features and information without showing new design information so that the existing data is clear and easily read. Copies of this survey, at the same scale as the site plan and the grading and drainage plan, must be submitted so that they can be overlaid on these plans to check information. This survey must show the relative location of the nearest parts of the adjoining buildings on the easterly and westerly sides of this site. Most existing structures, trees, fences, drainage facilities (including the concrete ditch below the house) and the driveway have been shown. Since utility services, that are in place, should provide service to this site, no trenching of the street is expected so showing of existing sanitary sewer pipes, existing water pipes and existing storm drain pipes in the street is not required. I did see that the sanitary sewer lateral is at an elevation that allows gravity service to only the top floor of this building so lower level service will need additional design. If the water line must be replaced to provide new fire protection flows, the contractor must obtain an encroachment permit from the Director of Public works prior to doing that trenching work. The topographic survey must be signed and sealed, by the licensed land surveyor or civil engineer, licensed to do land surveying, that is responsible for the preparation of this survey. The survey must include a note

that all easement are shown. If there are no easements, a note stating there are no easements, must be placed on the map. Wording for the no easements note could be "Based on a review of the recent title report (give the name of the title company and the date of the report and submit copies) and based on this surveyor's knowledge of this site, there are no easements". On the westerly side of the site, west of the driveway, there are some stepped areas created by wood and rock retaining walls. These features appear to relate to the adjoining property but they do come onto this property and must be shown. On the westerly side of the existing driveway, the topographic survey shows the ground elevation to be about 203 near the driveway elevation of 204. The ground is actually about 7 feet lower than the driveway at this location so the topographic survey must be corrected here. The existing retaining walls on the easterly and westerly sides of the driveway must be shown so that their height can be correctly read. The extent of the driveway bridge in this area must be shown. On the easterly side of the driveway, the retaining wall, maximum exposed height is about 7 feet and the ground elevation shown there nearly matches the top of wall so a guess, with the information on the survey, would indicate the wall is about one foot high. The topography information near this wall must be corrected. The location of the existing foundation retaining wall that holds up the street side of the driveway and supports the driveway bridge must be shown. This wall, as it appears relative to the house, is at least partly in the street right of way and so will have to be covered by an encroachment permit as will the side retaining walls. The area of the Fire Fighter Turn-around must be added to the topographic survey including the surveyed (record of survey) right of way lines, trees, fences, sign, existing utilities and paving.

During the site review, uncompacted fill soil, placed at the sides and directly downhill of the existing building, were observed on the very steep hillside there. Apparent excavation, covered by light plywood and 2x4 shoring, in the building crawl space was observed. The fill and excavation work was done without the required Town Permit. Satisfying the Town Permit requirements for that work must be done. It is my opinion that the fill is somewhat unstable now in its dry condition and that it will become much more unstable when it gets wet after the winter rains start. The excavation in the building crawl space appears to have created a condition of taking support away from the building foundation in that area. This foundation problem is likely to get worse when the hillside soil gets wet in the winter. This application must include resolving the unpermitted excavation and fill work and foundation support loss. The project geotechnical engineer must submit a letter or a revised report that provides a detailed description of the existing fill and excavation work. The source of the fill soil must be given if possible. If the fill material was imported, it is desirable that the source be known. If the fill is believed to all have come from the excavation under the building that should be stated. The new geotechnical engineer's letter or report must provide recommendations on how to resolve the problems created by the unpermitted excavation and fill grading work. The simplest resolution to the stability question of that fill soil, on the hillside, would be to remove it from the site and then correct any problems it may have created for the stability of the existing hillside. This will include erosion control. The submitted building plans sections seem to suggest that fill will be placed under the building in the excavated area. If fill is to be placed under the building, this must be clarified in the new geotechnical information. There is a very steep slope (more than 80%) below the concrete ditch below the building on this site. If that slope may adversely affect the stability of this site, recommendation must be given to solve that problem. The Geotechnical Engineer must provide comments on this steep slope. The existing concrete ditch, below the building on this site, is cracked with some displacement at the cracks and there is some subsidence of soil under the ditch leaving it partially unsupported. Leakage through the cracks may wash soil support out from under the ditch and that along with the existing unsupported areas may lead to collapse of the ditch. The geotechnical report must provide recommendations to get the ditch into good working condition so it can provide area

drainage as intended. An estimate, by a licensed engineer, of the quantity of the excavation and the quantity of fill, in cubic yards, of the existing grading work must be provided.

The proposed project plans must include the work needed to resolve the above cut and fill grading problems. This must include a grading, drainage and paving plan prepared by a licensed civil engineer. This plan must include base information that is the same as the site topographic and boundary survey including all ground level existing structures. The grading and drainage plan must include, cubic yard, grading quantities for the corrective work and for new work including best estimate quantities for excavation of foundations, grade beams, drilled piers, other structures and drainage piping. The plan must show all existing and proposed structures at ground level including piers. Quantities for fill to be placed on site must be given and quantities for excavation to be imported or removed from the site must be given. There are a number of poorly constructed wood retaining walls that support small to medium quantities of soil fill. This fill is expected to become a problem source of downhill soil sloughing or landslides as these walls and fill areas fail. The topographic survey must show these wood wall supported fill areas and the grading and drainage plan must show how these fill areas will be resolved so they do not become a problem. The grading and drainage plan must show bringing roof downleader drainage and other appropriate site drainage to the concrete ditch below the site as called for in the Geotechnical Report. This plan must show the grading, retaining walls (reinf. concrete or reinf. block) , paving and drainage needed to complete the Fire Fighter Turn-around. This turn around must provide a minimum 20' wide drivable paved street width outside of the turn-around limits. This plan must show repair and cleaning of the existing concrete ditch below the house so that it will be in good functional condition.

The site plan in the building plans must show the property boundary as it is shown on the recorded record of survey. The building plans state there is no soils report. This must be revised to state that the work must satisfy the project Geotechnical Report requirements.

A Stormwater Pollution Prevention plan for this project, that includes the requirements in the County of Marin "Minimum Erosion/Sediment Control Measures for Small Construction Projects" details, must be submitted.

If any trees are to be removed, a Fairfax Tree Committee report and permit must be obtained.

A construction management plan must be submitted to show that the Town Code Section 12.28, prohibition of obstructing roads, can be satisfied so that construction activities, vehicles and materials do not block the road.

I recommend that the processing of this project be delayed until the above required information is received.

Ray Wrynski, P. E.
Town Engineer





TOWN OF FAIRFAX

142 BOLINAS ROAD, FAIRFAX, CALIFORNIA 94930
PHONE (415) 453-1584 / FAX (415) 453-1618

RECEIVED
SEP - 6 2012
TOWN OF FAIRFAX

MEMORANDUM

To: Linda Neal – Senior Planner

Date: September 5, 2012

From: Ray Wrynski
Town Engineer

Page 1 of 3

Subject: Proposed Addition and Remodel
125 Live Oak Avenue
Fairfax, CA

A.P. 001-236-03

I have reviewed the plans that were enclosed with your 8/15/12 transmittal. Those plans consisted of 12 sheets, showing the proposed remodel and addition work, by John Lum Architecture, Inc., dated 7/31/12.

A site review was done 8/30/12.

Town Code Section 17.072.080 provides a list of submittal requirements for this type of proposed project.

During the site review, recently placed fill soil at the sides and directly below the existing building were observed on the very steep hillside there. Apparent excavation, covered by light plywood and 2x4 shoring, in the building crawl space was observed. The fill and excavation work was done without the required Town Permit. Satisfying the Town Permit requirements for that work must be done. It is my opinion that the fill is somewhat unstable now in its dry condition and that it will become much more unstable when it gets wet after the winter rains start. The apparent excavation in the building crawl space appears to have created a condition of taking support away from the building foundation in that area. This foundation problem is likely to get worse when the hillside soil gets wet this winter. The first step in resolving the unpermitted excavation and fill work and foundation support loss is the submittal of a geotechnical report that provides a detailed description of the existing fill and excavation work. The source of the fill soil must be given if possible. The report must provide recommendations on how to resolve the problems created by the excavation and fill grading work. The simplest resolution to the stability question of that fill soil, on the hillside, would be to remove it from the site and then correct any problems it may have created for the stability of the existing hillside. An estimate, by a licensed engineer, of the quantity of the excavation and the quantity of fill, in cubic yards, of this existing grading work must be provided. The proposed project plans must include the work needed to resolve the above cut and fill grading problems.

A topographic survey of the site that shows the property lines must be submitted. Copies of this survey, having only the topography, boundary and easement information (if any), without new proposed work information, must be submitted so that all the topography, boundary and easement information is clear and easily read. This survey must show the relative location of the nearest parts of the adjoining buildings on the easterly and westerly sides. Existing structures, trees, fences, drainage facilities (including the

concrete ditch below the house) and the driveway must be shown. Since utility services that are in place should provide service to this site, no trenching of the street is expected so showing of existing sanitary sewer pipes, existing water pipes and existing storm drain pipes in the street is not required. If the water line must be replaced to provide new fire protection flows, the contractor must obtain an encroachment permit from the Director of Public Works prior to doing that trenching work. The topographic survey must be signed and sealed, by the licensed land surveyor or civil engineer, licensed to do land surveying, that is responsible for the preparation of this survey. The survey must include a note that all easements are shown. If there are no easements, a note, stating there are no easements, must be placed on the map. Wording for the no easements note could be "Based on a review of the recent title report (give the name of the title company and the date of the report and submit copies) and based on this surveyor's knowledge of this site, there are no easements".

The boundary on the above topographic survey must be the same as the boundary shown for this site on a recorded record of survey of this site. A minimum of two copies of this recorded record of survey must be submitted for Town use in review of this proposed project. Two copies of a recent title report covering this site and two copies of the current fee title deed for this site must be submitted for Town use in review of this proposed project.

A site plan, using the above topographic survey as a base map, prepared by a licensed civil engineer must be submitted for this application. The site plan must show all existing and proposed structures at ground level. This plan must show the existing, recent, grading excavation and fill work along with computed cubic yards quantities for that work. Any, proposed, foundation excavation and fill work related to placing grade beams, drilled piers and other structures must be shown on this site plan. Excavation and fill work related to placing storm drains, subsurface drains and retaining wall and other backdrains must be shown. Estimated quantities for excavation, fill and material hauled into or away from the site must be given on this plan.

The geotechnical report, noted above for this site, must also include geologic information for this site's stability and recommendations for foundation design. The report must include a review of the existing building and driveway foundations regarding their suitability to satisfy current standards for stability and bearing capacity for the proposed finished project. If the existing foundations need to be strengthened, recommendations for that work must be provided. The report must include recommendations on how site drainage including stormwater from the street area and roof runoff should be dealt with to avoid erosion and stability problems on this site. There is a very steep slope below the concrete ditch below the building on this site. If that slope may adversely affect the stability of this site, recommendation must be given to solve that problem. The existing concrete ditch, below the building on this site, is cracked with some displacement at the cracks and there is some subsidence of soil under the ditch leaving it partially unsupported. Leakage through the cracks may wash soil support out from under the ditch and that along with the existing unsupported areas may lead to collapse of the ditch. The geotechnical report must provide recommendations to get the ditch into good working condition so it can provide area drainage as intended.

A Stormwater Pollution Prevention plan for this project, that includes the requirements in the County of Marin "Minimum Erosion/Sediment Control Measures for Small Construction Projects" details, must be submitted.

If any trees are to be removed, a Fairfax Tree Committee report and permit must be obtained.

A construction management plan must be submitted to show that the Town Code Section 12.28, prohibition of obstructing roads, can be satisfied so that construction activities, vehicles and materials do not block the road.

I recommend that the processing of this project be delayed until the above required information is received.

Ray Wrynski

Ray Wrynski, P. E.
Town Engineer



109

SURVEYOR'S STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYOR'S ACT, MAY 2010, AT THE REQUEST OF DAN BETTENBACH IN JUNE, 2016.

WILEY PIERCE, LS 3300, V.P., KCP, INC.
EXPIRATION DATE: JUNE 30, 2018

DATE: 9-02-2016



COUNTY SURVEYOR'S STATEMENT

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 0766 OF THE PROFESSIONAL LAND SURVEYOR'S ACT THIS 2ND DAY OF SEPTEMBER, 2016.

RICHARD D. BRINWICH
COUNTY SURVEYOR



BY DEPUTY:

RECORDER'S STATEMENT

FILED THIS 9TH DAY OF SEPTEMBER, 2016, AT 9:02 A.M. IN BOOK 2016 OF MAPS, AT PAGE 102, AT THE REQUEST OF THE COUNTY SURVEYOR.

RICHARD J. BEAULOU
COUNTY RECORDER

DEPUTY COUNTY RECORDER

DOCUMENT NO. 1-216-102-31
FEES \$10

NOTES:

1. ALL DIMENSIONS ARE SHOWN IN FEET AND DECIMALS THEREOF.
2. ALL TIES ARE PERPENDICULAR UNLESS OTHERWISE NOTED.
3. RECORD-MEASURED UNLESS OTHERWISE NOTED.
4. THIS RECORD OF SURVEY IS BEING FILED IN COMPLIANCE WITH SECTION 5, EXCEPT FOR THE PROFESSIONAL LAND SURVEYOR'S ACT.
5. EASEMENTS IN FAVOR OF THE MARIN VINE STREET FOR WATER SUPPLY PURPOSES ARE SHOWN, AS NONE AS ARE SHOWN IN THE NORTH AMERICAN TITLE CO. REPORT, ORDER No. 1343301, DATED 2/17/2015.

RECORD OF SURVEY

THE LANDS OF D.B. PROPERTY SOLUTIONS, LLC,
A CALIFORNIA LIMITED LIABILITY COMPANY.

AS DESCRIBED BY DEED RECORDED AS DOCUMENT NUMBER 2015-0025376, OFFICIAL RECORDS OF MARIN COUNTY BEING PORTIONS OF LOTS 122 & 123, AS SHOWN ON THE MAP OF P.H. JORDAN CO., SUBDIVISION OF RIDGEWAY PARK, FILED IN BOOK 2 OF RECORD MAPS AT PAGE 80, MARIN COUNTY RECORDS.

TOWN OF FAIRFAX

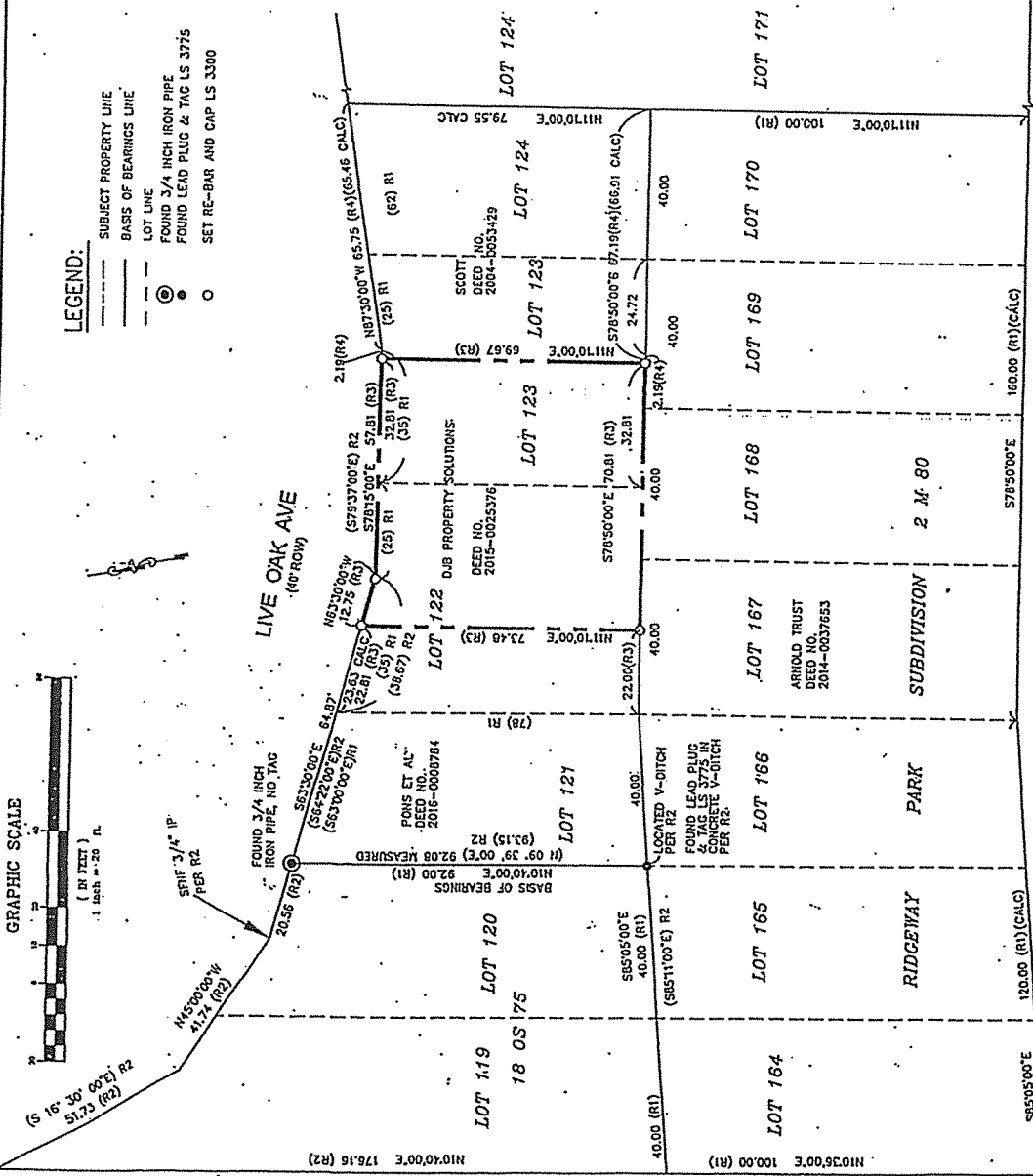
COUNTY OF MARIN STATE OF CALIFORNIA

KCP, INC.
2201 BROADWAY #M5
OAKLAND, CA 94612
(510) 832-4800
EMAIL: WPIERCE301@COMCAST.NET
SEPTEMBER, 2016

APN: 001-236-03 PAGE 1 OF 1

LEGEND:

- SUBJECT PROPERTY LINE
- BASES OF BEARINGS LINE
- LOT LINE
- FOUND 3/4" IRON PIPE
- FOUND LEAD PLUG & TAG LS 3775
- SET RE-BAR AND CAP LS 3300



THE BASIS OF BEARINGS:

THE BEARING N103°00'E BETWEEN THE FOUND LEAD PLUG IN THE V-DITCH AND THE FOUND 3/4" IRON PIPE WITH NO TAG AT LOT #120/#121 BOUNDARY, AS SHOWN.

REFERENCES:

- R1. MAP OF P.H. JORDAN CO., SUBDIVISION OF RIDGEWAY PARK, MARIN CO., CALIFORNIA, RECORDED ON 2/10/1907, BOOK 2 OF MAPS OF MARIN COUNTY, OFFICIAL RECORDS.
- R2. RECORD OF SURVEY, LOTS 119 AND 120, MAP OF P.H. JORDAN CO., RECORDED 9/30/1903, IN BOOK 18 OF SURVEYS, PAGE 75, MARIN COUNTY RECORDS.
- R3. GRANT DEED RECORDED MAY 26, 2015, DEED NUMBER 2015-0025376.
- R4. GRANT DEED RECORDED JUNE 10, 2004, DEED NUMBER 2004-0055459.

052-14; Residential RS 6 Zone; Leyla Hilmi, applicant; Chris Miller and Robin Goldman, owners; CEQA categorically exempt per Section 15301(a)

Zoning Technician Levenson presented a staff report.

Commissioner Swift noted a typographical error on page 3 of the staff report.

Chair Fragoso opened the Public Hearing.

Mr. Craig Zellers, Tamalpais Road, made the following comments:

- He lives adjacent to the subject property and is the closest neighbor.
- He supported the project.

Ms. Leyla Hilmi, designer, made the following comments:

- This is a small project that would provide a huge benefit to the owners.
- There were no objections from the neighbors.
- An engineer has looked at the foundation and saw no problems.
- The intention is to match the existing siding and make it blend in as much as possible.

Chair Fragoso closed the Public Hearing.

Chair Fragoso provided the following comment:

- The project was straightforward.

Commissioner Gonzalez-Parber provided the following comments:

- This small addition would add a lot of function and value to the project.
- She supports it.

M/s, Gonzalez-Parber/Newton, motion to adopt Resolution No. 17-14, 196 Tamalpais Road.

AYES: Gonzalez-Parber, Newton, Swift, Chair Fragoso

ABSENT: Ackerman, Green, Kehrlein

Chair Fragoso stated there was a 10-day appeal period.

3. 125 Live Oak Avenue; Application #17-13

Request for a Hill Area Residential Development Permit, Parking Variance, and Design Review for a 50% remodel/expansion of an existing 1,910 sf. single-family residence into a 1,962 sf. single-family residence; Assessor's Parcel No. 001-236-03; Residential RD 5.5-7 Zone; Dan Bettencourt, applicant/owner; CEQA categorically exempt per section 15031(a)

Principal Planner Neal presented a staff report.

Chair Fragoso had questions about the location of the turn-around and the alleged infringement on 130 Live Oak. Principal Planner Neal stated access to parking in one of the parking spaces could be blocked during emergencies.

Commissioner Swift asked if the V-ditch needed not only maintenance but also repair. Principal Planner Neal stated "yes".

Commissioner Newton asked if there was language in the resolution that requires the applicant to do anything about the turn-around. Principal Planner Neal stated they have to pay for the painting and the erection of the sign. It should be included in the resolution.

Commissioner Newton had questions about the engineer's letter, the street right-of-way, and the fee title deed. Principal Planner Neal stated the fee title deed is proof that they own the property. Commissioner Newton asked if the requirement for the fee title deed was included in the resolution. Principal Planner Neal stated "no"- the Commission could include it they choose.

Chair Fragoso opened the Public Hearing.

Mr. Kenneth Burley, partner in the project, made the following comments:

- He can get the grant deed in a couple of days.
- They have been working on the project for two years.
- They are trying to clean up this eyesore.
- The turnaround does not encroach on the neighbor's property.
- They can do an additional survey.
- It is a narrow road and there are no other options for the turnaround.

Mr. Albert Passon, soils engineer, made the following comment:

- He displayed a survey that shows how close the building was built to the property line.

Mr. Peter Lacques made the following comments:

- He is the owner of 130 and 132 Live Oak Avenue.
- He has no objections to the remodel- it is reasonable.
- He has five bedrooms and would need five parking off-street parking spaces to be in compliance with current codes. He has been using the area in front of the concrete planter for two of those spaces for many years. This area will be blocked off.
- This presents a hardship for him and his tenants.
- The Fire Department requirements would be a burden.
- This would force parking in tandem for his tenants- this is not a viable option.
- The applicant's survey should incorporate his property.
- He referred to condition #7 and asked if other options had been considered.
- The notice was postmarked on the 17th- there is a 10-day noticing requirement.

Chair Fragoso asked if this turnout requirement was something new. Principal Planner Neal stated "yes"- since the Urban Wildland Interface regulations were put into place. It is common in the hillside areas.

Mr. Chad Gregg, Live Oak Avenue, made the following comments:

- The removal of parking would increase the already existing hardship on Live Oak.
- Fire trucks already turn around on the street.
- There is one way in and one way out of this neighborhood.

Commissioner Newton stated confirmation of the location of Mr. Lacque's property line would not solve the parking problem. Mr. Lacques stated it was one thing to inflict a "no parking" zone under the assumption that it is a City right-of-way and quite another if it is on his property. This should be ascertained. He was asking for alternatives such as preserving one parking space or excavating the property across the street.

Chair Fragoso closed the Public Hearing.

Commissioner Gonzalez-Parber provided the following comment:

- She asked about the rules regarding removing trees in the public right-of-way. Principal Planner Neal stated it was the responsibility of the adjacent property owner to go through the Heritage Tree Removal process.
- She noted the 12' tree across the street could be removed to provide parking.
- The applicant has the right to improve his property.
- She understood the parking issue.
- Perhaps the Fire Department would work with the applicant on an alternative method/location.

Mr. Lacques stated he had discussions several years ago with the Fire Department about trimming a bit off of the hillside to the east of his property and a tiny bit of the area towards the middle of the road. He would like the opportunity to work with the applicant and the Fire Department.

Chair Fragoso asked if he would be willing to look at that area near the 12' tree near his property. Mr. Lacques stated "yes" but there could be other solutions.

Chair Fragoso asked if there would be a problem under the Permit Streamlining Act in continuing this item. Principal Planner Neal stated the Commission could, under the time limit of the Permit Streamlining Act, continue the application for one month.

Commissioner Gonzalez-Parber had a question about the 10-day noticing period. Principal Planner Neal stated she has never gotten an answer on whether or not the 10-day period includes the meeting date.

Commissioner Newton asked the applicant if they would support a 30-day continuance. Mr. Burley stated "yes"- they will get a survey of the other property and work with the neighbor on alternative parking. They believe, however, that they have satisfied all the necessary conditions.

M/s, Gonzalez-Parber/Swift, motion to continue application #17-13, 125 Live Oak Avenue, for 30 days to allow the applicant and the neighbor the opportunity to discuss with the Ross Valley Fire Department alternative methods for the turnaround and to verify the edge of the public right-of-way in front of 130 and 132 Live Oak Avenue.

AYES: Gonzalez-Parber, Newton, Swift, Chair Fragoso

ABSENT: Ackerman, Green, Kehrlein

The Commission took a 5-minute break at 10:00 p.m.

4. 39 Wood Lane; Application #17-14

Request for a Hill Area Residential Development Permit, Excavation Permit, Design Review Permit and Fence Height Variance to construct a new 2,573 sf. single-family residence, a 536 sf. accessory dwelling unit, a 155 sf. carport, a 100 sf. shed and to repair a slide; Assessor's Parcel No. 002-1-081-04; Residential Single-family RS 6 Zone; Owen Donnelley, applicant/owner; CEQA categorically exempt per Section 15303(a).

Principal Planner Neal presented a staff report. She noted the resolution does not talk about the second unit because it does not require approval based on the new State law. Commissioner Swift noted the resolution title does include a reference to it. Principal Planner Neal stated she included the reference because it was included in the plans. It could be deleted.

Commissioner Swift asked for clarification of the condition that required annual maintenance of the drainage system. Principal Planner Neal stated the plan for the slide repair includes a huge network of sub-drains. These need to be cleaned out. Chair Fragoso added the berm area at the base needs to also be maintained.

Linda Neal

From: peter lacques <peterlacques@aol.com>
Sent: Wednesday, April 26, 2017 3:56 PM
To: Linda Neal
Cc: 'peter lacques'
Subject: 130 Live Oak Avenue
Attachments: Photo 1.JPG; Photo 2.JPG; Photo 3.JPG; Photo 4.JPG

Dear Linda,

I am writing to object to the what the Developer of 125 Live Oak proposes to do to the parking in front of my duplex at 130 and 132 Live Oak. Although I don't object to other aspects of the project, I respectfully, very strongly object to this plan due to the parking impacts it imposes on my property.

My tenants and I have used this parking area in front of the planter box (which the developer proposes taking away) in front of my duplex for as long as I have owned the property (18 years). We have been able to park two cars in this area for guests and tenants without blocking street access or ability to turn around - including fire trucks and delivery trucks. Loss of these two parking spaces would create a hardship residents and guests. Additionally, other neighbors have parked here from time to time with permission.

Parking is extremely scarce in this neighborhood. The closest other available off-street parking is approximately 100 yards to the east (if available) and is highly competitive and essentially unavailable most of the time. Parking in that part of the street gets even more congested further east on Live Oak.

Additionally, tandem parking (i.e., blocking two of my tenants' covered parking spaces), as the developer has so graciously proposed, is not a viable option. First, the driveway at this area is very steep, and any car parking there would bottom out at the sharp angle created by the bottom of the driveway and the street. See Photo # 1. Second, if cars are forced to park in tandem at that location, it would make turning around much more difficult in the proposed no-parking area than is the case now. Currently, many cars and delivery trucks use the area in front of the covered parking to turn around with no problems. In fact, when there are NO cars parked in my offstreet parking spaces, drivers turning around will logically and naturally choose to use the area in front of the covered spaces to turn around, because it is much easier to do so.

Historically, I and my tenants have always used the driveway area for our purposes. There is a now-faded double yellow line at the bottom the driveway that runs between the fire hydrant to the west and the street extension to the east which has marked the historical boundary between the street and my parking area. See Photos 2, 3, 4.

In fact, in 2002, when the Town re-paved Live Oak, they specifically excluded paving any area on my side of the double yellow line. At the time they were breaking up the old pavement I asked the paving crew if they were going to pave the area on my side of the yellow line. They said no, it was my property and my responsibility. I remember I even asked if I could pay them pave my portion of the pavement, and the contractor prepared a bid for me, which I declined as too expensive.

I am also concerned that the Developer's survey does not even include my property, and makes no effort to ascertain where my property boundary lies.

I am also concerned that no other alternatives are being considered as part of the application.

Lastly, it is my understanding the current parking requirements for my duplex would require 5 off-street parking spaces. The developer's proposal requiring me to have tandem parking is in essence taking my property out of parking compliance and forcing me to take on a de facto parking variance. I also think that is inherently unfair for this Spec.

Linda Neal

From: Greg Shverdin <greg.shverdin@gmail.com>
Sent: Wednesday, April 26, 2017 1:51 PM
To: Linda Neal
Cc: Peter Lacques
Subject: Re: FW: Fairfax Scanner

Linda,

I am writing in regards to the proposed work done on Live Oak Ave. As I understand it, the parking spot in front 130 Live Oak Ave will be eliminated to allow a turnaround for firetrucks. Removing this parking spot would be a great inconvenience to me. Parking on Live Oak Ave is extremely limited as is and creating a tow away zone in this spot would add additional hardship. I live in a two-bedroom apartment directly above this parking spot and according to my lease, have only one dedicated carport spot.

Thanks,

Greg Shverdin
130 Live Oak Ave
Fairfax, CA 94930

On Wed, Apr 26, 2017 at 1:01 PM, peter lacques <peterlacques@aol.com> wrote:

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

From: Linda Neal [<mailto:lneal@townoffairfax.org>]
Sent: Wednesday, April 26, 2017 9:35 AM
To: peterlacques@aol.com
Subject: FW: Fairfax Scanner

Here you go Peter.

Linda Neal
Principal Planner

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

From: copier@townoffairfax.org [<mailto:copier@townoffairfax.org>]
Sent: Wednesday, April 26, 2017 9:54 AM
To: Linda Neal <lneal@townoffairfax.org>
Subject: Fairfax Scanner

Scanned image from scanner

Linda Neal

From: peter lacques <peterlacques@aol.com>
Sent: Wednesday, April 26, 2017 4:00 PM
To: Linda Neal
Cc: 'peter lacques'
Subject: FW: Parking

Linda,

I am forwarding an email from my tenant George Brown regarding the proposed parking impacts of the project at 125 Live Oak. Thank you.

Peter Lacques

From: George [mailto:ishirang@gmail.com]
Sent: Wednesday, April 26, 2017 3:50 PM
To: peter lacques
Subject: Parking

To whom it may concern,

I am writing to express my concern and strong disagreement with the plan to turn the 20' X 40' parking space at 130 and 132 Live Oak Avenue into a no parking zone.

This space is not only use by us the residents and guest of 130 and 132 Live Oak but our neighbor also.

Parking tandem behind carport parking would be difficult because of the steepness and the dangerous drop off on other side of street.

So I'm asking you to please reconsider and leave us a place to park because that is it for parking on that block of Live Oak Avenue.

Thank you and best regards.

George 132 Live Oak

Sent from my iPhone

Linda Neal

From: peter lacques <peterlacques@aol.com>
Sent: Wednesday, April 26, 2017 4:01 PM
To: Linda Neal
Cc: 'peter lacques'
Subject: FW: Letter - re 125 Live Oak

Linda,

I am forwarding another email from one of my tenants, Courtney Brown. Thank you.

Regards,

Peter

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

From: Yeah baby [mailto:yeahbaby459@comcast.net]
Sent: Wednesday, April 26, 2017 1:45 PM
To: peter lacques
Subject: Letter

To whom it may concern,

I am a resident of 132 Live Oak Ave and I protest the widening of the street. In the event of this happening, it will remove much needed parking spaces that belong to this residence. Street parking is already limited and removing these spaces would make it even more difficult for those of us that live on this block. I have lived here for about eight years and have never seen any type of large vehicle/truck have any problems turning around in front of the house. Please, I urge you to reconsider moving forward with this plan as it will have negative affects to me, my family and our neighbors. I strongly feel it is extremely unnecessary and would only negatively impact those of us that live here. Thank you kindly for your time,

Courtney Brown

Sent from my iPad

Linda Neal

From: peter lacques <peterlacques@aol.com>
Sent: Wednesday, April 26, 2017 4:04 PM
To: Linda Neal
Subject: FW: Regarding Potential Loss of Parking

Linda,

I am forwarding an email from my tenant Aaron Remington regarding the parking impacts of the proposed project at 125 Live Oak. Thank you.

Regards,

Peter Lacques

From: Aaron Remington [mailto:nondistraktion@gmail.com]
Sent: Wednesday, April 26, 2017 2:51 PM
To: Peter Lacques
Subject: Regarding Potential Loss of Parking

As a current resident of 130 Live Oak Avenue, the loss and deprivation of my regularly used parking spot would be unreasonable and impose hardship on me. This parking spot is used daily for the parking of guests and service vehicles, and for the general ease of traffic for that section of Live Oak Avenue. It would not be just to lose this parking and disrupt the daily activities of Live Oak Avenue in order for one neighbor to remodel their home using their current plans.

Thank you for your consideration and time,

Aaron Remington
130 Live Oak Ave.
Fairfax, CA 94930