

County of Santa Clara

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STAFF REPORT Zoning Administration February 4, 2021 **Item #1**

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File: PLN17-10080

Concurrent Land Use Permit for a Building Site Approval, Grading Approval, Design Review, and Open Space Compatible Use Determination for a New Single-Family Residence.

Summary: Consider recommendation of a concurrent land use permit for a Building Site Approval, Grading Approval, Design Review, and Open Space Easement Compatible Use Determination for an 8,647 square-foot single-family residence with a 1,373 detached garage, and a 1,198 square-foot detached accessory dwelling unit on a 27.1 acre lot. Associated improvements include a driveway, retaining walls, and proposed landscaping. Grading consists of 1,216 cubic yards of cut and 1,977 cubic yards of fill.

Owner: Martin & Rosario Gutierrez
Applicant: Hanna-Brunetti/D&Z Designs
Lot Size: 27.1 acres
APN: 728-24-008
Supervisory District: 1

Gen. Plan Designation: Agriculture Medium Scale
Zoning: A-20Ac-d1
Address: 2245 Liberata Drive, Morgan Hill
Present Land Use: Vacant
HCP: Area 1 (Covered Project)

RECOMMENDED ACTIONS

- A. Accept Categorical Exemptions, under Section 15303(a) of the CEQA Guidelines, Attachment A.
- B. Grant a concurrent land use permit for a Building Site Approval, Grading Approval, Design Review, and Open Space Easement Compatible Use Determination, subject to Conditions of Approval outlined in Attachment B.

ATTACHMENTS INCLUDED

Attachment A – Proposed CEQA Determination
Attachment B – Proposed Conditions of Approval
Attachment C – Location & Vicinity Map
Attachment D – Proposed Plans (with Light Reflective Value/LRV Color)
Attachment E – Alternative Site Analysis Map and Viewshed Map

Attachment F – Geotechnical and Geological Hazard Evaluation (dated January 30, 2015).
Attachment G – Biological and Plant Survey Reports from Live Oak Associates, Inc. (dated October 24, 2019).
Attachment H – Public Comments

PROJECT DESCRIPTION

The proposed project is for a concurrent land use permit to approve a Building Site Approval, Grading Approval, Design Review and Open Space Compatible Use Determination (CUD) for a new 8,647 square foot single-family residence, with a 1,373 detached garage and a 1,198 square foot detached accessory dwelling unit (ADU) on a 27.1-acre lot. The CUD is required to develop on land restricted by an Open Space Easement. The proposed development includes improvements to the access the driveway from Barnard Road, retaining walls in the rear of the property (with a 5 ft. maximum height), and a new septic system and leach field. The new single-family residence and ADU will be clustered in the southeastern portion of the lot to retain the open space quality of the site and minimize any visibility of the development to the valley floor. Proposed grading consists of 1,213 cubic yards of cut and 1,977 cubic yards of fill with a maximum vertical depth of 11 feet. The project will not require any removal of trees or demolition of any existing structures as the site is currently vacant.

The property is currently under an existing Open Space Easement (OSE) contract (2007.006) that allows for single-family residential uses (and its improvements) but limits the development to a maximum of 5% of total coverage and requires 95% of the land to remain as open space.

Setting/Location Information

The subject property is a 27.1 gross-acre parcel located at the end of Barnard Road and Liberata Drive in Morgan Hill, near the intersection of Hall Avenue and Cochrane Road, in the unincorporated area of Santa Clara County. The property abuts the City of Morgan Hill to the east, along the side property line, however, it is not located within the Urban Service Area (USA) of the City of Morgan Hill. Additionally, the property is 0.28 miles from Anderson Lake. The site is a vacant lot surrounded by many low-density single-family residences that were built in the late 1980s and early 1990s, with a few homes built in the early 2000. The neighborhood character consists of ranch style estate homes ranging in size from approximately 3,000 sq. ft. to 8,000 sq. ft., on minimum 4 acres properties. The property will have a new septic system and is serviced by an onsite well.

The site is located within the Santa Clara Valley Habitat Plan (HCP) Area 1 and is considered a covered project. The proposed development is located within the following landcovers: California Annual Grassland, Serpentine Bunchgrass Grassland, Urban – Suburban, Mixed Serpentine Chaparral, and Valley Oak Woodland. The proposed development area will not have any impacts to serpentine outcrop or Serpentine Chaparral as the areas are located southwest on the property. Although the site is located within a Bay Checkerspot Butterfly area, the survey report from Live Oak Associates, Inc., dated October 24, 2019 (Attachment G), did not find any evidence of Bay Checkerspot Butterfly on five (5) survey visits, and concluded that the existing property does *not* have any Bay Checkerspot Butterfly. The proposed project will not be in proximity to any creeks/watercourses or any riparian sensitive land covers. Based on County GIS data, the slope of the property is 23%.

REASONS FOR RECOMMENDATIONS

A. **Environmental Review and Determination (CEQA)**

The proposed project qualifies for a Categorical Exemption under Section 15303(a) of a new single-family residence. As such, an Initial Study and further analysis under the CEQA was not required.

- B. **Compatible Use Determination and Enhanced Design Review Findings for Open Space Easement Contracts:** Pursuant to County Ordinance Code Section C13-40, for any development or use on restricted land, the land owner must apply for and obtain a Compatible Use Determination (CUD) from the County. Planning Staff will determine whether the proposed use or development is compatible with the contract/agreement for the property and any adopted guidelines. The purpose of the CUD and enhanced design review findings are to allow uses that would continue to maintain the open space quality and intention of the Open Space Easement (OSE) contract while encouraging quality design to mitigate any visual impacts of development. In the following discussion, the scope of review findings are listed in **bold**, and an explanation of how the project meets the required standard is in plain text below.

1. **Effectively preserves the natural or scenic character of the land;**

The proposed development is clustered to the southeast portion of the lot with the residential house, accessory dwelling unit (ADU), and proposed water tanks. Less than 1% of property will be developed, therefore, preserving most of the property in its natural and scenic character. The proposed development is not located on the ridgeline, but rather, behind the ridgeline in an area that is buffered by a natural knoll to the north of the proposed location. The proposed development is not within any endangered wildlife area such as Bay Checker Butterfly (see Attachment G) or located adjacent to any creeks or watercourses. Therefore, as stated in the reasons above, this finding can be made.

2. **Does not significantly impair the open space character of the land;**

The property is currently under an existing Open Space Easement (OSE) contract (2007.006) that allows for single-family residential uses (and its improvements) but limits the development to a maximum of 5% of total coverage and requires 95% of the land to remain as open space. The proposed residential development is less than 1% of the total lot coverage and is clustered at the southeast portion of the property to maximize the open space quality of the lot, and therefore, is consistent to the limitation of development of OSE contracted lands. Additionally, the proposed development is limited to a specific southeastern portion on the lot where the topography is more stable for residential use as the property is comprised of many geological hazard zones and landslide areas. Therefore, as stated in the reasons above, this finding can be made.

3. Maintains open space in large, contiguous, and clustering development;

As previously mentioned, the proposed development is less than 1% of the total lot coverage and is clustered to the southeast portion of the property. Aside from the residence, ADU, and water tanks, the majority of the 27-acre parcel will remain open space and the land will continue to retain its natural and scenic character without additional development on the property. As such, this finding can be made.

4. Avoids noteworthy and valuable features of the land, such as rock outcroppings, significant stands of mature trees and riparian areas;

The proposed development is not proposing any tree removals or located near any mature oak trees. The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species on the property. As such, this finding can be made.

5. Considers the topography, visual impacts, and conservation of natural resources in citing the proposed development;

The proposed grading has been designed to contour to the natural topography to the maximum extent possible and the overall design of the residence is sited in an area to minimize disturbance to the natural landscape as much as possible. Retaining walls proposed to the rear limit the grading and disturbance as much as feasible due to the lot's natural topography, which descends near side area of the lot. The proposed development is utilizing an existing dirt road and is only making improvements to the existing dirt road for access and Fire/Life safety and requirements. The grading proposed is primarily for improvement of the driveway and follows natural contours. The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species. For these reasons, this finding can be made.

6. Minimizes grading;

The project's grading quantities are 1,213 cubic yards of cut and 1,977 cubic yards of fill. The proposed grading is necessary to establish the building pads for the residence, attached garage, ADU, retaining walls, and improvement to the driveway. These are allowable primary uses for the zoning district. An Alternative Site Analysis (Attachment E) was conducted for the property where the applicant provided alternative sites that are closer to Liberata Drive and Barnard Road for Planning Staff to analyze the competing factors of grading, siting (visibility), and geological hazards and landslides areas throughout the property. A more detailed analysis regarding grading is identified in the Grading Findings of the Staff Report, however, by siting the proposed development as currently proposed, the applicant avoids areas of geological landslides areas that would require unnecessary disturbance to the natural

environment. All new grading will utilize temporary erosion control measures during construction that will be replaced with long-term permanent erosion control measures in the form of natural landscaping. As such, the above finding can be made. For the reasons mentioned above, this finding can be made.

7. Maintaining the open space in large, continuous areas capable of serving the various purposes of such open space, including but not limited to recreation and trails, agriculture, viewshed protection, habitat preservation and wildlife corridors;

The proposed development is less than 1% of the total lot coverage and is clustered to the southeast portion of the property. Aside from the residence, ADU, and water tanks, the majority of the 27-acre parcel will remain open space and the land will continue to retain its natural and scenic character without additional development on the property. The development is designed to minimize any viewshed impact by locating the residence behind a ridgeline and behind a natural knoll located to the northern portion of the property. Additionally, the proposed residence has a maximum height of 25 feet, with one (1) story, and will not create additional visual impact, as there are multiple rooflines as opposed to one large singularly tall building. Therefore, this finding can be made.

8. Avoiding those noteworthy and most valuable natural features of the land, such as rock outcroppings, historic or archeological sites, significant stands of mature trees and riparian areas;

As previously mentioned, the proposed development is not proposing any tree removals or located near any mature oak trees. The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species on the property. As such, this finding can be made.

9. Being located based on the consideration and balancing of factors as topography, visual impacts and conservation of natural resources and landscape features, while also minimizing the need for grading and earthwork to the maximum extent possible;

The proposed grading is necessary to establish the building pads for the residence, attached garage, ADU, retaining walls, and improvement to the driveway. These are allowable primary uses for the zoning district. An Alternative Site Analysis (Attachment E) was conducted for the property where the applicant provided alternative sites that are closer to Liberata Drive and Barnard Road for Planning Staff to analyze the competing factors of grading, siting (visibility), and geological hazards and landslides areas throughout the property. Although Option A would be a bit closer to Barnard Road, the proposed development would generate a significant amount of grading (4,906 cubic yards of cut and 3,190 cubic yards of fill) than the

current site proposed, not to mention Option A would be located in a highly visible area to the valley floor. Although Option B in the Alternative Site Analysis Map (Attachment E) would be in a less visible area (“medium visibility”) than Option A, however, Option B is in a landslide area with slope easements restrictions from Liberata Drive and would require significant grading in the amounts of 2,248 cubic yards of fill and 3,619 cubic yards of fill is required for development in that area.

After analyzing the Alternative Site Analysis Map (Attachment E) and the Geotechnical and Geological Hazard Evaluation by Earth Systems Pacific (Attachment F), and conducting a site and neighborhood field study, Staff determined that the single-family residence as proposed in the southeastern portion of the property will not create significant visual impact to the valley floor as it is located in a medium visibility area and the development area slopes downward which provides a natural screening of the residence from the valley floor. Additionally, the proposed landscaping for the retaining walls in the rear will screen and soften any visual impacts from neighbors. Grading for the proposed residence and ADU is minimized to 1,213 cubic yards of cut and 1,977 cubic yards of fill, which is significantly less than Option A and Option B in the Alternative Site Analysis Map.

Consequently, the amount, design, location and the nature of the proposed grading is necessary and appropriate to establish the single-family residential use, which is a permissible use in the A-20Ac-d1 zoning district. As such, this finding can be made.

10. Being clustered on the property to the maximum extent possible;

Planning Staff worked with the applicant after many resubmittals to cluster the proposed development to the maximum extent possible while balancing competing factors such as various landslide areas, steep terrain, and high visibility areas throughout the property. The proposed development is clustered to the southeast portion of the property and majority of the 27-acre property will remain open space and the land will continue to retain its natural and scenic character. Therefore, this finding can be made.

C. Project/Proposal

1. General Plan: Agriculture Medium Scale

- 2. Approval Building Site:** Per County Ordinance Code Section C12-307, Building Site Approval (BSA) is required for new single-family or two-family dwellings, including any property within the A-20Ac-d1 zoning district that is not a designated lot within an approved Parcel Map or Tract Map. The proposed project meets all development standards for a primary residence (minimum of 30 ft. from the front property line/right-of-way, minimum of 30 feet to side and rear, and a maximum height of 35 feet tall). Application for BSA was applied for on November 28, 2017 and will be approved simultaneously with the CUD, Grading Approval and Design Review.

3. **Zoning Standards:** The Zoning Ordinance specifies the required development standards for A-20Ac-d1 Zoning District, as summarized below, followed by Table A, noting the project's conformance with Section 3.20.040 "-d1" Combing District:

Main Residence

Setbacks (A-20Ac): 30-feet from all property lines and/or rights-of-way (ROW)
Height: 35-feet maximum
Stories: 2-stories maximum

Table A: Compliance with Development Standards for -d1 Combining District

STANDARDS & REQUIREMENTS	CODE SECTION	Meets Standard (Y/N)*
Siting	§ 3.20.040 (A)(2)(b)	Y*
Story Poles	§ 3.20.040 (A)(2)(c)	Y*
Color & LRV	§ 3.20.040 (B)	Y*
Building Form & Massing	§ 3.20.040 (C)	Y*
Retaining Walls	§ 3.20.040 (D)	Y*
Ridgeline Development	§ 3.20.040 (E)	Y*
Design Review Guidelines	§ 3.20.040 (F)	Y*

*See a detailed discussion of these development standards within the body of the Design Review Findings in Section C below

D. Design Review Findings:

Pursuant to Section §5.50.040 of the County Zoning Ordinance, all Design Review applications are subject to the stated scope of review. The overall purpose of Design Review is to encourage quality design and mitigate potential adverse visual impacts of development. In the following discussion, the scope of review findings is listed in **bold**, and an explanation of how the project meets the required standard is in plain text below.

1. Mitigation of any adverse visual impacts from proposed structures, grading, vegetation removal and landscaping;

According to the County's GIS data on visibility of properties as seen from the valley floor, the subject property is located in a "highly visible" to "medium visible" areas with only small portions of the lot that are not visible to the valley floor (primarily in the geo hazard and landslide areas). As detailed in CUD Finding No. 9 above, an Alternative Site Analysis (Attachment E) was conducted for the property where the applicant provided alternative sites that are closer to Liberata Drive and Barnard Road for Planning Staff to analyze the competing factors of grading, siting (visibility), and geological hazards and landslides areas throughout the property. Although Option A would be a bit closer to Barnard Road, the proposed development would generate a significant amount of grading (4,906 cubic yards of cut and 3,190 cubic yards of fill) than the current site proposed not to mention Option A would be located in a highly visible area to the valley floor. Although Option B in the Alternative Site Analysis

Map (Attachment E) would be in a less visible area (“medium visibility”) than Option A, however, Option B is in a landslide area with slope easements restrictions from Liberata Drive not to mention significant grading in the amounts of 2,248 cubic yards of cut and 3,619 cubic yards of fill is required for development in that area.

After analyzing the Alternative Site Analysis Map (Attachment E) and the Geotechnical and Geological Hazard Evaluation by Earth Systems Pacific (Attachment F), and conducting a site and neighborhood field study, Staff determined that the single-family residence as proposed in the southeastern portion of the property will not create significant visual impact to the valley floor as it is located in a medium visibility area and the development area slopes downward which provides a natural screening of the residence from the valley floor. Additionally, the proposed landscaping for the retaining walls in the rear will screen and reduce any visual impacts to the neighbors with shrubs and vines. Grading for the proposed residence and ADU is minimized to 1,213 cubic yards of cut and 1,977 cubic yards of fill, which is significantly less than Option A and Option B in the Alternative Site Analysis Map.

The proposed project includes construction of a one-story residence, with a maximum height of 24 feet, which is well below the maximum allowable height limitation of 35 feet in height. The proposed ADU has a maximum height of 16 feet which is consistent to the required height for ADU with the County of Santa Clara. The applicant is incorporating earth toned colors that are not more than 35 LRV, which is below the LRV requirement of single-family residence within a -d1 (Design Review) district but is consistent to the requirements for the visibility coloring for properties within Open Space Easement contracts.

The proposed development will not be removing any trees and all existing trees located near Barnard Road will be protected during construction. A landscaping plan was submitted along with the plan set (Attachment D) that included shrubs along the proposed retaining walls in the rear of the residence. Additional conditions for trees and shrubs are incorporated in the preliminary Conditions of Approval to help further screen and soften the retaining walls and mitigate any potential visual impacts to the side neighbors. As sited and designed, the project minimized visual impacts toward the valley floor or neighboring properties, and the grading quantities are minimized to the extent possible for establishment of a single-family residence on the existing property. As such, the above finding can be made.

2. Compatibility with the natural environment;

The project includes the construction of a new single-family residence with an attached garage and ADU. The proposed development is utilizing an existing dirt road and is only making improvements to the existing dirt road for access and Fire/Life safety and requirements. The grading proposed is primarily for improvement of the existing driveway and follows natural contours. The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay

Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species on the property. Although the proposed development area is adjacent to serpentine soil, the biology report from Live Oak Associates did identify the presence of the smooth lessingia but not other plants that are associated with serpentine soil. Smooth lessingia is a covered plant under the Santa Clara Valley Habitat Plan, and therefore, the mitigation and conditions of smooth lessingia is incorporated as part of the conditions of approval for the project under the Santa Clara Valley Habitat Plan. By siting the proposed development as currently proposed, the applicant avoids areas of geological hazards and landslides that would require unnecessary disturbance to the natural environment.

As the property is under a current OSE contract, the single-family residence, ADU, and overall development is less than 1% of the total lot coverage and is clustered to maximize the open space quality of the lot, and therefore, is consistent to the limitation of development of OSE contracted lands and CUD findings. As such, the proposed project is designed to be compatible with the natural and existing environment and is utilizing existing natural terrain for the construction of the buildings. For the above reasons, this finding can be made.

3. **Conformance with the “*Design Review Guidelines*,” adopted by the Board of Supervisors;**

The proposed project conforms to the County’s Board-adopted *Design Review Guidelines*. The siting of the proposed residence utilizes a pad in a flat area of the parcel and requires minimal site improvements and grading. The necessary grading is primarily for the improvement of the existing driveway for Fire/Life safety access. The proposed residence is not surrounded by many trees and the ones that are existing will be maintained and protected during construction. Additional landscaping has been added as part of the project conditions, in Attachment B of the Staff Report. Impacts on privacy and views of neighboring properties are minimal as the project is sited in an area that has a slope that provides a natural screening to the residence from the valley floor. Additionally, landscaping plans with the inclusion of trees and shrubs will mitigate any impacts to adjacent neighbors. The proposed residence has a maximum height of 25 feet, with one (1) story, and will not create additional visual impact, as there are multiple rooflines, as recommended in the *Design Review Guidelines*. The development is also not located on or above any ridgeline.

The architectural design of the proposed residence avoids excessive bulk and mass by incorporating undulating facades and varied roof planes. Exterior colors for the house façade, trim, and roof materials all have a Light Reflective Value (LRV) of 35 or less, as shown as part of the plan set (Attachment D). As part of the requirement for Design Review (Tier 2), the applicant is required to erect story poles prior to the Zoning Administration Hearing and will be inspected by Staff January 25, 2021 to ensure compliance to Section 3.20.040 (A)(2)(c). After inspecting the required story poles, no new impacts were observed by Staff. For these reasons, the above finding can be made.

4. Compatibility with the neighborhood and adjacent development;

As noted in the *Project Description* section of the report, the neighboring properties are developed with single-family residences that are both one (1) to two (2) stories, a majority of which were built between the 1980s, 1990s, and 2000s. The proposed residence is keeping with the characteristics of the surrounding neighborhood in that the proposed size, number of stories, and architectural design are compatible to adjacent developments. The project will not be obtrusive compared to the other developed parcels in the vicinity, due to the similarities in size, overall design, and color. As such, this finding can be made.

5. Compliance with applicable zoning district regulations; and

As summarized in Section B(3) and Table A of this Staff Report, residential use is an allowed use in the A-20Ac-d1 Agriculture Zoning District, and the project complies with the A-20Ac -d1 zoning regulations and development standards. The proposed residence meets the required setbacks (30-foot front, 30-foot side, and 30 feet rear) and height at 25 feet (maximum of 35-feet). Furthermore, the proposed design is also in keeping with the -d1 design guideline standards and building massing standards in that the structure incorporates varied roof heights and uses architectural elements, such as windows and cornices, to produce patterns of light and shade. Exterior colors are proposed and conditioned to be less than 35 in LRV. For these reasons, Staff has determined that the project follows the applicable zoning district regulations, and this finding can be made.

6. Conformance with the general plan, any applicable specific plan, other applicable guidelines.

The proposed development conforms with the Santa Clara County General Plan Policies R-LU15, R-GD22, R-GD24, *Design Guidelines*, and *Siting Criteria for Development of Limited Uses* for Open Space Easement (OSE) Compatible Use Determination (CUD).

General Plan Policy R-LU15 states that properties identified in the General Plan as “Agriculture-Medium Scale,” minimum parcel sizes shall be not less than 20 acres. The existing property is at 27 acres, which is consistent to the lot size requirement in the General Plan for “Agriculture-Medium Scale.” The project conforms to R-GD22 and R-GD24 as the proposed development is minimizing the grading as much as possible with most of the grading is used for improvement to the existing driveway. As previously discussed, Planning Staff analyzed alternative sites (Option A and Option B) on the property and had to balance between competing factors such as visibility, grading, and geological hazards and landslides that are present on the lot. In conclusion Planning Staff determined that the current proposed site is consistent to the County’s General Plan (R-GD22, R-GD24) as it minimizes grading to achieve a

single-family residence while avoiding visibility and geologic impacts on the property.

The proposed development is consistent to the County's Board-adopted *Design Guidelines* as it is sited on a flat pad, with tiered rooflines and does not have any massive and/or bulky facades. The exterior color and materials are muted and to have an LRV of 35 or less to ensure compatibility with the surrounding environment. Existing trees on the property are to be protected during construction and a landscaping plan will provide additional screening and privacy to the neighboring properties. The project is also consistent to the *Siting Criteria for Development of Limited Uses* for Open Space Easement (OSE) Compatible Use Determination (CUD) as the development is less than 1% of the total lot coverage and is clustered to maximize the open space quality of the lot, and therefore, is consistent to the limitation of development of OSE contracted lands. Additionally, the project maintains more than 95% of property as vacant land to preserve the open space quality of the lot and is situated in an area that would not impact natural features such as historic/archaeological sites, mature trees, and/or riparian areas. For the above reasons, the finding can be made.

- E. **Grading Approval:** Pursuant to Section C12-433 of the County Ordinance Code, all Grading Approvals are subject to specific findings. In the following discussion, the scope of review findings are listed in **bold**, and an explanation of how the project meets the required standard is in plain text below.

1. The amount, design, location, and the nature of any proposed grading is necessary to establish or maintain a use presently permitted by law on the property.

The project's grading quantities are 1,213 cubic yards of cut and 1,977 cubic yards of fill. The proposed grading is necessary to establish the building pads for the residence, attached garage, ADU, retaining walls, and improvement to the driveway. These are allowable primary uses for the zoning district. An Alternative Site Analysis (Attachment E) was conducted for the property where the applicant provided alternative sites that are closer to Liberata Drive and Barnard Road for Planning Staff to analyze the competing factors of grading, siting (visibility), and geological hazards and landslides areas throughout the property. Although Option A would be a bit closer to Barnard Road, the proposed development would generate a significant amount of grading (4,906 cubic yards of cut and 3,190 cubic yards of fill) than the current site proposed not to mention Option A would be located in a highly visible area to the valley floor. Although Option B in the Alternative Site Analysis Map (Attachment E) would be in a less visible area ("medium visibility") than Option A, however, Option B is in a landslide area with slope easements restrictions from Liberata Drive not to mention significant grading in the amounts of 2,248 cubic yards of fill and 3,619 cubic yards of fill is required for development in that area.

After analyzing the Alternative Site Analysis Map (Attachment E) and the Geotechnical and Geological Hazard Evaluation by Earth Systems Pacific (Attachment F), and

conducting a site and neighborhood field study, Staff determined that the single-family residence as proposed in the southeastern portion of the property will not create significant visual impact to the valley floor as it is located in a medium visibility area and the development area slopes downward which provides a natural screening of the residence from the valley floor. Additionally, the proposed landscaping for the retaining walls in the rear will screen and soften any visual impacts from neighbors. Grading for the proposed residence and ADU is minimized to 1,213 cubic yards of cut and 1,977 cubic yards of fill, which is significantly less than Option A and Option B in the Alternative Site Analysis Map.

Consequently, the amount, design, location and the nature of the proposed grading is necessary and appropriate to establish the single-family residential use, which is a permissible use in the A-20Ac-d1 zoning district. As such, this finding can be made.

2. The grading will not endanger public and/or private property, endanger public health and safety, will not result in excessive deposition of debris or soil sediments on any public right-of-way, or impair any spring or existing watercourse.

The proposed grading will not endanger public or private property. The grading is minimized to establish a single-family residential use on the property that will provide a safe and stable foundation for the house, attached garage, and ADU. All export will be deposited at an approved site. The Conditions of Approval of final grading plans will ensure that grading around the building pads and driveway will not result in slope instability or erosion. Land Development Engineering has specific erosion control standards to be implemented as part of the driveway and grading design. As such, this finding can be made.

3. Grading will minimize impacts to the natural landscape, scenic, biological and aquatic resources, and minimize erosion impacts.

The proposed grading has been designed to contour to the natural topography to the maximum extent possible and the overall design the residence is tiered and stepped to minimize disturbance to the natural landscape. Retaining walls proposed to the rear is to limit the grading and disturbance as much as feasible due to the lot's natural topography, which descends near side area of the lot. The proposed development is utilizing an existing dirt road and is only making improvements to the existing dirt road for access and Fire/Life safety and requirements. The grading proposed is primarily for improvement of the driveway and follows natural contours. The development will not impact any riparian habitat or oak woodland, nor will it impact any Bay Checker Butterfly as the Biology Report and Surveys conducted by Live Oak Associates (Attachment G) did not find any evidence of the species. Although the proposed development area is adjacent to serpentine soil, the biology report from Live Oak Associates did identify the presence of the smooth lessingia but not other plants that are associated with serpentine soil. Smooth lessingia is a covered plant under the Santa Clara Valley Habitat Plan, and therefore, the mitigation and conditions of smooth lessingia is incorporated as part of the conditions of approval for the project under the

Santa Clara Valley Habitat Plan. By siting the proposed development as currently proposed, the applicant avoids areas of geological hazards and landslides that would require unnecessary disturbance to the natural environment. All new grading will utilize temporary erosion control measures during construction that will be replaced with long-term permanent erosion control measures in the form of natural landscaping. As such, the above finding can be made.

4. **For grading associated with a new building or development site, the subject site shall be one that minimizes grading in comparison with other available development sites, taking into consideration other development constraints and regulations applicable to the project.**

The proposed location is suitable for a building site, as it is clustered towards the southeastern portion of the property that utilizes the existing flat area of the lot. The project conforms to R-GD22 and R-GD24 as the proposed development is minimizing the grading as much as possible with most of the grading is used for improvement to the existing driveway. As previously discussed, Planning Staff analyzed alternative sites (Option A and Option B) on the property and had to balance between competing factors such as visibility, grading, and geological hazards and landslides that are present on the lot. In conclusion Planning Staff determined that the current proposed site is consistent to the County's General Plan (R-GD22, R-GD24) as it minimizes grading to achieve a single-family residence while avoiding visibility and geologic impacts on the property. As such, this finding can be made.

5. **Grading and associated improvements will conform with the natural terrain and existing topography of the site as much as possible, and should not create a significant visual scar.**

The majority of the grading is necessary to establish the single-family residential use and improvement for a driveway for access from Barnard Road. Grading is minimized and limited to the establishment the primary use (residential) of the lot, and will not disturb any ridgeline or create any visual scar. Additionally, the project is using an existing flat area of the property and is conforming to the natural terrain by locating the house behind the existing natural slope of the lot at 26%. As such, this finding can be made.

6. **Grading conforms with any applicable general plan or specific plan; and**

The proposed grading is in conformance with specific findings and policies identified in the County General Plan. For example, the total grading quantities have been minimized by utilizing part of the existing building pad and the overall design of the residence is tiered and stepped to reduce bulk and massing that is consistent with the County's General Plan R-GD22 and R-GD24 (see Finding 4 above), which encourages only the minimal grading necessary to establish a single-family residence. As such, this finding can be made.

7. Grading substantially conforms with the adopted "*Guidelines for Grading and Hillside Development*" and other applicable guidelines adopted by the County.

The proposed grading is in conformance with the adopted "*Guidelines for Grading and Hillside Development*," in particular, the specific guidelines for siting, building form, and design. The access driveway for the proposed residence is not required as the residence is utilizing Hillslope Place, which is an existing County maintained road. A driveway to access a detached garage is needed for vehicular accessibility. Additionally, the residence tiered with undulating facades to blend in with the natural terrain. The property is not visible from the valley floor, however, the owner is incorporating neutral colors and earth tones as part of the conformity to the natural landscape and neighborhood. Erosion control is conditioned with the County requirements of Land Development Engineering with final erosion control plans to be implemented with the final grading permit.

The project is also consistent to the *Siting Criteria for Development of Limited Uses* for Open Space Easement (OSE) Compatible Use Determination (CUD) as the development is less than 1% of the total lot coverage and is clustered to maximize the open space quality of the lot, and therefore, is consistent to the limitation of development of OSE contracted lands. Additionally, the project maintains more than 95% of property as vacant land to preserve the open space quality of the lot and is situated in an area that would not impact natural features such as historic/archaeological sites, mature trees, and/or riparian areas. For the above reasons, the finding can be made. As such, this finding can be made.

In conclusion, Staff recommends the Zoning Administration Hearing Officer to approve the concurrent land use entitlements for a Building Site Approval, Grading Approval, and Design Review. Pursuant to County Ordinance Section C12-307, Building Site Approval is required for new single-family or two-family dwellings, including any property within the A-40AC-d1 zoning district that is not a lot within a Parcel Map or a numbered lot subdivision. As noted throughout the Staff Report, the proposed project meets all development standards for the primary residence (minimum of 30 ft. to the front, minimum of 30 feet to side and rear, and a maximum height of 35 feet) and all the findings for Open Space Easement Compatible Use Determination, Grading Approval and Design Review.

ADDITIONAL INFORMATION

Public Comment

As a result of the public notice, Staff received public comments letters from a neighbor adjacent to the property. The neighbor has concerns with the overall location/siting, grading, and scale of the project. As noted in the analysis/body of the report and as analyzed in the findings, Staff determined that the single-family residence as proposed in the southeastern portion of the property will not create significant visual impact to the valley floor as it is located in a medium visibility area and the development area slopes downward which provides a natural screening of the residence from the valley floor. Additionally, the proposed landscaping for the retaining

walls in the rear will screen and reduce any visual impacts to the neighbors with shrubs and vines. Grading for the proposed residence and ADU is minimized to 1,213 cubic yards of cut and 1,977 cubic yards of fill, which is significantly less than Option A and Option B in the Alternative Site Analysis Map.

The proposed project includes construction of a one-story residence, with a maximum height of 24 feet, which is well below the maximum allowable height limitation of 35 feet in height. The proposed ADU has a maximum height of 16 feet which is consistent to the required height for ADU with the County of Santa Clara. The applicant is incorporating earth toned colors that are not more than 35 LRV, which is below the LRV requirement of single-family residence within a -d1 (Design Review) district but is consistent to the requirements for the visibility coloring for properties within Open Space Easement contracts.

The proposed development will not be removing any trees and all existing trees located near Barnard Road will be protected during construction. A landscaping plan was submitted along with the plan set (Attachment D) that included shrubs along the proposed retaining walls in the rear of the residence. Additional conditions for trees and shrubs are incorporated in the preliminary conditions of approval to help further screen and soften the retaining walls and mitigate any potential visual impacts to the side neighbors. As sited and designed, the project minimized visual impacts toward the valley floor or neighboring properties, and the grading quantities are minimized to the extent possible for establishment of a single-family residence on the existing property.

Story Poles

On January 15, 2021, the applicant installed the required story poles at the development site as part of the requirements for Design Review Zoning Administration Hearing items. Staff verified and confirmed the story poles were erected on January 25th. Planning Staff visited the site and neighborhood again on January 29th, 2021 and can confirm the story poles are still standing.

BACKGROUND

On August 26, 2015, the current owners, Martin and Rosario Gutierrez, originally applied for Building Site Approval, Grading Approval, Design Review, and Open Space Easement (OSE) Compatible Use Determination (CUD). Unfortunately, the application subsequently expired as the owners were not able to address and resubmit within one (1) year from the date of the original submittal. On November 28, 2017, the owners returned and submitted for a new application of Building Site Approval, Grading Approval, Design Review, and Open Space Easement (OSE) Compatible Use Determination (CUD). The application was deemed incomplete on December 28, 2017 as staff had numerous comments and issues related to the project, primarily concerning location (siting), proposed grading, Habitat Plan Coverage and any impacts to serpentine soil and/or Bay Checkers Butterfly. The owners did not resubmit until July 23, 2018, where biological geologic reports were provided in addition to plans revisions. The application was deemed incomplete as the owners did not address the primary issues and concerns regarding visibility, siting, and grading along with items from other referral agencies.

Staff met with the owners' consultants from Hanna-Brunetti and D&Z Designs in the months following the second incomplete letter to work with the applicant on siting the project and

addressing any outstanding issues and concerns. After multiple resubmittals, the project was deemed complete on December 8, 2020.

On August 16, 2018, a development sign was installed at the property and August 29, 2018, the project was noticed within a 300-foot radius as part of the requirement for Early Public Outreach.

The owner installed the required story poles by January 15th at the development site as part of the requirements for Design Review Zoning Administration Hearing items (7 days prior to the hearing). A public notice was mailed to all property owners within a 300-foot radius of the project on January 20, 2021 and was also published in the Post Records on January 20, 2021 for the Zoning Administration Hearing date.

STAFF REPORT REVIEW

Prepared by: Lara Tran, Associate Planner



Reviewed by: Leza Mikhail, Zoning Administrator/Principal Planner




ATTACHMENT A
Proposed CEQA Determination

ATTACHMENT A

STATEMENT OF EXEMPTION

from the California Environmental Quality Act (CEQA)

FILE NUMBER	APN(S)	
PLN17-10080	728-24-008	1/29/2021
PROJECT NAME	APPLICATION TYPE	
Building Site Approval, Grading Approval, and Design Review; 2245 Liberata Drive, Morgan Hill	Building Site Approval, Grading Approval, and Design Review	
OWNER	APPLICANT	
Martin & Rosario Gutierrez	Hanna-Brunetti/ D&Z Designs	
PROJECT LOCATION		
2245 Liberata Drive, Morgan Hill		
PROJECT DESCRIPTION		
<p>Building Site Approval, Grading Approval, and Design Review for an 8,647 square foot single-family residence with a 1,373 detached garage and a 1,198 square foot detached accessory dwelling unit (ADU) on a 27.1-acre lot. Associated improvements include access driveway, retaining walls, and proposed landscaping. Grading consists of 1,213 cubic yards of cut and 1,977 cubic yards of fill.</p> <p>All discretionary development permits processed by the County Planning Office must be evaluated for compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended). Projects which meet criteria listed under CEQA may be deemed exempt from environmental review. The project described above has been evaluated by Planning Staff under the provisions of CEQA and has been deemed to be exempt from further environmental review per the provision(s) listed below.</p>		
CEQA (GUIDELINES) EXEMPTION SECTION		
Categorically Exempt – Section 15303(a) of a new single-family residence with attached garage and detached accessory dwelling unit (ADU).		
COMMENTS		
<p>There is no proposal to remove any existing trees on the property. Proposed development is a covered project under the Santa Clara Valley Habitat Conservation Plan (HCP) for Area 1. The project is not located near any riparian or creeks. Biology Report and Surveys from Live Oak Associates did not find any presence of Bay Checkerspot Butterfly although there was evidence of smooth lessingia. Smooth lessingia is a covered plant under the Santa Clara Valley Habitat Plan, and therefore, the mitigation and conditions of smooth lessingia is incorporated as part of the conditions of approval for the project under the Santa Clara Valley Habitat Plan. A landscaping plan is required to screen the retaining wall in the rear of the residence for any visual impacts.</p>		
APPROVED BY:		
Lara Tran, Associate Planner	 _____ Signature	_____ 1/29/2021 _____ Date

Approved by: _____



ATTACHMENT B
Proposed Conditions of Approval

ATTACHMENT B
PRELIMINARY CONDITIONS OF APPROVAL
BUILDING SITE APPROVAL AND DESIGN REVIEW

Date: February 4, 2021
Owner/Applicant: Martin & Rosario Gutierrez / Hanna-Brunetti and D&Z Design Associates Inc.
Location: 2245 Liberata Drive, Morgan Hill, CA (APN: 728-24-008)
File Number: PLN17-10080
CEQA: Categorically Exempt – Section 15303, Class 3(a).
Project Description: Concurrent land use permit for a Building Site Approval, Grading Approval, and Design Review for an 8,647 square foot single-family residence with a 1,373 detached garage and a 1,198 square foot detached accessory dwelling unit (ADU) on a 27.1-acre lot. Associated improvements include access driveway, retaining walls, and proposed landscaping. Grading consists of 1,213 cubic yards of cut and 1,977 cubic yards of fill. No trees are proposed for removal. Proposed development is a covered project under the Santa Clara Valley Habitat Conservation Plan (HCP).

For any question regarding the following preliminary conditions of approval, contact the person listed for that agency. S/he represents a specialty and can provide details about the conditions of approval.

Agency	Name	Phone	E-mail
Planning	Lara Tran	(408) 299-5759	lara.tran@pln.sccgov.org
Land Development Engineering	Ed Duazo	(408) 299-5733	ed.duazo@pln.sccgov.org
Fire Marshal	Alex Goff	(408) 299-5763	alex.goff@sccfd.org
Environmental Health	Darrin Lee	(408) 299-5748	darrin.lee@cep.sccgov.org
Geology	Jim Baker	(408) 299-5774	jim.baker@pln.sccgov.org
Roads and Airport	Leo Camacho	(408) 573-2464	leo.camacho@rda.sccgov.org
Building Inspection		(408) 299-5700	

STANDARD CONDITIONS OF APPROVAL

Building Inspection

1. For detailed information about the requirements for a Building Permit, obtain a Building Permit Application Instruction handout from the Building Inspection Office or visit the website at www.sccbuilding.org.

Planning

2. Development must take place in substantial conformance with the approved civil plans, prepared by M.H. Engineering and architectural plans prepared by D&Z Designs, submitted on October 16, 2020 and the Conditions of Approval. Any changes to the proposed project may result in additional environmental review, pursuant to the California Environmental Quality Act, or additional Planning review and a public hearing.

3. Existing zoning is A-20Ac-dl. Maintain the following minimum residential setbacks:

Front:	30 feet
Sides:	30 feet
Rear:	30 feet
Height:	35 feet (maximum)
Stories:	2 (maximum)

4. Grading consists of 1,213 cubic yards of cut and 1,977 cubic yards of fill with a maximum vertical depth of 11 feet. Any significant increase in grading quantities, or modification to the grading design, is subject to further review and may require a modification to the Grading Approval and associated fees.
5. Two (2) off-street parking spaces are required for the residence where one (1) must be covered.
6. A detached accessory dwelling unit (ADU) shall have a maximum square footage of 1,200 s.f. and a maximum 400 s.f. attached garage per Section 4.10.015(D)(1) and Section 4.10.015(D)(4). Additionally, proposed ADU shall adhere to all requirements and regulations of Section 4.10.015.
7. Any detached accessory structures shall be in the rear half of the lot, or at least 75 ft. from the front property line or edge of right-of-way, per Sections 4.20.020(D). Rear yard coverage of cumulative detached accessory structures shall not be more than 30%, which excludes green houses or agricultural structures.
8. Any accessory structures shall not contain more than two (2) internal plumbing fixtures per Section 4.20.020(I)(1). Further review of a Special Permit and associated fees may be required if additional plumbing fixtures are proposed.
9. The exterior color surfaces (including walls, roof, window trim/accent, retaining walls, fences) of the structure must be of muted colors with light reflectivity value (LRV) of 35 or lower (as indicated on Sheet A3.1 of the approved plan set) and shall be in conformance with the color and materials approved by the Hearing Officer at the Zoning Administration hearing on February 4, 2021.
10. The property owner shall maintain the existing landscaping and provide tree protection for all existing trees adjacent to the development area and/or driveway.

11. Incorporate native and non-native trees and shrubs to screen the retaining walls in the rear of the property in the landscaping plan.
12. Fences within an Open Space Easement shall be open and shall use welded wire mesh attached to wood posts or wood-rail type fences. Avoid solid and painted plank fencing, especially in an area that is highly visible to the public.
13. If archaeological resources or human skeletal remains are discovered during construction, work shall immediately stop, and the County Coroner's Office notified. Upon determination that the remains are Native American, no further disturbance of the site may be made except as authorized by the County Coordinator of Indian Affairs, in accordance with state law and Chapter B6-18 of the County Ordinance Code.

Land Development Engineering

14. Property owner is responsible for the adequacy of any drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health or damage to adjoining property.

Environmental Health

15. All construction activities shall be in conformance with the Santa Clara County Noise Ordinance Section B11-154 and prohibited between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and Saturdays, or at any time on Sundays for the duration of construction.

CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO BUILDING AND/OR GRADING PERMIT ISSUANCE

Planning

16. **Prior to issuance of any permits**, the applicant shall pay all reasonable costs associated with the work by the Department of Planning and Development.
17. **Prior to issuance of a building permit**, and pursuant to Zoning Ordinance Section 5.20.125, record a Notice of Permit and Conditions with the County Office of Clerk-Recorder to ensure that successor property owners are aware that certain conditions of approval shall have enduring obligation. Evidence of such recordation shall be provided **prior to building permit issuance**.
18. **Prior to issuance of a building permit**, provide a landscaping plan for the proposed retaining walls in the rear of the residence. The landscaping plan shall provide the type and size of trees and plants to screen the retaining walls.
19. **Prior to issuance of a building permit**, submit final color samples for the house facade, trim and roof indicating the Light Reflectivity Value is less than or equal to 35, pursuant to the policy of the County's Open Space Easement (OSE) Handbook, and consistent with approved project, color samples and plans approved at the February 4, 2021 Zoning Administration Hearing.

20. **Prior to issuance of a building permit**, including a lot area coverage calculation chart (as part of the plan set) signed and stamped by a licensed civil engineer or land surveyor to ensure the proposed development is less than 5% of the entire parcel for Open Space Easement contracts.

Habitat Plan Application for Private Projects

21. **Prior to issuance of any grading or building permit**, submit a completed Habitat Plan Application for Private Projects (“Application”) with all required submittal materials, including all exhibits (as described in the Application for Private Projects), and required staff review fee to the Planning Office for review and verification. See further details regarding site plans and land cover mapping as part of the application.

Site Plan

The required site plan shall show the project development, including a delineation of the permanent and temporary development buffer areas.

- *Permanent development area* is defined as all land that will have permanent improvements (driveways, water tanks, buildings/structures, septic system, landscaping, etc.), plus a 50-foot buffer surrounding these areas.
- *Temporary development area* is defined as land that will be temporarily affected during development (construction laydown areas, subsurface utilities/trenching, etc.) that will be *restored within one year of completing construction*, plus a 10-foot buffer surrounding these areas.

Land Cover Mapping

The required land cover mapping shall include the following:

- Land cover mapping that clearly delineates the verified land cover (as described in Chapter 3 of the Habitat Plan), proposed development (foot print of residence and improvements – i.e. driveway, septic system, landscaping, impervious surfaces, and area of temporary and permanent impacts (with applicable buffers).
- Area calculations of land cover permanently and temporarily impacted by the project, consistent with Table 1 in the Application for Private Projects.

Fees

22. **Prior to issuance of any grading or building permits**, all Santa Clara Valley Habitat Agency (SCVHA) fees must be paid. Land cover fees are paid based on the land cover (including Serpentine Fee Zone), and development area associated with the project. *Temporary development fees* are based on the amount of time the land is disturbed during construction, plus one year after completing construction, and cannot exceed a combined total of 2 years. ***All temporary development that exceeds 2 years from the onset of construction will be subject to permanent impact fees.***

The project is subject to the following Habitat Plan fees based on HCP Geobrowser Mapping. Actual land cover fees will be verified upon receiving adequate land cover mapping with impervious surface calculations.

- A. Land Cover Fee Zone B –Agricultural and Valley Floor Lands.
- B. Serpentine Fee Zone (*permanent fees* shall apply to the total area of serpentine rock outcrop impacted).

Habitat Plan Conditions of Approval

23. **Prior to issuance of grading/drainage or building permits**, all future development is subject to the following Conditions of Approval and described in more detail within Chapter 6 of the Santa Clara Valley Habitat Plan.

- Condition 1: Avoid Direct Impacts on Legally Protected Plant and Wildlife Species.
- Condition 3: Maintain Hydrologic Conditions and Protect Water Quality.
- Condition 7: Rural Development.
- Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization.
- Condition 14: Valley Oak and Blue Oak Woodland Avoidance and Minimization.
- Condition 19 & 20: Plant Salvage and Avoid and Minimize Impacts to Covered Plan Occurrences.

24. **Prior to issuance of grading/drainage or building permits**, incorporate the Habitat Plan *Conditions of Approval (Exhibit A)*, and *Table 1: Hydrology Condition 3* into the improvement/grading and building plans.

Geology

25. **Prior to issuance of grading or building permits**, submit a Geotechnical Engineer's Plan Review Letter that confirms the plans conform with the recommendations presented in Earth Systems reports.

Land Development Engineering (LDE)

26. **Prior to issuance of a building permit**, obtain a grading permit from LDE (building and grading permits may be applied for concurrently). The process for obtaining a grading permit and the forms that are required can be found at the following web page: www.sccplanning.org > How to... > Submit a development Permit Application > Grading Permit

If the County Roads and Airports Department provides a condition of approval to obtain an encroachment permit, the grading and encroachment permits will be processed concurrently under one set of improvement (grading) plans. Please contact LDE at (408) 299-5734 for additional information and timelines.

27. Final plans shall include a single sheet which contains the County standard notes and certificates as shown on County Standard Cover Sheet. Plans shall be neatly and accurately drawn, at an appropriate scale that will enable ready identification and recognition of submitted information.

Improvement Plans

28. Final improvement plans shall be prepared by a licensed civil engineer for review and approval by LDE and the scope of work shall be in substantial conformance with the conditionally approved preliminary plans on file with the Planning Office. Include plan, profile, typical sections, contour grading for all street, road, driveway, structures, and other improvements as appropriate for construction. The final design shall be in conformance with all currently adopted standards and ordinances. The following standards are available on-line:
- March 1981 Standards and Policies Manual, Volume 1 (Land Development)
https://www.sccgov.org/sites/dpd/DocsForms/Documents/StandardsPoliciesManual_Voll.pdf.
 - 2007 Santa Clara County Drainage Manual
https://www.sccgov.org/sites/dpd/DocsForms/Documents/DrainageManual_Final.pdf
29. Survey monuments shall be shown on the improvement plan to provide sufficient information to locate the proposed improvements and the property lines. Existing monuments must be exposed, verified and noted on the grading plans. Where existing monuments are below grade, they shall be field verified by the surveyor and the grade shall be restored and a temporary stake shall be placed identifying the location of the found monument. If existing survey monuments are not found, temporary staking delineating the property line may be placed **prior to construction** and new monuments shall be set **prior to final acceptance of the improvements**. The permanent survey monuments shall be set pursuant to the State Land Surveyor's Act. The Land Surveyor / Engineer in charge of the boundary survey shall file appropriate records pursuant to Business and Professions Code Section 8762 or 8771 of the Land Surveyors Act with the County Surveyor.
30. The improvement plans shall include an Erosion and Sediment Control Plan that outlines seasonally appropriate erosion and sediment controls during the construction period. Include the County's Standard Best Management Practice Plan Sheets BMP-1 and BMP-2 with the Plan Set.
31. All applicable easements affecting the parcel(s) with benefactors and recording information shall be shown on the improvement plans.

Drainage

32. Provide a drainage analysis prepared by a licensed civil engineer in accordance with criteria as designated in the 2007 County Drainage Manual (see Section 6.3.3 and Appendix L for design requirements). The on-site drainage will be controlled in such a manner as to not increase the downstream peak flow for the 10-year and 100-year storm

event or cause a hazard or public nuisance. The mean annual precipitation is available on the on-line property profile.

33. All new on-site utilities, mains and services shall be placed underground and extended to serve the proposed development. All extensions shall be included in the improvement plans. Off-site work should be coordinated with any other undergrounding to serve other properties in the immediate area.

Stormwater Treatment – San Francisco Bay & Central Coast

34. Include one of the following site design measures in the project design: (a) direct hardscape and/or roof runoff onto vegetated areas, (b) collect roof runoff in cisterns or rain barrels for reuse, or (c) construct hardscape (driveway, walkways, patios, etc.) with permeable surfaces. Though only one site design measure is required, it is encouraged to include multiple site design measures in the project design. For additional information, please refer to the C.3 Stormwater Handbook (June 2016) available at the following website: http://scvurppp.org/pdfs/1516/c3_handbook_2016/SCVURPPP_C.3_Technical_Guidance_Handbook_2016_Chapters.pdf. The project straddles the boundary between the San Francisco Bay Watershed and the Central Coast Watershed. If any run-off is released to the Central Coast Watershed, then include at least one site design measure for each watershed (i.e., one site design measure for run-off draining to the San Francisco Bay Watershed and one site design measure for run-off draining to the Central Coast Watershed).
35. Submit one (1) copy of the signed and stamped geotechnical report for the project.
36. Submit a plan review letter by the Project Geotechnical Engineer certifying that the geotechnical recommendation in the above geotechnical report have been incorporated into the improvement plan.

Notice of Intent

37. Indicate on the improvement plans the land area that will be disturbed. If one acre or more of land area will be disturbed, file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) for coverage under the State General Construction Permit. The SWRCB will issue a Waste Discharge Identification number (WDID). The WDID number shall be shown on the on the final improvement plans. The SWRCB web site is at: www.waterboards.ca.gov > [Water Issues](#) > [Programs](#) > [Stormwater](#)

Environmental Health

38. Sewage conditions have been determined at 337 plus 337 lineal feet of subsurface drainline using Quick 4 High Capacity chambers. The two drainline systems must be connected through a positive diversion valve. A 1500 gallons septic tank will be required. This system is adequate to serve a four-bedroom single family dwelling and one-bedroom accessory dwelling unit.
39. **At the time of application for a building permit**, provide a plot plan to scale (1" = 20') on a grading and drainage plan showing the house, driveway, accessory structures, septic

tank and required drainlines to contour. Maintain all setbacks as outlined within County of Santa Clara Onsite Manual. The original plans must be submitted to the Department of Environmental Health prior to the issuance of the septic system permit and submitted as the final grading plan to Land Development Engineering when a grading permit is required.

40. **At the time of application of a building permit**, provide a final floor plan to Environmental Health to assist in the sizing of the proposed dwelling's dispersal field.
41. **Prior to issuance of a building permit**, contact the Department of Environmental Health at (408) 918-3492 (Nicole Jorgensen) for drinking water/well clearance. Domestic water shall be supplied by an approved water system installed to Environmental Health standards. The water clearance application must be approved **prior to obtaining a septic system or building permit**. A well log must be submitted which shows a 50-foot sanitary seal, and pump tests, bacterial and chemical testing must be completed.

Fire Marshal's Office

42. **Prior to building permit issuance**, change the current address from Liberata Drive to Barnard Road to accurately reflect the access the property uses.
43. **Prior to approval of the foundation**, fire protection water system shall be installed, functioning, and inspected. System shall be maintained in good working order and accessible throughout construction. A stop work order may be placed on the project if the required hydrant systems are not installed, accessible, and/or functioning.
44. Where on-site storage tanks are required, details for fire protection water supply shall be included with the building permit set of drawings. Submittal shall include, but not be limited to, location of water supply, (e.g. onsite well, shared well; tank location and capacity, pipe size, wharf hydrant orifice size and location, domestic and fire protection water tanks and piping configuration).
 - A. All installations shall include a primary aboveground storage tank with a capacity of not less than 3,000 gallons dedicated to domestic and fire sprinkler system demand. Storage capacity may be increased due to sprinkler design demand or additional domestic (including landscaping) required by the Environmental Health Department.
 - B. Provide two 5,000-gallon (total of 10,000-gallon) secondary aboveground storage tanks dedicated to the wharf hydrant.
 - C. Aboveground storage tanks shall be provided with automatic refill. Manual refilling of tanks is not acceptable.
 - D. Installation of aboveground storage tanks less than 20 ft. to a structure requires tanks to be of noncombustible construction.
 - E. Installation of the tank system shall comply with Fire Marshal Standard CFMO-W5.
 - F. A copy of the Shared Well agreement shall be provided at the time of plan submittal for building permit.

45. One on-site wharf hydrant with 2-1/2-inch orifice is required to be installed when fire protection water is supplied by on-site aboveground storage tank(s). Installation of hydrants shall be in accordance with Fire Marshal Standard Detail CFMO-W4.
- A. Minimum distance to structure shall not be less than 55 ft. from the closest portion of the structure.
 - B. Hydrant shall be installed within 8 ft. of driving surface in a location acceptable to the Fire Marshal's Office.
 - C. Installation of a hydrant adjacent to a driveway (12 ft. wide) requires a turnout complying with SD-16 to allow additional emergency vehicles to pass.
 - D. Hydrant shall have a positive flow by means of gravity feed or where that is not possible, from a reliable, listed automatic pump approved by the Fire Marshal. Elevation of hydrants and tanks in relation to each other shall be a major consideration. *Note:* Tank and hydrant elevations shall be noted on the site plan submitted for building permit.
46. Fire Department access are minimum Fire Marshal standards. Should the access standards conflict with any other local, State, or Federal requirements, the most restrictive shall apply.
47. Construction of access roads and driveways shall use good engineering practice.
48. All required access roads, driveways, turnarounds, and turnouts shall be installed, and serviceable prior to approval of the foundation, and shall be maintained throughout construction. A stop work order may be placed on the project if required driving surfaces are not installed, accessible, and/or always maintained.
49. Driveways (roads serving 2 or less lots) shall comply with the following when the distance between the centerline of the access road and any portion of the structure exceeds 150 ft. (measured along the path of travel).
- A. Width: Clear width of drivable surface of 12 ft.
 - B. Vertical Clearance: Minimum vertical clearance of 15 ft. shall be maintained between the access road and the building site (trim or remove, tree limbs, electrical wires, structures, and similar improvements).
 - C. Curve Radius: Inside turn radius for curves shall be a minimum of 50 ft.
 - D. Grade: Maximum grade shall not exceed 16%.
 - E. Surface: All driving surfaces shall be all-weather and capable of sustaining 75,000 pounds gross vehicle weight.
 - F. Turnouts: Passing turnouts in compliance with SD-16 shall be provided at every 400 ft. and wherever hydrants are placed adjacent to a driveway.
50. The property is located within the State Response Area (served by Cal Fire) and in the Wildland/Urban Interface Fire Area. All the following conditions shall apply:
- A. A Class "A" roof assembly is required. Detail shall be included in plans submitted for building permit.
 - B. Provide a 1/2 inch spark arrester for the chimney.

- C. Remove significant combustible vegetation within 30 feet of the structure to minimize risk of wildfire casualty. Maintain appropriate separation of vegetative fuels in areas between 30 and 100 feet from the structure.

51. Fire protection water systems and equipment shall always be accessible and maintained in operable condition and shall be replaced or repaired where defective. Fire protection water shall be made available to the fire department.

52. Fire department access roads, driveways, turnouts, and turnarounds shall always be maintained free and clear and accessible for fire department use. Gates shall be maintained in good working order and shall always remain in compliance with Fire Marshal Standard CFMO-A3.

Roads and Airport

53. **Prior to Building Permit issuance**, obtain a Santa Clara County Roads and Airports Department (RAD) Encroachment Permit for the following required improvement:

- A. Installation of the driveway approach on Barnard Road to County Standard B/4.

54. The process for obtaining an Encroachment Permit and the forms that are required can be found at: www.countyroads.org > Services > Apply for Permits > Encroachment Permit.

55. Demonstrate that the post-development maximum flow rate into the County Road right-of-way is equal-to or less-than the pre-development corresponding storm event flow rate per the County Drainage Manual. Provide engineered plans and drainage calculations for any detention or retention system necessary to satisfy this requirement.

CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO OCCUPANCY OR ONE YEAR FROM THE DATE OF THE LAND DEVELOPMENT AGREEMENT, WHICHEVER COMES FIRST.

Planning

56. **Prior to final inspection**, contact Lara Tran in the Planning Division, **at least two (2) weeks in advance** to schedule a site visit to verify the approved exterior colors have been installed as approved.

Geology

57. Submit a Construction Observations Letter that verifies the work was completed in accordance with the approved plan.

Land Development Engineering

58. Existing and set permanent survey monuments shall be verified by inspectors **prior to final acceptance of the improvements** by the County. Any permanent survey monuments damaged or missing shall be reset by a licensed land surveyor or registered civil engineer authorized to practice land surveying and they shall file appropriate records pursuant to Business and Professions Code Section 8762 or 8771 of the Land Surveyors Act with the County Surveyor.

59. Construct all the improvements. Construction staking is required and shall be the responsibility of the developer.

Fire Marshal's Office

60. **Prior to occupancy**, an approved residential fire sprinkler system complying with CFMO-SP6 shall be installed throughout the structure system and finalized by the Fire Marshal Office.
61. A separate permit shall be obtained from Fire Marshal Office by a state licensed C-16 contractor prior to installation. Please allow for a minimum of 30 days for plan review of fire sprinkler plans by the Fire Marshal Office.

Roads and Airports

62. Construct all the improvements approved under the Encroachment Permit.

Environmental Health

63. Provide proof of garbage service **at the time of final occupancy sign-off**. Garbage service in the unincorporated areas of Santa Clara County is mandatory.

EXHIBIT A
Santa Clara Valley Habitat Plan
Conditions of Approval

File #PLN17-10080

APN: 728-24-008

BSA, Grading Approval, and Design Review

Property Owner: Martin and Rosario Gutierrez

Santa Clara Valley Habitat Plan Conditions of Approval

Incorporate the following Habitat Plan Conditions of Approval into the grading/drainage and building plans. The conditions are described in more detail within Chapter 6 of the Santa Clara Valley Habitat Plan.

Condition 1: Avoid Direct Impacts on Legally Protected Plant and Wildlife Species

Conditions Applied During Project Construction

1. Large Trees (migratory birds or raptors) - If construction will require the removal of large trees during the bird nesting season, conduct pre-construction surveys by a qualified biologist to determine if active nests are present within trees. Private applicants should follow procedures currently used (including definition of nesting season and timing of pre-construction surveys) to comply with Migratory Bird Treaty Act (MBTA) and California state regulation requirements in addressing this condition.

Condition 3: Maintain Hydrologic Conditions and Protect Water Quality and

Conditions Applied During Project Construction

2. Incorporate Table 1: *Hydrology Condition 3* (attached) into the grading and building plans.

Condition 7: Rural Development

Conditions Applied During Project Construction

3. Minimize ground disturbance to the smallest area feasible.
4. Avoid and minimize impacts associated with altering natural drainages and contours on the project site. If the site is graded, blend grading into the existing landform as much as possible.
5. Prevent rills (a narrow groove or crack in the road resulting from erosion by overland flow) by breaking up large or long bare areas into smaller patches that can be effectively drained before rills can develop.
6. Disconnect and disperse runoff flow paths, including roadside ditches, that might otherwise deliver fine sediment to stream channels.
7. Prevent gullies by dispersing runoff from road surfaces, ditches and construction sites, by correctly designing, installing and maintaining drainage structures (i.e. road shape, rolling dips, out-sloped roads, culverts) and by keeping streams in their natural channels. No single point of discharge from a road or other disturbed area should carry sufficient flow

- to create gullies. If gullies continue to develop, additional drainage structures are needed to further disperse the runoff).
8. Maintain as much natural vegetation as possible, consistent with fuel management standards, on the project site.
 9. Maintain County-mandated fuel buffer (variable width by slope conditions).
 10. At project sites that are adjacent to any drainage, natural or manmade, exposed soils must be stabilized or otherwise contained on site to prevent excessive sediment from entering a waterway.
 11. Minimize to the maximum extent possible the amount of ground disturbance when constructing roads.
 12. Ground-disturbing activities associated with road construction should be timed to occur during dry weather months to reduce the possibility of landslides or other sediment being transported to local streams during wet weather.
 13. If construction extends into wet weather, the road bed will be surfaced with appropriate surfacing material to prevent erosion of the exposed roadbed.
 14. If construction on steep slopes is required, construction will be timed for dry weather months to reduce the potential for landslides.
 15. All temporarily disturbed soils will be revegetated with native plants and/or grasses or sterile nonnative species suitable for the altered soil conditions upon completion of construction. Local watershed native plants will be used if available. If sterile nonnative species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive nonnatives. All disturbed areas that have been compacted shall be de-compacted prior to planting or seeding.
 16. All temporarily disturbed areas, such as staging areas, will be returned to pre- project or ecologically improved conditions within 1 year of completing construction or the impact will be considered permanent.
 17. No plants identified by the California Invasive Plant Council as Invasive will be planted on the project site. Planting with watershed local native and/or drought-resistant plants is highly encouraged. This reduces the need for watering as well as the need for fertilizers and pesticides.
 18. Outdoor lighting will be of low intensity and will utilize full cutoff fixtures to reduce light pollution of the surrounding natural areas.

Postconstruction

19. All temporarily disturbed soils will be revegetated with native plants and/or grasses or sterile, nonnative species suitable for the altered soil conditions upon completion of construction. Local watershed native plants will be used if available. If sterile, nonnative species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive nonnatives. All disturbed areas that have been compacted shall be de-compacted prior to planting or seeding.

20. All temporarily disturbed areas, such as staging areas, will be returned to pre-project or ecologically improved conditions within 1 year of completing construction or the impact will be considered permanent.

Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization.

Conditions Applied During Project Construction

21. Conduct surveys of the serpentine vegetation to inventory for covered species and evaluate habitat quality for covered species.
22. For portions of the development area that are in the Bay checkerspot butterfly habitat units identified in *Appendix D* of the Habitat Plan, survey the site for the presence of larval host plants of Bay checkerspot butterfly. If larval host plants are found, conduct reconnaissance-level surveys for adult butterflies during the peak of the flight period to determine species presence or absence.
23. Locate the project footprint as far from the covered species or the highest-quality serpentine habitat as is feasible. Utilize applicable buffers as identified in this Chapter 6 of the Habitat Plan.
24. If covered plants occur on the site and cannot be avoided, notify the Habitat Agency of the construction schedule so that plant salvage can be considered and potentially implemented (see Condition 19).

Condition 14: Valley Oak and Blue Oak Woodland Avoidance and Minimization.

Conditions Applied During Project Construction

25. Temporary project access points will be constructed as close as possible to the work area to minimize necessity for tree removal.
26. Roads and pathways will be aligned outside of the tree's root protection zone (as defined above) whenever possible.
27. Roads and pathways designed beneath or within 25 feet of the dripline of oak trees will be graded using handheld equipment and will use permeable surfacing (e.g., grass pavers that allow runoff to infiltrate the ground).
28. Alteration of natural grade through fill or other means within the root protection zone of oak trees will be minimized.
29. Trenching for utility lines and other purposes will be minimized within root protection zones. Utilities may be installed in these areas by boring below the root zone.
30. If extensive pruning of blue oaks and valley oaks is necessary, pruning will be conducted during the winter dormant period for these species and under the supervision of an arborist certified to International Society of Arboriculture or similar standards.

Condition 19 & 20: Plant Salvage and Avoid and Minimize Impacts to Covered Plant Occurrences.

Conditions Applied During Project Construction

31. To reduce impacts on covered plants, all covered activities will be confined to the minimum area necessary to complete the activity or construction.

32. A setback buffer will be established around covered plant occurrences located on any project site or in an adjacent area that could be affected by construction traffic or activities. The setback buffer will be adequate to prevent or minimize impacts during or after project implementation.
33. The plants and buffer area will be protected from encroachment and damage during construction by installing temporary construction fencing. Fencing will be brightly colored and highly visible.
34. Fencing will be designed to keep construction equipment away from plants and prevent unnecessary damage to or loss of plants on the project site.
35. Fencing will be installed under the supervision of a qualified biologist to ensure proper location and prevent damage to plants during installation. Fencing will be installed before any site preparation or construction work begins and will remain in place for the duration of construction.
36. Construction personnel will be prohibited from entering these areas (the exclusion zone) for the duration of project construction.

If a proposed project will potentially affect the plant occurrence, the following steps will be implemented:

37. A qualified biologist will determine if the long-term viability of a covered plant occurrence will be reduced (as described below) by implementation of the covered activity.
38. Some covered plant occurrences may only be disturbed or partially affected by covered activities, and viability may be maintained. It is important to monitor and, if possible, maintain these occurrences of covered plants where they occur, even if they are not protected within the Reserve System.
39. The project proponent will submit advance notification (in advance of the full application submittal) to the Habitat Agency. Impacts on plant occurrences must be offset by protection, management, and monitoring of covered plant occurrences in the Reserve System prior to impacts (Table 5-16 of the Habitat Plan). Therefore, notification to the Habitat Agency is required to confirm available take for plant impacts prior to construction of the project. Notification will include documentation of the condition of each plant occurrence to potentially be affected. Project proponents must also notify the Habitat Agency of their construction schedule to allow the Habitat Agency the opportunity to conduct salvage activities.
40. If the biologist determines that the covered activity may affect the covered plant occurrence or a portion of the plant occurrence found on site, monitoring during construction will be required as follows.
41. The Habitat Agency will monitor construction activities. The purpose of the monitoring will be (1) to assess whether the impact reduces the long-term viability of the occurrence and whether supplemental management actions are feasible and warranted, and (2) to determine whether the Habitat Agency must protect and enhance or create occurrences in the Reserve System according to Table 5-16 of the Habitat Plan. If the impact occurs on less than 5% of the total occurrence as measured by the number of individuals at the time of impact, then the impact is assumed not to affect long-term viability and will not require

monitoring, nor will it count as a permanent impact (Table 4-6 of the Habitat Plan). This allowance does not apply to Coyote ceanothus.

When determining viability for the purpose of assessing a partial or permanent impact, the Habitat Agency will consider the following factors:

42. Results of monitoring plant occurrences affected by covered activities (e.g., correlation between pre-project observations and actual viability post project)
43. Impacts to date on the covered plant species and how close total impacts are to the allowable impact cap in the Habitat Plan (e.g., extra care taken when near cap not to exceed the cap)

Specific monitoring protocols and success criteria will be developed during implementation as appropriate for each covered species, according to the guidelines discussed here. Monitoring protocols can draw on those developed for other Habitat Conservation Plans/Natural Community Conservation Plans. It is possible that only a portion of the occurrence will be located on the covered activity project site. In such instances, the monitoring protocol will address this issue. Three possible approaches include the following:

44. If the landowner agrees, the Habitat Agency will obtain access to the adjacent sites on which the rest of the plant occurrence is located, and surveys will include the entire occurrence.
45. If access to adjacent site(s) is not possible, or if for some other reason it is not feasible to survey the entire occurrence, then an alternative will be developed to estimate the extent and condition of the adjacent portion of the occurrence.
46. If only a small portion of the occurrence is on adjacent properties, then only the portion of the occurrence on the project site will be monitored and assessed for viability. The determination whether this is a full impact will be made based on the results for this portion of the occurrence only.
47. Population monitoring will be conducted by the Habitat Agency before the covered activity is implemented to document the baseline condition. For annual species, the minimum post-construction monitoring period will be 5 years. If extreme or unusual climate conditions affect the species, then monitoring will be extended 1 or 2 years, as appropriate to assess impacts and success.
48. Monitoring will include estimates of percentage cover and number of individuals. An occurrence will be assumed to retain long-term viability and will not require replacement in the Reserve System if the decline in occurrence size and percentage cover from pre-project conditions is less than 25% over the monitoring period, unless site-specific conditions otherwise suggest substantial declines in occurrence viability.
49. For perennial species, the minimum post-construction monitoring period will be 3 years. Monitoring will include estimates of density (percentage cover), recruitment of seedlings if impacts included removing individuals, and measurements of adult plant health (e.g., signs of disease, herbivory, nutrient deficiencies). An occurrence of a perennial covered species will be assumed to retain long-term viability and will not require replacement in the Reserve System if the decline in seedling recruitment and density from pre-project

conditions is less than 25% over the monitoring period, unless site-specific conditions otherwise suggest substantial declines in occurrence viability.

50. The Habitat Agency will implement conservation actions on the site that would help to maintain or improve the condition of the occurrence, as long as an agreement can be reached with the landowner to conduct these measures. Possible conservation measures are described in Chapter 5 of the Habitat Plan. If plant occurrences are determined to not be viable based on post-project monitoring, the Habitat Agency must assess the loss as a full permanent impact and implement conservation actions accordingly. In these cases, mitigation would occur after the impact. However, the potential for mitigation to occur after impacts is unlikely given that the qualified biologist and Habitat Agency will make conservative determinations regarding projected impacts on long-term viability.

Habitat Agency Conducts Plant Salvage (Condition 19) if Appropriate

51. Where impacts on covered plant species cannot be avoided and plants will be removed by approved covered activities, the Habitat Agency has the option of salvaging the covered plants. Salvage of covered plants is conducted in addition to mitigation that may be required for impacts on covered plants.
52. Plant salvage as mitigation is acknowledged as a technique that rarely succeeds; it is opposed by conservation organizations as a primary mitigation tool (Howald 1996; California Native Plant Society 1998). Therefore, the Habitat Agency must carefully weigh the expected costs and potential benefits of the salvage effort before undertaking it. Salvage guidelines are presented below for all covered plants, for perennial species, and for annual species.

All Covered Plants

53. All salvage operations will be conducted by the Habitat Agency or a third-party contractor approved by the Habitat Agency. Translocation activities will be reviewed and approved by the Wildlife Agencies in advance of translocation activities occurring. Translocated plants should be moved during their dormant season in order to minimize impacts on individuals. To ensure enough time to plan salvage operations, project proponents will notify the Habitat Agency of their schedule for removing the covered plant occurrence.
54. The Habitat Agency may conduct investigations into the efficacy of salvaging seeds from the soil seed bank for both perennial and annual species. The soil seed bank may add to the genetic variability of the occurrence. Covered species may be separated from the soil through garden/greenhouse germination or other appropriate means. Some topsoil taken from impact sites may also be moved to the transplant site in the reserve to introduce soil microorganisms.
55. The Habitat Agency will transplant new occurrences such that they constitute separate populations and do not become part of an existing population of the species, as measured by the potential for genetic exchange among individuals through pollen or propagule (e.g., seed, fruit) dispersal. Transplanting or seeding receptor sites (i.e., habitat suitable for establishing a new population) will be carefully selected on the basis of physical, biological, and logistical considerations (Fiedler and Laven 1996); some examples of these are listed below.

- A. Historic range of the species
- B. Soil type
- C. Soil moisture
- D. Topographic position, including slope and aspect
- E. Site hydrology
- F. Mycorrhizal associates
- G. Presence or absence of typical associated plant species
- H. Presence or absence of herbivores or plant competitors
- I. Site accessibility for establishment, monitoring, and protection from trampling by cattle or trail users

Perennial Covered Plants

56. Salvage methods for perennial species will be tested for whole individuals, cuttings, and seeds. Salvage measures will include the evaluation of techniques for transplanting as well as germinating seed in garden or greenhouse and then transplanting to suitable habitat sites in the field. Techniques will be tested for each species, and appropriate methods will be identified through research and adaptive management. Where plants are transplanted or seeds distributed to the field, they will be located in reserves in suitable habitat to establish new populations. Field trials will be conducted to evaluate the efficacy of different methods and determine the best methods to establish new populations.
57. Transplanting within the reserves will only minimally disturb existing native vegetation and soils. Supplemental watering may be provided as necessary to increase the chances of successful establishment, but must be removed following initial population establishment. Supplemental watering will include watering throughout the first growing season to mimic natural rainfall patterns. During establishment, areas will be fenced off as necessary to prevent trampling or grazing by livestock. These areas will not be selected for controlled burns. Once the population has established itself, as determined by success criteria that may include setting seed, 3-year survival, or other criteria developed in agreement with the Wildlife Agencies, then fencing and irrigation will be removed and the site may be burned for management purposes if that is appropriate for the target plant.

Annual Covered Plants

58. For annual covered plants, mature seeds will be collected from all individuals for which impacts cannot be avoided (or if the population is large, a representative sample of individuals). If storage is necessary, seed storage studies will be conducted to determine the best storage techniques for each species. A seed storage facility will also be contacted and consulted regarding collecting and storage requirements of the facility. One of the leading seed banks in California is the Rancho Santa Ana Botanic Garden in Claremont (Rancho Santa Ana Botanic Garden 2010).
59. This facility has strict seed collection and storage guidelines available on its website (<http://www.rsabg.org>). If needed, studies will be conducted on seeds germinated and plants grown to maturity in garden or greenhouse to propagate larger numbers of seed.

Such studies can be contracted with research institutions such as the Rancho Santa Ana Botanic Garden or carried out by other qualified biologists. Seed propagation methods will ensure that genetic variation is not substantially affected by propagation (i.e., selection for plants best adapted to cultivated conditions). Field studies will be conducted under the Adaptive Management Program to determine the efficacy and best approach for dispersal of seed into suitable habitat. Where seeds are distributed to the field, they will be in reserves in suitable habitat to establish new populations. If seed collection methods fail (e.g., from excessive seed predation by insects), alternative propagation techniques will be necessary.

Table 1. Habitat Plan Condition 3 – Hydrologic Conditions*

ID	Avoidance and Minimization Measure	Covered Activity Application	Covered by NPDES Requirements
1	Minimize the potential impacts on covered species most likely to be affected by changes in hydrology and water quality.	All	No
3.2	To the extent possible, restore the hydrograph to more closely resemble predevelopment conditions.	All	No
5	Invasive plant species removed during maintenance will be handled and disposed of in such a manner as to prevent further spread of the invasive species.	All	No
53	When possible, maintain a vegetated buffer strip between staging/excavation areas and receiving waters.	All	No
62	Use existing roads for access and disturbed area for staging as site constraints allow. Off-road travel will avoid sensitive communities such as wetlands and known occurrences of covered plants.	All	No
70	Only clear/prepare land which will be actively under construction in the near term.	All	No
73	When possible, avoid wet season construction.	All	No
84.2	Fiber rolls used for erosion control will be certified as free of noxious weed seed.	All	No
84.3	Filter fences and mesh will be of material that will not entrap reptiles and amphibians.	All	No
86	Topsoil removed during soil excavation will be preserved and used as topsoil during revegetation when it is necessary to conserve the natural seed bank and aid in revegetation of the site.	All	No
88	To the extent feasible, vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas.	All	No
89	The potential for traffic impacts on terrestrial animal species will be minimized by adopting traffic speed limits.	All	No
90	All trash will be removed from the site daily to avoid attracting potential predators to the site. Personnel will clean the work site before leaving each day by removing all litter and construction-related materials.	All	No
95	<p>To minimize entrapment of animals on job sites, the project biologist will survey the work area at the close daily activities to identify and remediate any potential areas or conditions that might trap animals. Examples of such include pits, trenches or pipes that animals can fall into or perforated pipes or netting that can cause entanglement.</p> <p>The biologist shall consider the animals expected to enter the site during the calendar period work will be occurring, and shall use his or her best judgment to remove entrapment conditions, allow for escape (such as a ramp not exceeding a 30-degree slope leading out of a trench) or develop a site-specific protocol (such as daily post-dawn surveys) to eliminate or minimize entrapment.</p> <p>If no project biologist is required on-site the job foreman or property owner will designate an individual to carry out these activities. Only individuals that hold permits or that have been approved by the Habitat Agency as a qualified biologist may handle listed species.</p>	All	No

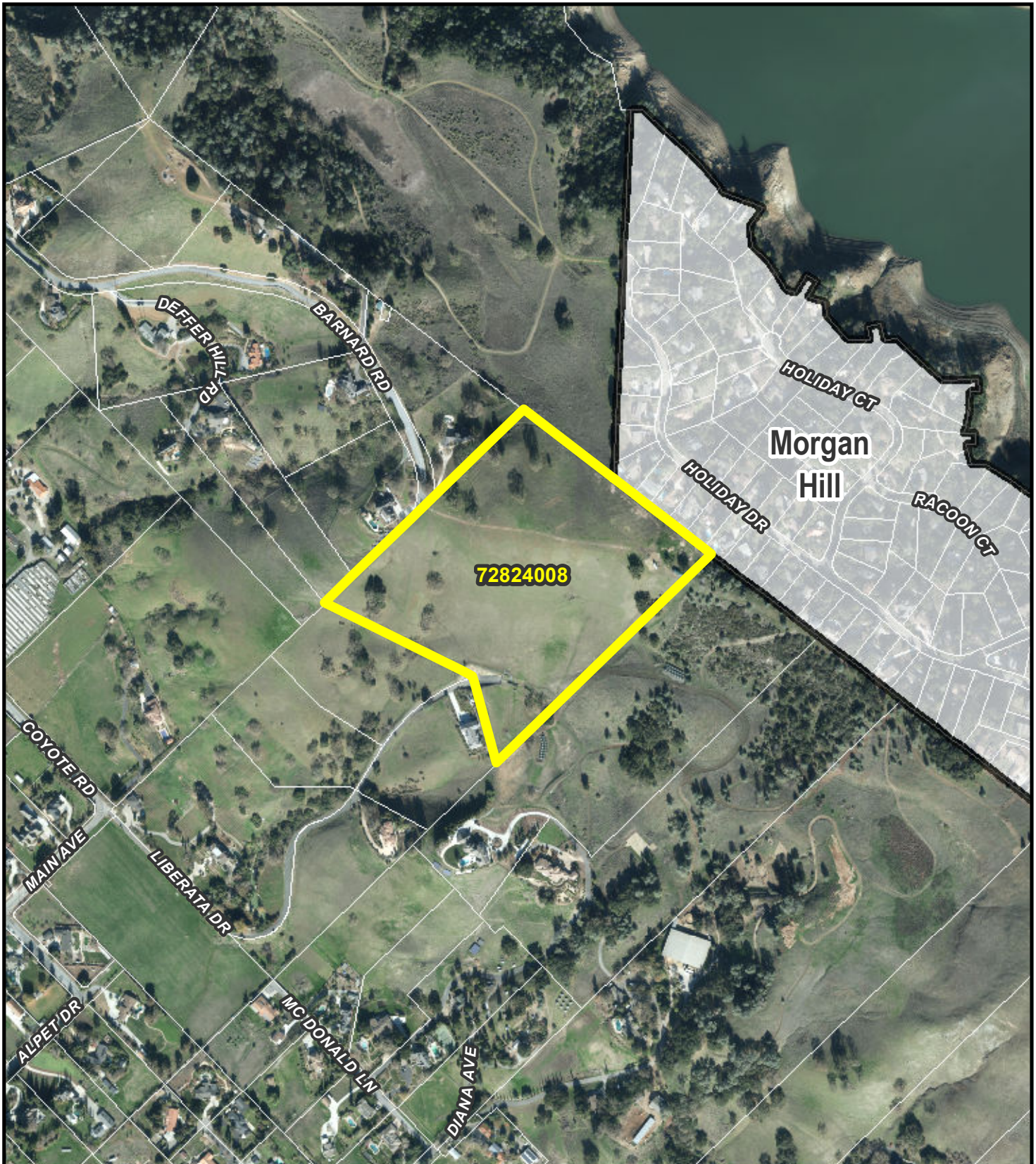
* Based on SCVHP Table 6-2. Aquatic AMMs-Modified January 30, 2018). Measures covered by NPDES will be reviewed each time the applicable NPDES permit is renewed.

Table 6-2. Continued

ID	Avoidance and Minimization Measure	Covered Activity Application	Covered by NPDES Requirements
103	Unless otherwise indicated in an Executive Directive issued by the Habitat Agency, for example a directive to address plant pathogens, (103.1) all disturbed soils will be revegetated with native plants, grasses, seed mixtures, or sterile nonnative species suitable for the altered soil conditions upon completion of construction. (103.2) Local watershed native plants will be used if available. If sterile nonnative species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive nonnatives. (103.3) All disturbed areas that have been compacted shall be de-compacted prior to planting or seeding. (103.4) Cut-and-fill slopes will be planted with local native or non-invasive plants suitable for the altered soil conditions.	All	No

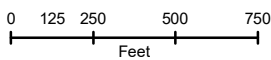
* Based on SCVHP Table 6-2. Aquatic AMMs-Modified January 30, 2018. Measures covered by NPDES will be reviewed each time the applicable NPDES permit is renewed.

ATTACHMENT C
Location & Vicinity Map

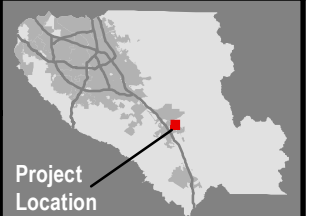


Project Vicinity Map

File PLN17-10080
APN 728-24-008
2245 Liberata Dr.
Morgan Hill



This map created by the Santa Clara County Planning Office. The GIS data was compiled from various sources. While deemed reliable, the Planning Office assumes no liability.
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ATTACHMENT D
Proposed Plans with LRV

General Construction Specifications

1. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY EARTH SYSTEMS PACIFIC PROJECT FILE NO. SH-12630-SA AND DATED JANUARY 30, 2015 THIS REPORT IS SUPPLEMENTED BY: 1) THE PLANS AND SPECIFICATIONS, 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS, 3) THE COUNTY OF SANTA CLARA STANDARD SPECS, 4) STATE OF CALIFORNIA STANDARD DETAILS, 5) STATE OF CALIFORNIA STANDARD SPECIFICATIONS. IN THE EVENT OF CONFLICT THE FORMER SHALL TAKE PRECEDENCE OVER THE LATTER. THE PERFORMANCE AND COMPLETION OF ALL WORK MUST BE TO THE SATISFACTION OF THE COUNTY.
2. DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF THE IMPROVEMENTS SHOWN ON THESE PLANS AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THEIR CONTINUED MAINTENANCE.
3. DEVELOPER SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS OR OMISSIONS IN THESE PLANS. THE COUNTY SHALL BE AUTHORIZED TO REQUIRE DISCONTINUANCE OF ANY WORK AND SUCH CORRECTION AND MODIFICATION OF PLANS AS MAY BE NECESSARY TO COMPLY WITH COUNTY STANDARDS OR CONDITIONS OF DEVELOPMENT APPROVAL.
4. DEVELOPER SHALL OBTAIN ENCROACHMENT PERMITS FROM THE SANTA CLARA VALLEY WATER DISTRICT AND CALIFORNIA DEPARTMENT OF TRANSPORTATION WHERE NEEDED. COPIES OF THESE PERMITS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY THE COUNTY'S INSPECTOR.
5. DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR ROADWAY AREA.
6. THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE THE GROUND THAT ARE SHOWN TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED.
7. DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE COUNTY INSPECTOR.
8. ALL PERSONS MUST COMPLY WITH SECTION 4442 OF THE PUBLIC RESOURCES CODE AND SECTION 13005 OF THE HEALTH AND SAFETY CODE RELATING TO THE USE OF SPARK ARRESTERS.
9. UNCOVERING OR UNWEATHERING ANY BURIAL SITE AS EVIDENCED BY HUMAN SKELETAL REMAINS OR ARTIFACTS, THE PERSON MAKING SUCH DISCOVERY SHALL IMMEDIATELY NOTIFY THE COUNTY CORONER AT (408) 454-2520 AND LAND DEVELOPMENT ENGINEERING OFFICE AT (408) 299-5730. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE LAND DEVELOPMENT OFFICE IN ACCORD WITH PROVISIONS OF THIS ORDINANCE (COUNTY ORDINANCE CODE SECTION B6-18).
10. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
11. ANY DEVIATION FROM THESE APPROVED PLANS SHALL BE RE-APPROVED IN WRITING BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.

1. THE DEVELOPER'S ENGINEER IS RESPONSIBLE FOR THE INITIAL PLACEMENT AND REPLACEMENT OF CONSTRUCTION GRADE STAKES. THE STAKES ARE TO BE ADEQUATELY IDENTIFIED, LOCATED, STABILIZED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 1/2 FEET FROM BACK OF CURB.
2. ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED LAND SURVEYOR.
3. PROPERTY LINE STAKING MUST BE PERFORMED BY THE PROJECT ENGINEER OR LAND SURVEYOR FOR EACH LOT. TO RE-ESTABLISH THE PROJECT BOUNDARY AND SHALL BE INSPECTED BY THE COUNTY INSPECTOR PRIOR TO THE BEGINNING OF THE WORK.
4. PROPER CONSTRUCTION STAKES SHALL BE SET IN THE FIELD BY THE PROJECT ENGINEER OR LAND SURVEYOR AND VERIFIED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF GRADING.

1. CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
2. THE COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT CONCRETE INSPECTION.
3. INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR COMPLIANCE WITH PLANS & SPECIFICATIONS BUT DOES NOT INCLUDE RESPONSIBILITY FOR THE SUPERINTENDENT OF CONSTRUCTION, SITE CONDITIONS, EQUIPMENT OR PERSONNEL. CONTRACTOR SHALL NOTIFY THE COUNTY LAND DEVELOPMENT INSPECTOR AT PHONE (408) 296-5682 AT LEAST 24 HOURS PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
4. DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE MUST SUBMIT WRITTEN REQUEST FOR FINAL INSPECTION AND ACCEPTANCE. SAID REQUEST SHALL BE DIRECTED TO THE INSPECTION OFFICE NOTED ON THE PERMIT FORM.
5. THE CONTRACTOR SHALL PROVIDE TO THE COUNTY CONSTRUCTION INSPECTOR WITH PAD ELEVATION AND LOCATION CERTIFICATES, PREPARED BY THE PROJECT ENGINEER OR LAND SURVEYOR, PRIOR COMMENCEMENT OF THE BUILDING FOUNDATION.

1. EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN AREAS TO BE IMPROVED WILL BE REMOVED TO AN AUTHORIZED DISPOSAL SITE AS FOLLOWS:
 - A) TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO PUBLIC USE)
 - B) FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE NOTED ON THE PLANS.
2. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MOVE OR RELOCATE UTILITY POLES AND OTHER OBSTRUCTIONS IN THE WAY OF CONSTRUCTION.

1. CONTRACTOR SHALL NOTIFY UTA (UNDERGROUND SERVICE ALERT) AT 1-800-277-2600 A MINIMUM OF 24 HOURS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES.
2. ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING UNDERGROUND CONDUITS OR FACILITIES SHALL BE THE INDIVIDUAL CONTRACTORS RESPONSIBILITY. PLAN LOCATIONS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.
3. ALL UNDERGROUND INSTALLATIONS SHALL BE IN PLACE AND THE TRENCH BACKFILLED AND COMPACTED BEFORE PLACING AGGREGATE BASE MATERIAL OR SURFACE STRUCTURES. SURFACING MAY BE DONE IF THE UTILITY COMPANY CONCERNED INDICATES BY LETTER THAT IT WILL BORE. UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY, GAS AND WATER MAINS SHALL BE INSTALLED OUTSIDE THE PAVED AREAS.
4. TRENCH BACKFILL IN EXISTING PAVEMENT AREAS SHALL BE SAND MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS. THE TRENCH SECTION FOR TRENCH REPLACEMENT SHALL CONSIST OF NOT LESS THAN 12 INCHES OF APPROVED AGGREGATE BASE MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 95% AND 4 INCHES OF HOT ASPHALT CONCRETE PLACED IN TWO LIFTS. TRENCH RESTORATION FOR HIGHER TYPE PAVEMENTS SHALL BE MADE IN KIND OR AS DIRECTED BY THE COUNTY.
5. TRENCH BACKFILL IN NEW CONSTRUCTION AREAS SHALL BE SAND MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 90%. THE REQUIREMENT FOR SELECT MATERIAL MAY BE WAIVED BY COUNTY IF THE NATIVE SOIL IS SUITABLE FOR USE IN THE TRENCH BACKFILL BUT THE COMPACTION REQUIREMENTS WILL NOT BE THEREBY WAIVED.
6. BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

1. REINFORCED CONCRETE AND CONCRETE MASONRY UNIT RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR AND ENGINEER OF RECORD PRIOR TO POURING THE FOUNDATION AND FORMING THE WALL.
2. SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR.

1. EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IT SHALL BE STRIPPED OF ALL VEGETATION. TO ACHIEVE A PROPER BOND WITH THE FILL MATERIAL, THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN 3:1, FILL SHALL BE BENCHED AND THE FILL KEPT IN TO ACHIEVE STABILITY. WHERE NEW FILL IS TO BE PLACED ON EXISTING FILL, THE EXISTING FILL SHALL BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS. BEFORE COMPACTION BEGINS, THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT PROPER COMPACTION BY EITHER (1) AERATING THE FILL IF IT IS TOO WET OR (2) MOISTENING THE FILL IF IT IS TOO DRY. EACH LIFT SHALL BE THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION OF MOISTURE.
2. EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE.
3. SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER COMPACTED TO WITHSTAND WEATHERING IN THE AREA(S) DELINEATED ON THE PLAN.
4. NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS.
5. IF A SHOULDER OR BELOW SHOULDER ACCESS ROAD OR PARKING AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
6. MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL.

LOCATION	CUT (C.Y.)	FILL (C.Y.)	VERT. DEPTH
RESIDENCE	560±	656±	11±
RESIDENCE YARD	0±	215±	3.5±
GUEST HOUSE	0±	144±	5.2±
DRIVEWAY	653±	962±	5.8±
TOTAL	1,213±	1,977±	

7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
9. THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%
10. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION
11. THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED BY THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER FOR BUILDING OCCUPANCY.
12. THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR TO THE CONSTRUCTION OF ANY PAVED AREA.
13. GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA CLARA COUNTY GRADING OFFICIAL.
14. TOTAL DISTURBED AREA FOR THE PROJECT _____SF.
15. WDD NO. _____
16. THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

1. FOR ALL TREES TO BE RETAINED WITH A CANOPY IN THE DEVELOPMENT AREA OR INTERFACES WITH THE LIMITS OF GRADING FOR ALL PROPOSED DEVELOPMENT ON SITE, THE TREES SHALL BE PROTECTED BY THE PLACEMENT OF RIGID TREE PROTECTIVE FENCING, CONSISTENT WITH THE COUNTY INTEGRATED LANDSCAPE GUIDELINES, AND INCLUDE THE FOLLOWING:
 - A. FENCING SHOULD BE PLACED ALONG THE OUTSIDE EDGE OF THE DRILLPIE OF THE TREE OR GROVE OF TREES.
 - B. THE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE CONSTRUCTION PERIOD AND SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION.
 - C. FENCING SHALL BE REPAIRED, AS NECESSARY, TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES.
 - D. SIGNAGE STATING, "WARNING- THIS FENCING SHALL NOT BE REMOVED WITHOUT PERMISSION FROM THE SANTA CLARA COUNTY PLANNING OFFICE (408) 299-5770. COUNTY OF SANTA CLARA TREE PROTECTION MEASURES MAY BE FOUND AT <http://www.sccplanning.gov>." SHALL BE PLACED ON THE TREE PROTECTIVE FENCING UNTIL FINAL OCCUPANCY.
2. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, TREE PROTECTIVE FENCING SHALL BE SECURELY IN PLACED AND INSPECTED BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.
3. SEE EXISTING TREE PROTECTION DETAILS FOR MORE INFORMATION.

1. DRIVEWAY LOCATIONS SHALL BE AS SHOWN ON THE IMPROVEMENT PLANS WITH CENTERLINE STATIONING. THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES THROUGHOUT (WITH A MAXIMUM APPROACH SLOPE OF 1/4 INCHES PER FOOT).
2. ALL DRIVEWAY OR COMMON ACCESS ROAD SECTIONS IN EXCESS OF 15 LONGITUDINAL SLOPE MUST BE PAVED WITH A MINIMUM 2-INCH ASPHALT LIFT OR FULL DEPTH CONCRETE LIFT PRIOR TO ANY COMBUSTIBLE FRAMING.
3. THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS.
4. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THE PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY). THE PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
5. ALL WORK IN THE COUNTY ROAD RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT - I.E. CABLE, ELECTRICAL, GAS, SEWER, WATER, RETAINING WALLS, DRIVEWAY APPROACHES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ETC.

1. PACIFIC GAS & ELECTRIC ELECTROLIER SERVICE FEE SHALL BE PAID BY THE DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE.

1. THE SANITARY SEWER AND WATER UTILITIES SHOWN ON THESE PLANS ARE NOT PART OF THIS GRADING PERMIT AND ARE SHOWN FOR REFERENCE ONLY.
2. ALL MATERIALS AND METHODS OF CONSTRUCTION OF SANITARY SEWERS SHALL CONFORM TO THE SPECIFICATIONS OF THE JURISDICTION INVOLVED. INSPECTION OF SANITARY SEWER WORK SHALL BE DONE BY SAID JURISDICTION.

1. CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. CONCRETE PLACED MUST DEVELOP A MINIMUM STRENGTH FACTOR OF 2800 PSI IN A SEVEN-DAY PERIOD. THE CONCRETE MIX DESIGN SHALL BE UNDER THE CONTINUAL CONTROL OF THE COUNTY INSPECTOR.

1. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
2. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
3. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY (NON-TOXIC) SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES.
4. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
5. SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
6. ALL CONSTRUCTION VEHICLES, EQUIPMENT AND DELIVERY TRUCKS SHALL HAVE A MAXIMUM IDLING TIME OF 5 MINUTES (AS REQUIRED BY THE CALIFORNIA AIRBORNE TOXIC CONTROL MEASURE TITLE 13, SECTION 2485 OF CALIFORNIA CODE OF REGULATIONS (CCR)). ENGINES SHALL BE SHUT OFF IF CONSTRUCTION REQUIRES LONGER IDLING TIME UNLESS NECESSARY FOR PROPER OPERATION OF THE VEHICLE.
7. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MILES PER HOUR.
8. ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL EQUIPMENT SHALL BE CHECKED BY A CERTIFIED MECHANIC AND DETERMINED TO BE RUNNING IN PROPER CONDITION PRIOR TO OPERATION.
9. POST A SIGN THAT IS AT LEAST 32 SQUARE FEET MINIMUM 2 INCHES LETTER HEIGHT VISIBLE NEAR THE ENTRANCE OF CONSTRUCTION SITE THAT IDENTIFIES THE FOLLOWING REQUIREMENTS. OBTAIN ENCROACHMENT PERMIT FOR SIGN FROM ROADS DEPARTMENT OR OTHER APPLICABLE AGENCY IF REQUIRED.
 - A. 15 MILES PER HOUR (MPH) SPEED LIMIT
 - B. 5 MINUTES MAXIMUM IDLING TIME OF VEHICLES
 - C. TELEPHONE NUMBER TO CONTACT THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGARDING DUST COMPLAINTS. NOTE PHONE NUMBER OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AIR POLLUTION COMPLAINT HOTLINE OF 1-800-334-6366
10. ALL FILL SLOPES SHALL BE COMPACTED AND LEFT IN A SMOOTH AND FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING.
11. ALL EXPOSED DISTURBED AREAS SHALL BE SEEDDED WITH BROME SEED SPREAD AT THE RATE OF 5 LB. PER 1000 SQUARE FEET (OR APPROVED EQUAL). SEEDING AND WATERING SHALL BE MAINTAINED AS REQUIRED TO ENSURE GROWTH.
12. ALL DITCHES SHALL BE LINED PER COUNTY STANDARD S08.
13. ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE & OUTFALL EROSION CONTROLS E.G. SACKED CONCRETE RIP-RAP. ENERGY DISSIPATORS SHALL BE INSTALLED AT ALL DITCH OUTFALLS. WHERE OUTFALLS ARE NOT INTO AN EXISTING CREEK OR WATER COURSE, RUNOFF SHALL BE RELEASED TO SHEET FLOW.
14. PRIOR TO GRADING COMPLETION AND RELEASE OF THE BOND, ALL GRADED AREAS SHALL BE RESEEDDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADE SLOPES AND REDUCE THE POTENTIAL FOR EROSION OF THE SUBJECT SITE.
15. PERMANENT LANDSCAPING SHOWN ON THE ATTACHED LANDSCAPE PLAN MUST BE INSTALLED AND FIELD APPROVED BY THE COUNTY PLANNING OFFICE PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER, AND FINAL OCCUPANCY RELEASE BY THE BUILDING INSPECTION OFFICE.
16. THE OWNER SHALL PREPARE AND PRESENT A WINTERIZATION REPORT TO THE COUNTY INSPECTOR FOR REVIEW PRIOR TO OCTOBER 15TH OF EVERY YEAR.

17. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL INSTALL AND MAINTAIN CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs) ON THE PROJECT SITE AND WITHIN THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY THROUGHOUT THE DURATION OF THE CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL TO PREVENT THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, AND WASTE INTO THE SANTA CLARA COUNTY RIGHT-OF-WAY, STORM SEWER WATERWAYS, ROADWAY INFRASTRUCTURE. BMPs SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
 - A. PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN / STAGING AREAS.
 - B. PREVENTION OF TRACKING OF MUD, DIRT, AND CONSTRUCTION MATERIALS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
 - C. PREVENTION OF DISCHARGE OF WATER RUN-OFF DURING DRY AND WET WEATHER CONDITIONS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
18. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY.
19. EROSION CONTROL PLAN IS A GUIDE AND SHALL BE AMENDED AS NECESSARY TO PREVENT EROSION AND ILLICIT DISCHARGES ON A YEAR AROUND BASIS, DEPENDING ON THE SEASON, WEATHER, AND FIELD CONDITIONS. EROSION CONTROL MEASURES IN ADDITION TO THOSE NOTED IN THE PERMITTED PLANS MAY BE NECESSARY. FAILURE TO INSTALL SITE SIGN AND SITUATIONALLY APPROPRIATE EROSION CONTROL MEASURES MAY RESULT IN VIOLATIONS, FINES, AND A STOPPAGE OF WORK.

1. DEVELOPER IS RESPONSIBLE FOR ALL NECESSARY DRAINAGE FACILITIES WHETHER SHOWN ON THE PLANS OR NOT AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THE ADEQUACY AND CONTINUED MAINTENANCE OF THESE FACILITIES IN A MANNER WHICH WILL PRECLUDE ANY HAZARD TO LIFE, HEALTH, OR DAMAGE TO ADJOINING PROPERTY, CONSISTENT WITH NPDES PERMIT CAG612008 / ORDER NO. R2-2009-0047 AND NPDES PERMIT CAG500004 / ORDER NO. 2013-0001-DWQ.
2. DROP INLETS SHALL BE COUNTY STANDARD TYPE 5 UNLESS OTHERWISE NOTED ON THE PLANS. THE DEVELOPER'S ENGINEER SHALL BE RESPONSIBLE FOR THE PROPER LOCATION OF DROP INLETS, WHERE STREET PROFILE GRADE EXCEEDS 6% DROP INLETS SHALL BE SET AT 500' ANGLE CURB LINE TO ACCEPT WATER OR AS SHOWN ON THE PLANS.
3. WHERE CULVERTS ARE INSTALLED THE DEVELOPER SHALL BE RESPONSIBLE FOR GRADING THE OUTLET DITCH TO DRAIN TO AN EXISTING SWALE OR TO AN OPEN AREA FOR SHEET FLOW.
4. UPON INSTALLATION OF DRIVEWAY CONNECTIONS, PROPERTY OWNERS SHALL PROVIDE FOR THE UNINTERRUPTED FLOW OF WATER IN ROADSIDE DITCHES.
5. THE COUNTY SHALL INSPECT UNDERGROUND DRAINAGE IMPROVEMENTS AND STORMWATER MANAGEMENT FEATURES PRIOR TO BACKFILL.

THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (___ WERE) (___ WERE NOT) MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (^). THERE (___ WERE) (___ WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL Δ.

NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER
PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPY OF THE AS-BUILT PLANS MUST BE
FURNISHED TO THE COUNTY ENGINEER AFTER CONSTRUCTION.

1. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO THE GRADING COMPLETION AND RELEASE OF THE BORROW PILE.



1. THE LANDOWNER/CONTRACTOR MUST PROTECT AND ENSURE THE PERPETUATION OF SURVEY MONUMENTS AFFECTED BY CONSTRUCTION ACTIVITIES.
2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE, STAKE, AND FLAG ALL PERMANENT SURVEY MONUMENTS OF RECORD AND ANY UNRECORDED MONUMENTS THAT ARE DISCOVERED THAT ARE WITHIN 50 FEET OF THE CONSTRUCTION ACTIVITY.
3. THE LANDOWNER, CONTRACTOR AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING MONUMENT, CORNER STAKE, OR ANY OTHER PERMANENT SURVEYED MONUMENT SHALL CAUSE TO HAVE A LICENSED LAND SURVEYOR OR CIVIL ENGINEER, AUTHORIZED TO PRACTICE SURVEYING, ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY BE FILED WITH THE COUNTY SURVEYORS OFFICE PRIOR TO DISTURBING SAID MONUMENTS AND RESEALING PERMANENT MONUMENTS TO PERPETUATE THE LOCATION OF ANY PERMANENT MONUMENTS THAT BE DESTROYED, DAMAGED, COVERED, DISTURBED, OR OTHERWISE OBSCURED. THE LICENSED LAND SURVEYOR OR CIVIL ENGINEER SHALL FILE A CORNER RECORD OR RECORD OF SURVEY WITH COUNTY SURVEYOR PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.



1. PRIOR TO THE COMMENCEMENT OF ANY GRADING, TREE PROTECTIVE FENCING SHALL BE IN PLACE IN ACCORDANCE WITH THE TREE PRESERVATION PLAN AND INSPECTED BY A CERTIFIED ARBORIST. THE ARBORIST SHALL MONITOR CONSTRUCTION ACTIVITY TO ENSURE THAT THE TREE PROTECTION MEASURES ARE IMPLEMENTED AND ADHERED TO DURING CONSTRUCTION. THIS CONDITION SHALL BE INCORPORATED INTO THE GRADING PLANS.
2. FENCE SHALL BE MINIMUM 5 FEET TALL CONSTRUCTED OF STURDY MATERIAL (CHAIN-LINK OR EQUIVALENT STRENGTH/ DURABILITY).
3. FENCE SHALL BE SUPPORTED BY VERTICAL POSTS DRIVEN 2 FEET (MIN) INTO THE GROUND AND SPACED NOT MORE THAN 10 FEET APART.
4. THE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE DURING THE CONSTRUCTION PERIOD, INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION, REPAIRED AS NECESSARY TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES, AND REMAIN IN PLACE UNTIL THE FINAL INSPECTION.
5. A SIGN THAT INCLUDES THE WORDS, "WARNING: THIS FENCE SHALL NOT BE REMOVED WITHOUT THE EXPRESSED PERMISSION OF THE SANTA CLARA COUNTY PLANNING OFFICE," SHALL BE SECURELY ATTACHED TO THE FENCE IN A VISUALLY PROMINENT LOCATION.

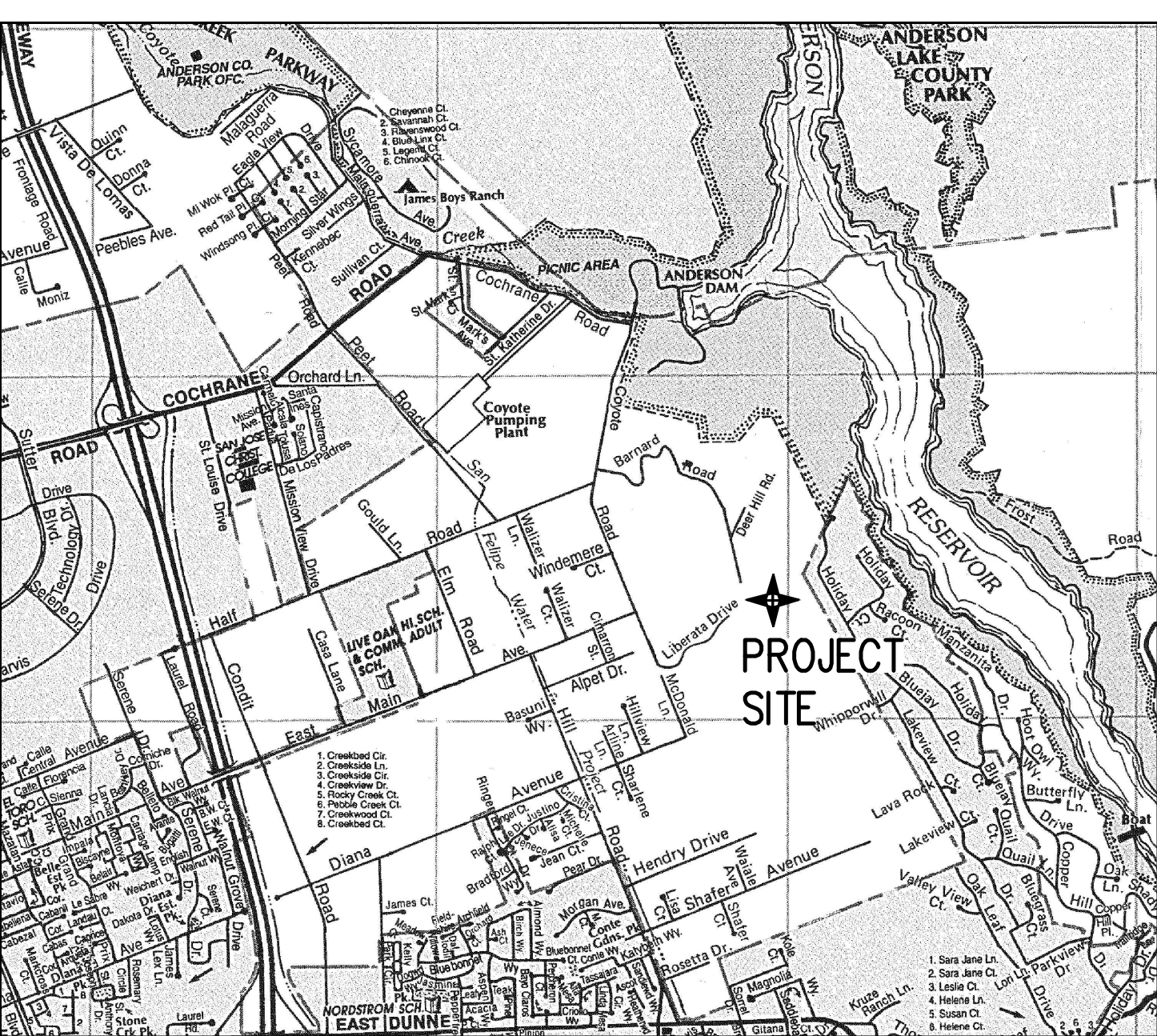
COUNTY OF SANTA CLARA DEPT. OF ROADS AND AIRPORTS ISSUED BY: _____ DATE: _____ ENCROACHMENT PERMIT NO. _____	COUNTY OF SANTA CLARA LAND DEVELOPMENT ENGINEERING & SURVEYING GRADING/DRAINAGE PERMIT NO. _____ ISSUED BY: _____ DATE: _____
--	--

NO WORK SHALL BE DONE IN THE COUNTY'S RIGHT-OF-WAY WITHOUT AN ENCROACHMENT PERMIT, INCLUDING THE STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT OF PORTABLE TOILETS.

I HEREBY STATE THAT THESE PLANS ARE IN COMPLIANCE WITH ADOPTED COUNTY STANDARDS, THE APPROVED TENTATIVE MAP (OR PLAN) AND CONDITIONS OF APPROVAL PERTAINING THERETO DATED _____ FILE(S) NO. 10080-17B(R1)-17G(R1)-17D(R1)-17E(R1)

DATE _____ 69278
R.C.E. NO.
EXP 6-30-_____

ISSUANCE OF A PERMIT AUTHORIZING CONSTRUCTION DOES NOT RELEASE THE DEVELOPER, PERMITEE OR ENGINEER FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS CONTAINED IN THE PLANS. IF, DURING THE COURSE OF CONSTRUCTION, THE PUBLIC INTEREST REQUIRES A MODIFICATION OF (OR DEPARTURE FROM) THE SPECIFICATIONS OF THE PLANS, THE COUNTY SHALL HAVE THE AUTHORITY TO REQUIRE THE SUSPENSION OF WORK, AND THE NECESSARY MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.



1. THE DEVELOPER IS RESPONSIBLE FOR THE INSTALLATION OF THE WORK PROPOSED ON THE EROSION CONTROL PLAN. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE DESIGN OF THE EROSION CONTROL PLANS AND ANY MODIFICATIONS OF THE EROSION CONTROL PLANS TO PREVENT ILLICIT DISCHARGES FROM THE SITE DURING CONSTRUCTION.

2. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.

3. CLEAR AND GRUB BUILDING PAD AND DRIVEWAY
4. BUILDING PAD AND DRIVEWAY GRADING
5. CONSTRUCT RETENTION POND
6. CONSTRUCT DRIVEWAY APPROACH PER COUNTY STD. B/4
7. FURNISH AND INSTALL WATER TANKS AND WATER SYSTEM.
8. FURNISH & INSTALL WHARF FIRE HYDRANT PER COUNTY STDs.

1. FURNISH AND INSTALL SEPTIC TANK AND LEACHFIELD

1	COVER SHEET
2	OVERALL SITE PLAN
3	GRADING & DRAINAGE PLAN – OVERALL
4	GRADING & DRAINAGE PLAN – HOUSE
5	DRIVEWAY PROFILE & DETAILS
6	NOTES, SECTIONS, ABBREVIATIONS & LEGEND
7	EROSION CONTROL PLAN
BMP1&2	BEST MANAGEMENT PRACTICES

ENGINEER'S NAME: HANNA & BRUNETTI

ADDRESS: 7651 EIGLEBERRY STREET, GILROY CA 95020

PHONE NO. 408 842-2173

FAX NO. 408 842-3662

IMPROVEMENT PLANS

FOR THE
HOME GRADING AND DRAINAGE
ON THE LANDS OF GUTIERREZ
45 LIBERATA DRIVE, MORGAN HI

PARCEL 4; PARCEL MAP RECORDED IN BOOK 404 OF MAPS, AT PAGE 7

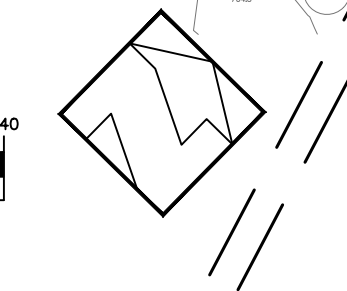
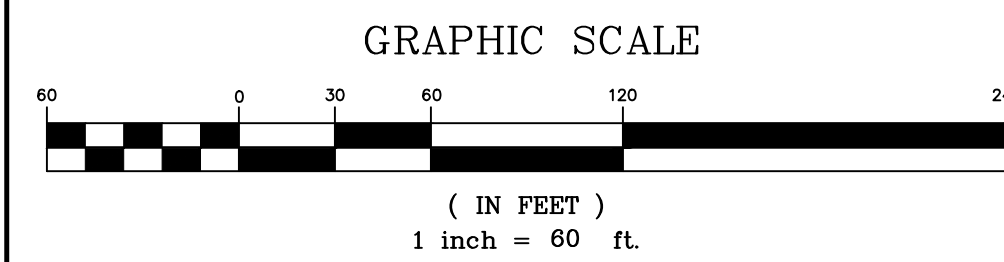
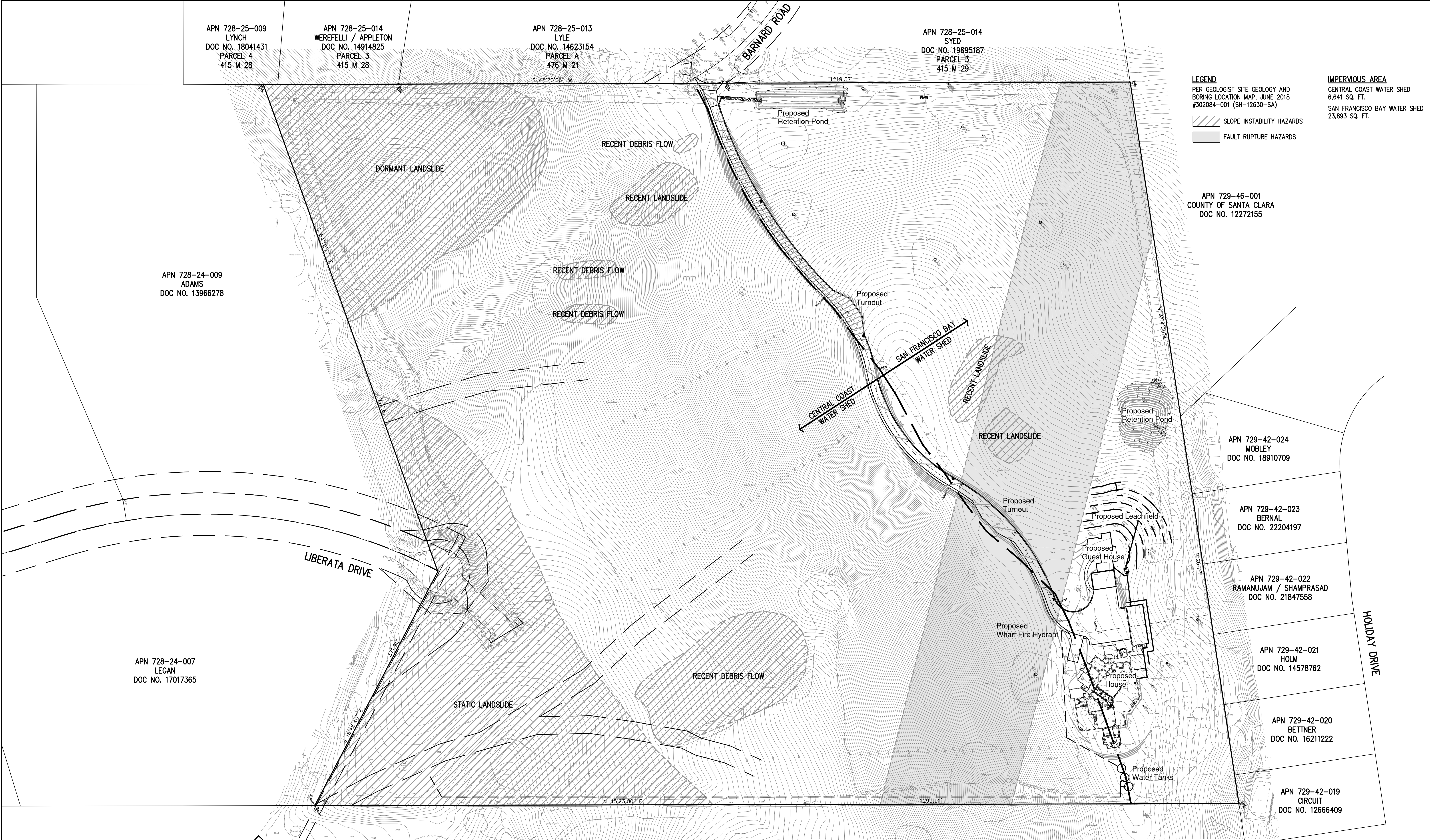
DATED SEPTEMBER 19th, 197

OCTOBER 2020			NO SCALE
Revision 1	Date	APN 728-24-008	Sheet 1 of 9
Revision 2	Date	Co. File	
Revision 3	Date	PLN17-10080(R3)	

JOB NO. 13036

PLAN # _____ OF _____ SHEET _____

THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR PART, IS PROHIBITED. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS.



REVISIONS:		
DATE	DESCRIPTION	BY:



DATE: <i>OCTOBER 2010</i>
HORIZ. SCALE: <i>1"=60'</i>
VERT. SCALE: <i>NONE</i>
DESIGNED BY: <i>AM</i>
CHECKED BY: <i> </i>
DRAWN BY: <i>TM</i>

date: 20
Hanna - Brunetti

Amanda Joy Musy-Verdel

R.C.E. # 69,278
expires: 6/30/



REFERENCES

UNINCORPORATED
OCTOBER 2020

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

Overall Site Plan

Lands of Gutierrez - apn 728-24-008

SANTA CLARA COUNTY
CALIFORNIA

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR
CONSTRUCTION PERMIT AND PLAN
COVER SHEET FOR SPECIAL
CONDITIONS AND PERMIT NUMBERS

SHEET	2
OF 9	
JOB NO.	13036

APPLICANT: GUTIERREZ

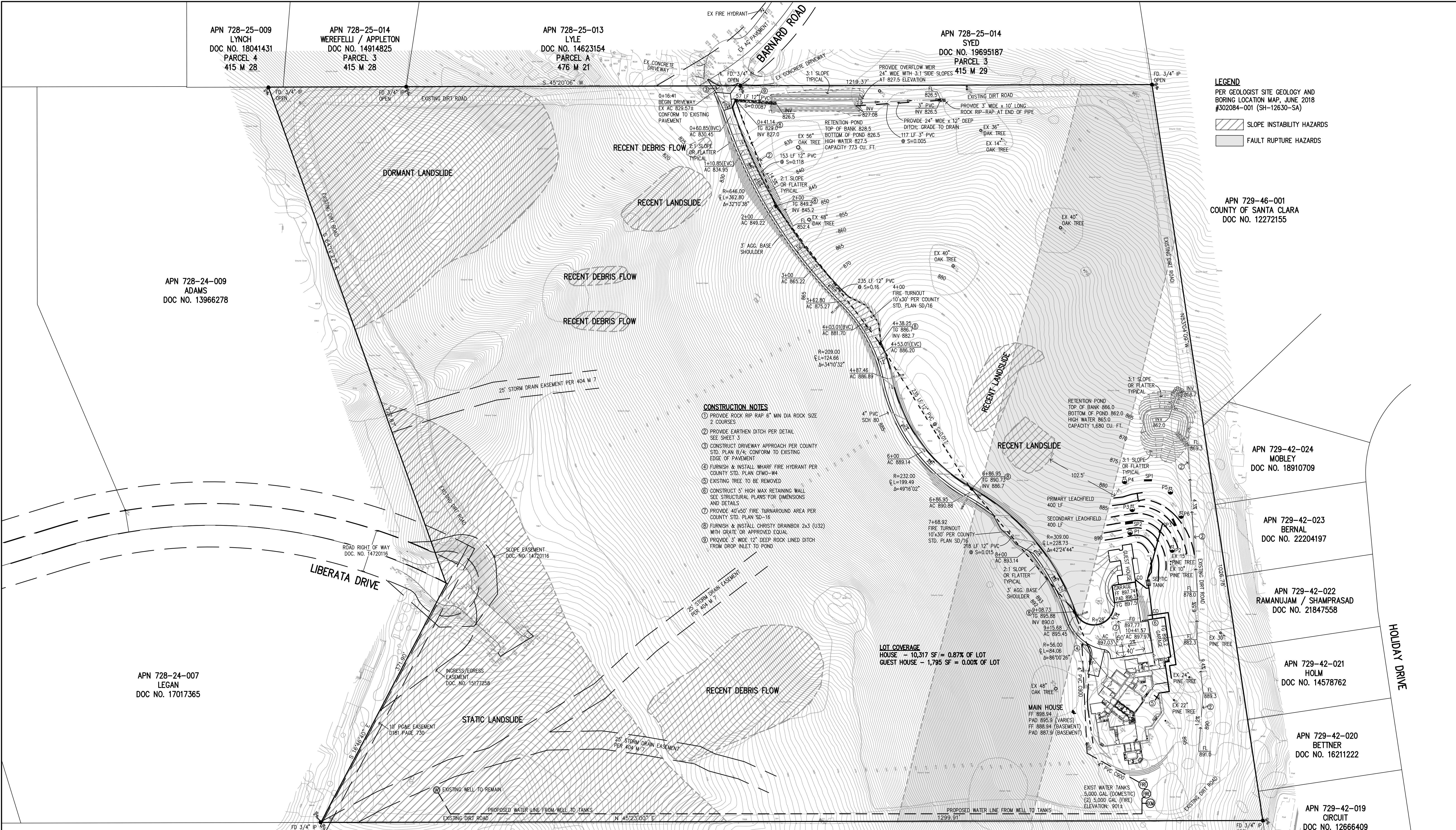
ROAD: 2245 LIBERATA DRIVE

COUNTY FILE NO.: PLN17-10080 (R3)

JOB NO. 13036

PLAN # OF SHEET

THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS IN THE ENGINEER WITHOUT PREJUDICE.



LEGEND
PER GEOLOGIST SITE GEOLOGY AND BORING LOCATION MAP, JUNE, 2018 #302084-001 (SH-12630-SA)
SLOPE INSTABILITY HAZARDS
FAULT RUPTURE HAZARDS

APN 729-46-001
COUNTY OF SANTA CLARA
DOC NO. 12272155

APN 729-42-024
MOBLEY
DOC NO. 18910709

APN 729-42-023
BERNAL
DOC NO. 22204197

APN 729-42-022
RAMANUJAM / SHAMPRASAD
DOC NO. 21847558

APN 729-42-021
HOLM
DOC NO. 14578762

APN 729-42-020
BETTNER
DOC NO. 16211222

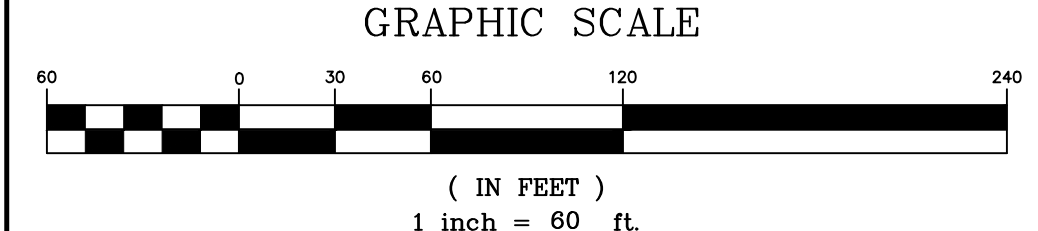
APN 729-42-019
CIRCUIT
DOC NO. 12666409

- CONSTRUCTION NOTES**
- 1. PROVIDE ROCK RIP RAP 6" MIN DIA ROCK SIZE 2 COURSES
 - 2. PROVIDE EARTHEN DITCH PER DETAIL SEE SHEET 3
 - 3. CONSTRUCT DRIVEWAY APPROACH PER COUNTY STD. PLAN 5/4. CONFORM TO EXISTING EDGE OF PAVEMENT
 - 4. FURNISH & INSTALL WHARF FIRE HYDRANT PER COUNTY STD. PLAN OFWO-W4
 - 5. EXISTING TREE TO BE REMOVED
 - 6. CONSTRUCT 5' HIGH MAX RETAINING WALL SEE STRUCTURAL PLANS FOR DIMENSIONS AND DETAILS
 - 7. PROVIDE 40'x60' FIRE TURNAROUND AREA PER COUNTY STD. PLAN SD-16
 - 8. FURNISH & INSTALL CHRISTY DRAINBOX 2x3 (U32) WITH GRATE OR APPROVED EQUAL
 - 9. PROVIDE 3' WIDE 12" DEEP ROCK LINED DITCH FROM DROP INLET TO POND

LOT COVERAGE
HOUSE - 10,317 SF = 0.87% OF LOT
GUEST HOUSE - 1,795 SF = 0.00% OF LOT

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS



REVISIONS:		
DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1990
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3682
EMAIL: ENGINEERING@HANNABRUNETTI.COM

DATE: OCTOBER 2020
HORIZ. SCALE: 1"=60'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY:
DRAWN BY: TM

date: 20
Hanna - Brunetti

Amanda Joy Musy-Verdel

R.C.E. # 69,278
expires: 6/30/



REFERENCES

UNINCORPORATED
OCTOBER 2020

Grading & Drainage Plan - Overall

Lands of Gutierrez - apn 728-24-008

SANTA CLARA COUNTY
CALIFORNIA

SHEET
3
OF 9
JOB NO.
13036

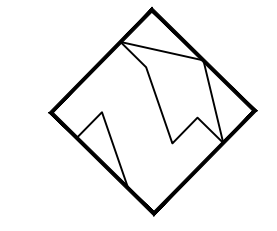
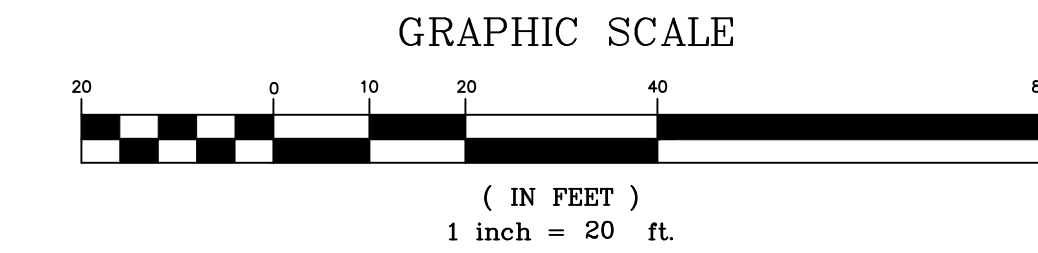
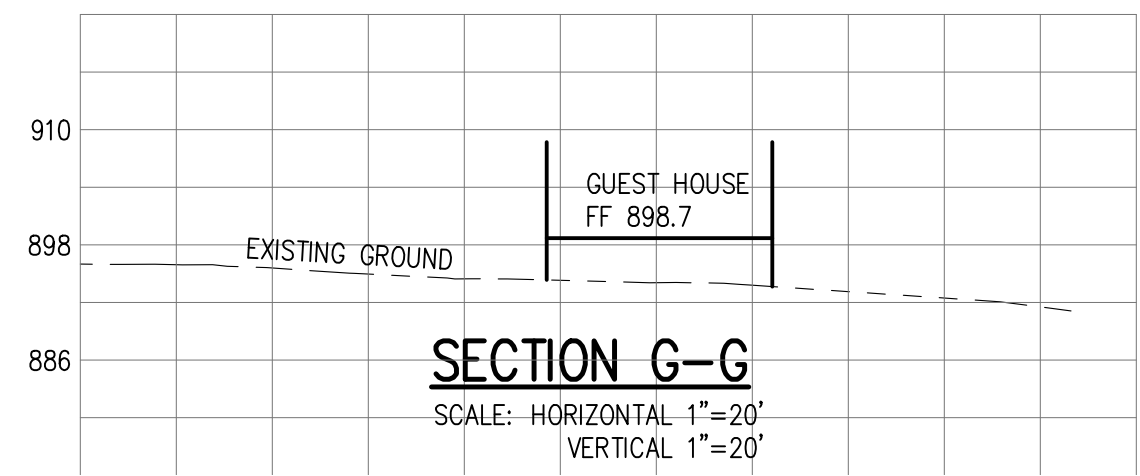
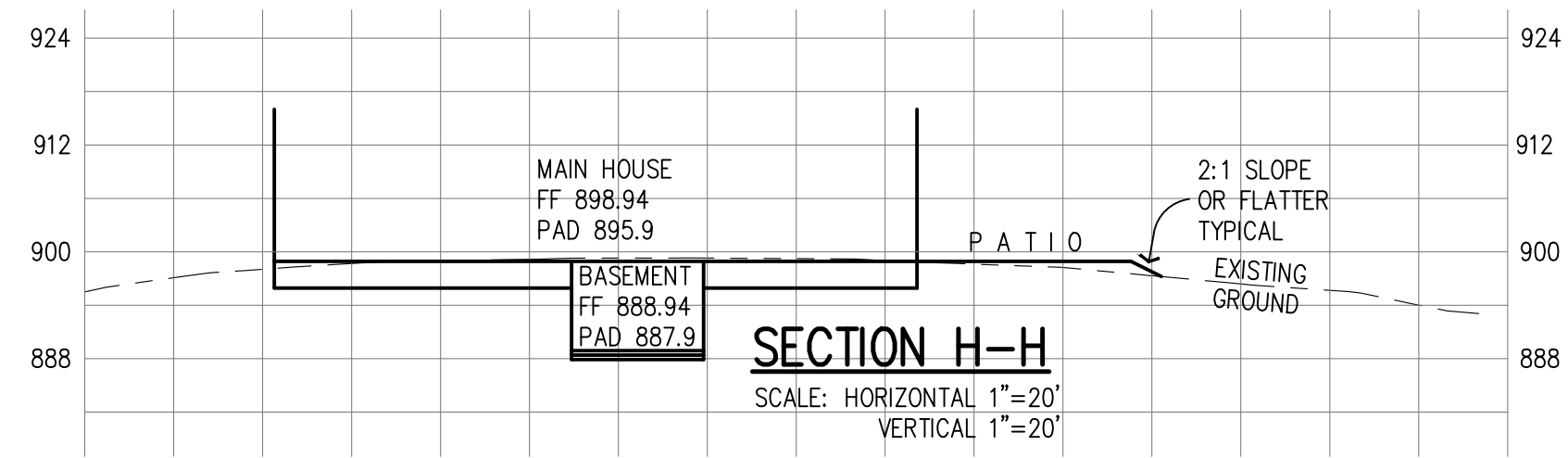
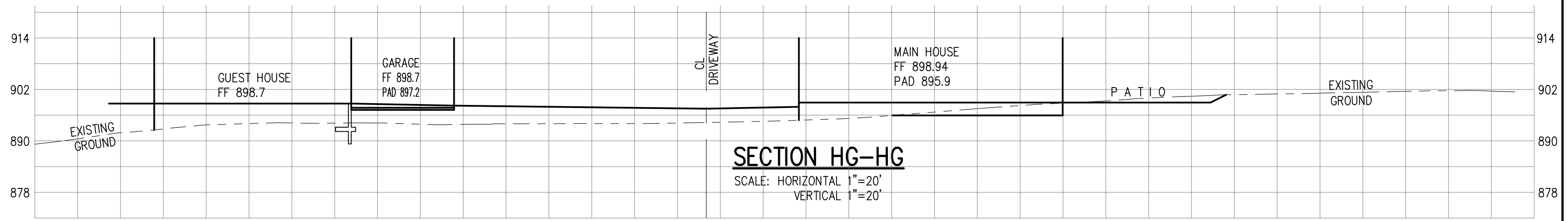
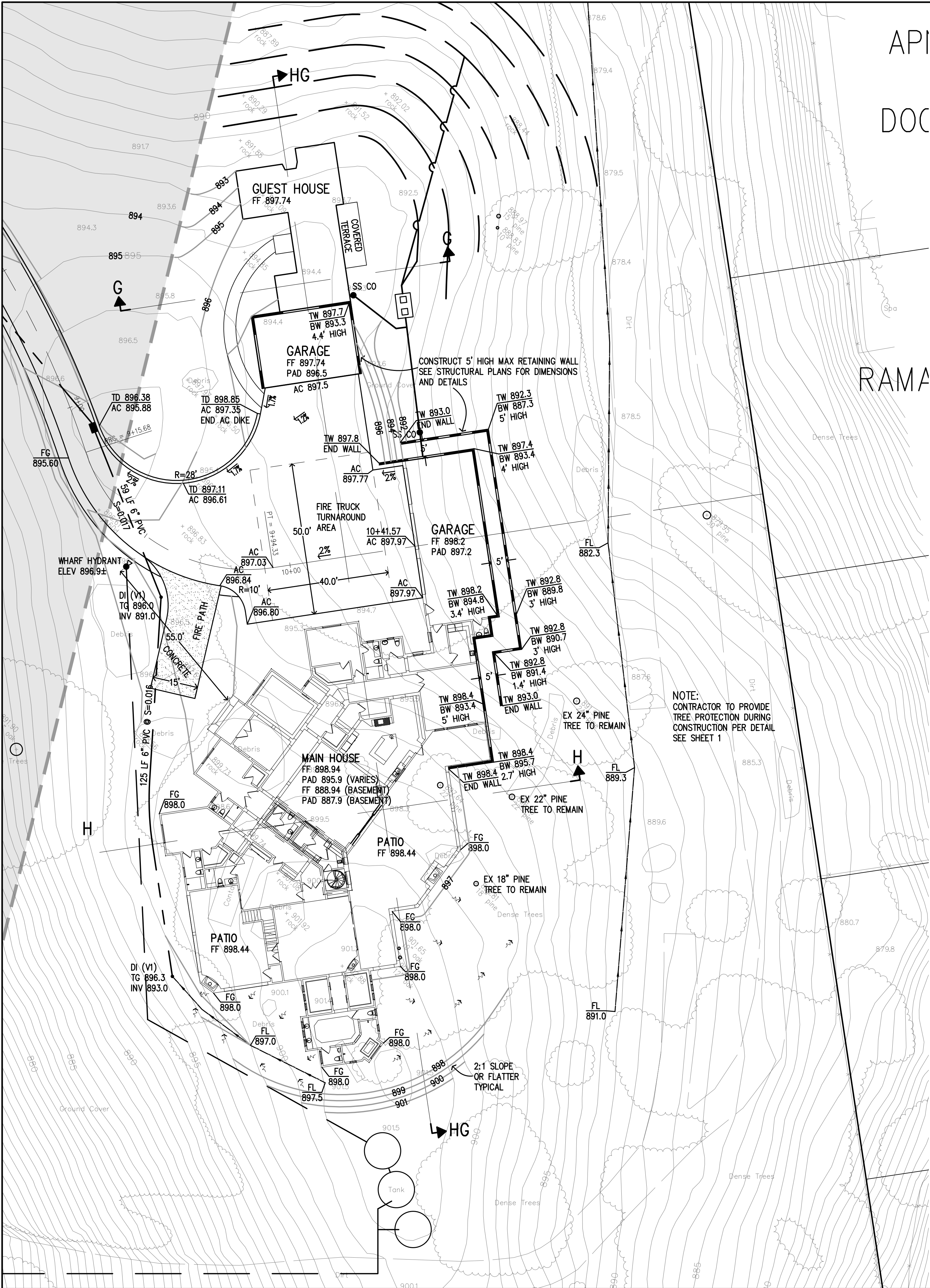
APPLICANT: GUTIERREZ

ROAD: 2245 LIBERATA DRIVE

COUNTY FILE NO.: PLN17-10080 (R3)

JOB NO. 13036

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COVER SHEET FOR SPECIAL
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OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING@HANNABRUNETTI.COM

DATE: *OCTOBER 2020*
HORIZ. SCALE: *1"=20'*
VERT. SCALE: *NONE*
DESIGNED BY: *AM*
CHECKED BY:
DRAWN BY: *TM*

date: 20
Hanna - Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69,278
expires: 6/30/



REFERENCES

UNINCORPORATED
OCTOBER 2020

Grading & Drainage Plan - House

Lands of Gutierrez - apr 728-24-008

SANTA CLARA COUNTY
CALIFORNIA

SHEET
4
OF 9
JOB NO. 13036

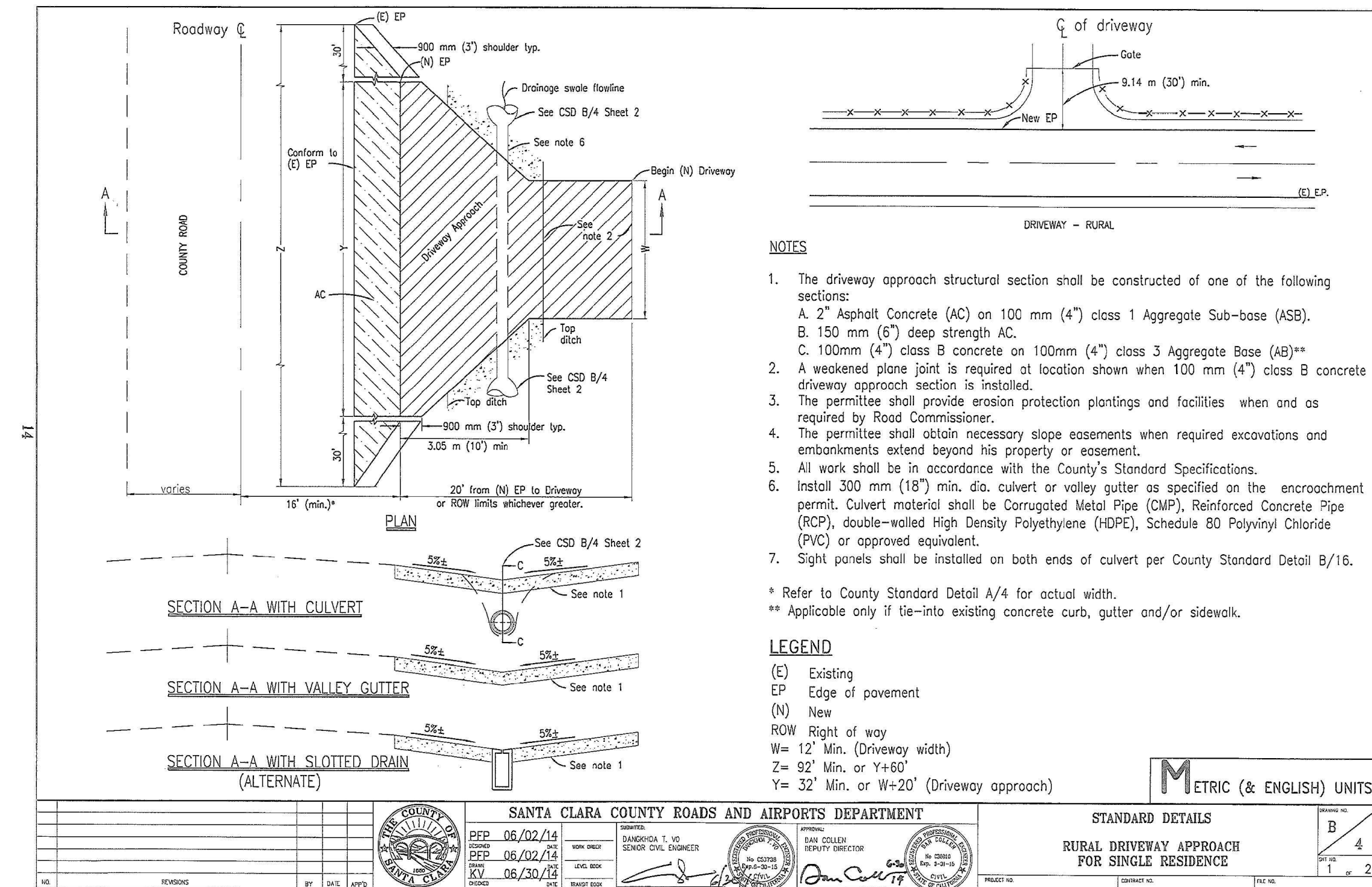
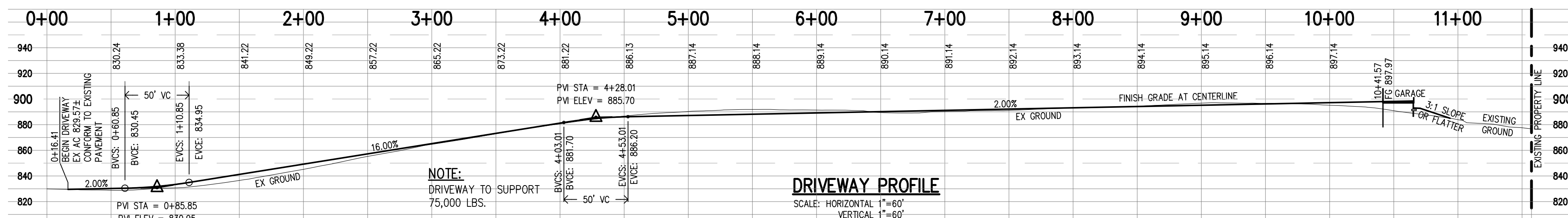
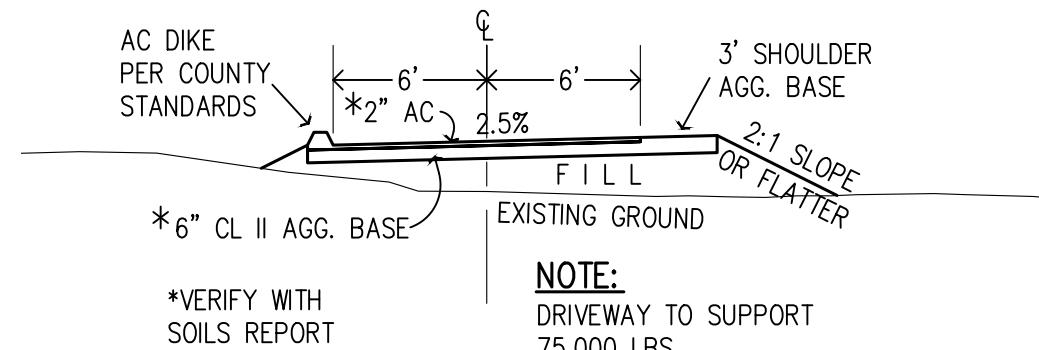
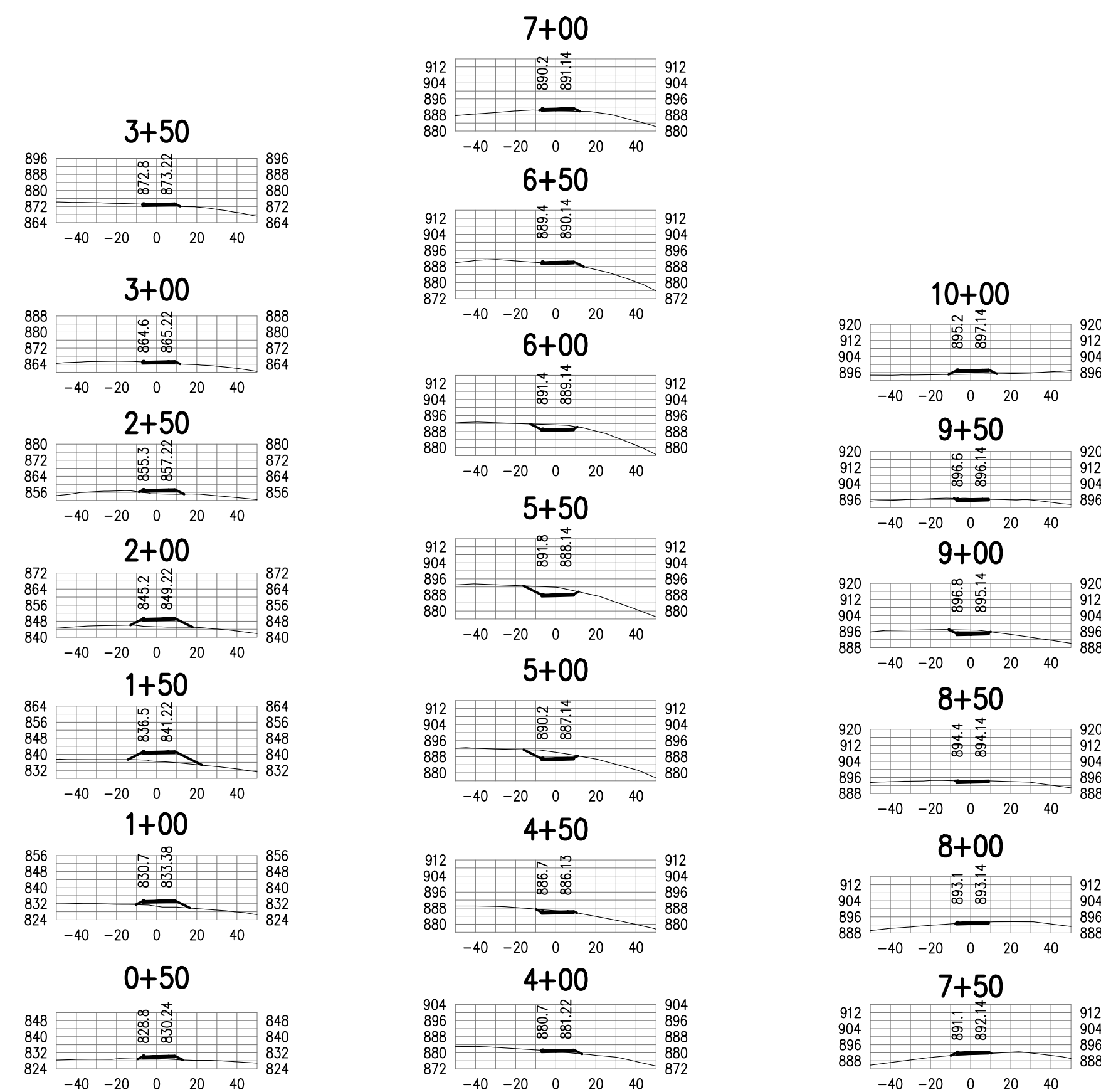
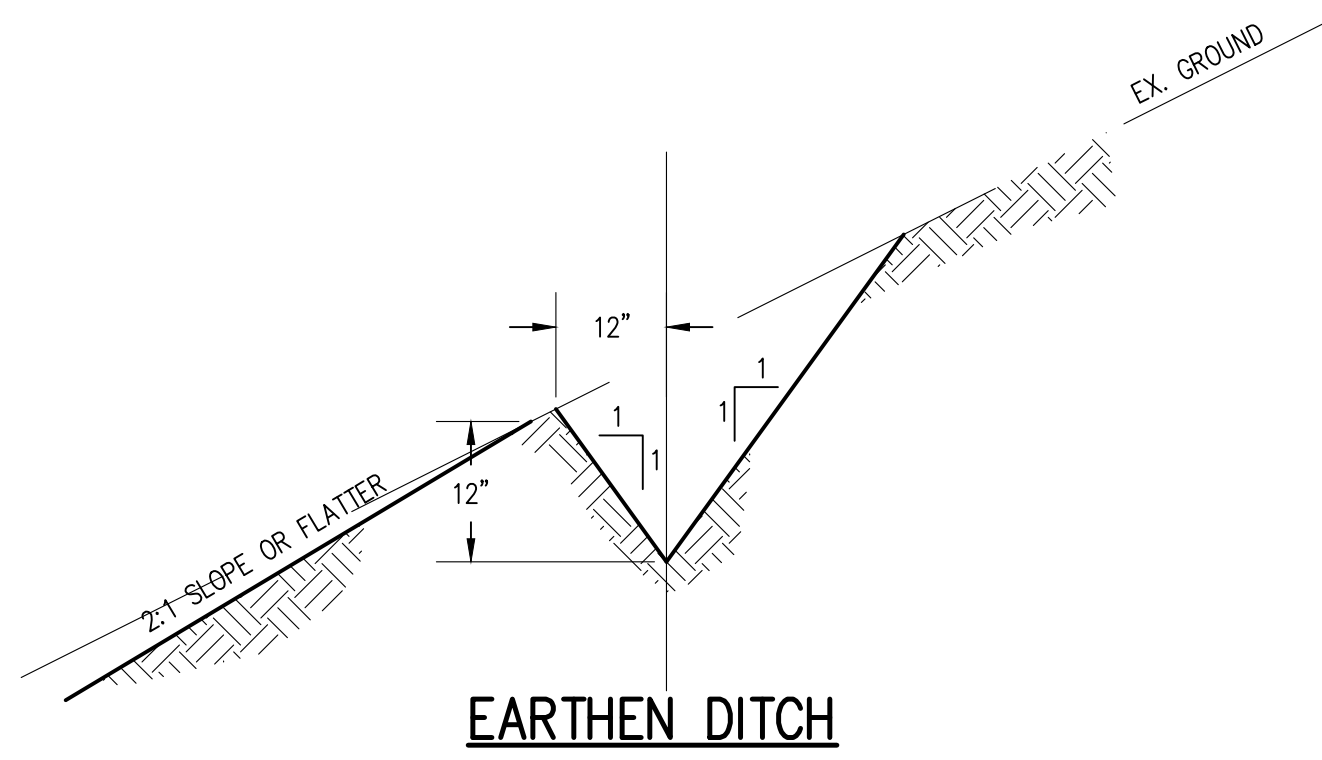
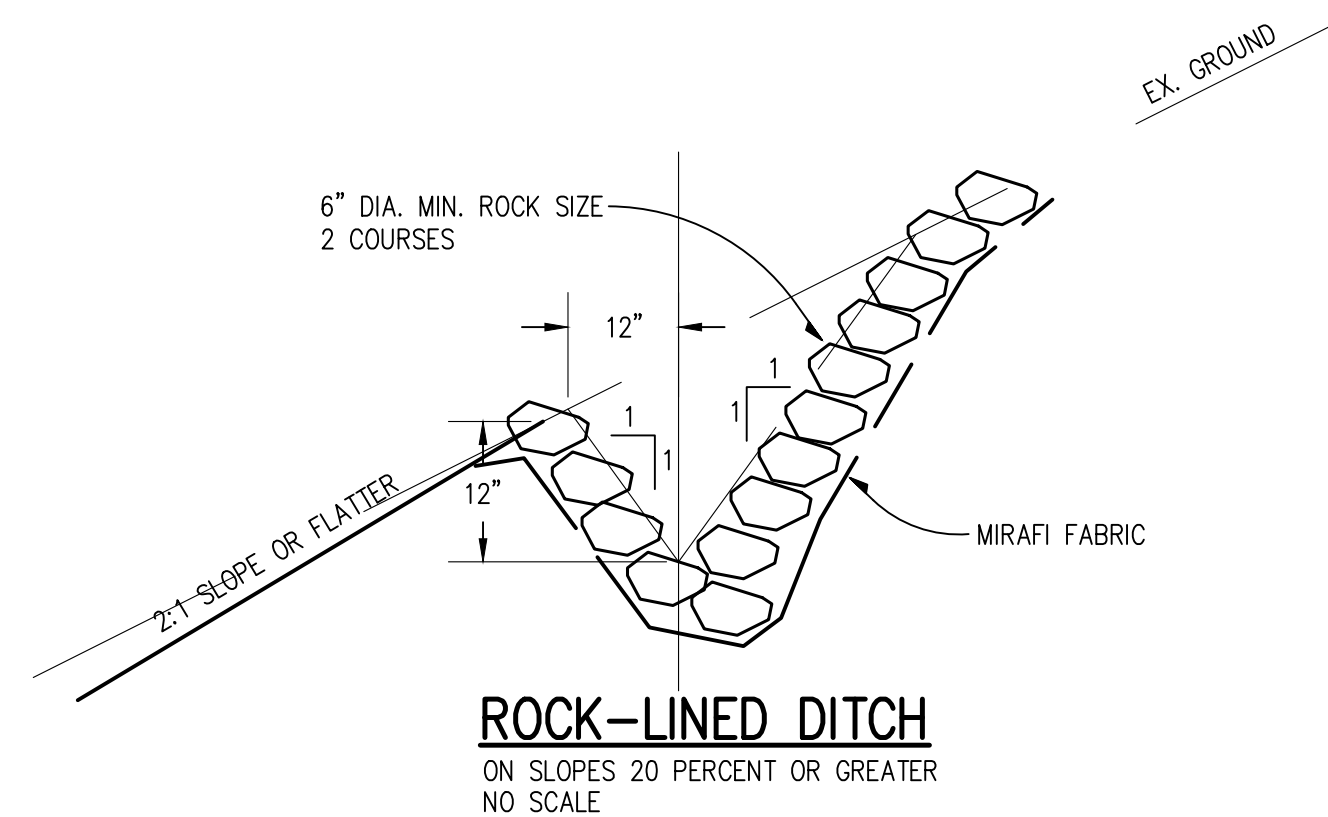
APPLICANT: GUTIERREZ

ROAD: 2245 LIBERATA DRIVE

COUNTY FILE NO.: PLN17-10080 (R3)

JOB NO. 13036

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STATION	AREAS		VOLUMES		CUMULATIVE VOLUMES	
	Square Feet		Cubic Yards		Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
0+00	0.00	0.00				
0+50	0.00	17.65	0.00	16.35	0.00	16.35
1+00	0.00	47.92	0.00	60.71	0.00	77.06
1+50	0.00	117.15	0.00	152.84	0.00	229.90
2+00	0.00	84.06	0.00	186.31	0.00	416.21
2+50	0.00	26.92	0.00	102.76	0.00	518.97
3+00	3.10	3.69	2.87	28.34	2.87	547.31
3+50	4.37	2.34	6.92	5.58	9.80	552.89
4+00	3.69	7.77	7.47	9.36	17.26	562.25
4+50	0.50	14.89	3.88	20.98	21.14	583.24
5+00	30.16	0.51	28.39	14.27	49.53	597.51
5+50	36.56	0.11	61.78	0.58	111.31	598.08
6+00	12.87	0.86	45.77	0.90	157.08	598.98
6+50	0.00	59.96	11.92	56.32	168.99	655.30
7+00	0.00	56.12	0.00	107.48	168.99	762.78
7+50	0.00	56.30	0.00	104.09	168.99	866.87
8+00	0.00	31.90	0.00	81.67	168.99	948.54
8+50	0.00	25.53	0.00	53.18	168.99	1001.71
9+00	3.88	4.18	3.60	27.51	172.59	1029.22
9+50	0.00	21.39	3.60	23.68	176.18	1052.90
10+00	0.00	85.36	0.00	98.85	176.18	1151.74
10+40	0.00	224.47	0.00	229.51	176.18	1381.25
			0.00	0.00	176.18	1381.25

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

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[illegible]

DATE: OCTOBER 2020
HORIZ. SCALE: AS SHOWN
VERT. SCALE: NONE
DESIGNED BY: AM.
CHECKED BY: _____
DRAWN BY: _____ T.M.

date: _____ 20____
Hanna - Brunetti

Amanda Joy Musy-V

R.C.E. # 69,278
expires: 6/30/



REFERENCES

UNINCORPORATED
OCTOBER 2020

Driveway Profile, Sections & Details

Lands of Gutierrez -apn 728-24-008

SANTA CLARA COUNTY
CALIFORNIA

SHEET

5

OF 9

JOB NO. 13036

JOB NO. 13036

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PROJECT NOTES:

1. THE LOCATION OF THE BUILDING PADS AND/OR FOUNDATIONS ARE TO BE ESTABLISHED BY A PERSON AUTHORIZED TO PRACTICE LAND SURVEYING. A LETTER SIGNED AND SEALED BY THAT AUTHORIZED PERSON, STATING THAT HE/SHE HAS LOCATED THE BUILDING CORNERS, AND THEIR LOCATIONS CONFORM TO COUNTY BUILDING SETBACK REQUIREMENTS PER THE APPROVED BUILDING PLANS IS REQUIRED TO BE SUBMITTED TO THE COUNTY ENGINEER.
2. "THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE GROUND WHICH ARE SHOWN TO BE REMOVED. ANY OTHER SUCH TREES ARE NOT TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED."
3. NO TREES ARE TO BE REMOVED
4. PRIOR TO GRADING COMPLETION AND RELEASE OF BOND, ALL GRADED AREAS SHALL BE RESEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADED SLOPES AND REDUCE THE POTENTIAL FOR EROSION ON THE SUBJECT SITE.
5. BOTH DRAINFIELDS MUST BE STAKED AND STRUNG PRIOR TO APPROVAL OF THE SEPTIC DESIGN TO VERIFY THAT THE PROPOSED SEPTIC DESIGN WILL ACTUALLY FIT INTO THE PROPOSED LEACHFIELD AREA, AND CONFORM TO ALL REQUIRED SETBACKS.
6. IF ARCHAEOLOGICAL RESOURCES OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL BE HALTED WITHIN 50 METERS (150 FEET) OF THE FIND UNTIL IT CAN BE EVALUATED BY A QUALIFIED ARCHAEOLOGIST. IF THE FIND IS DETERMINED TO BE SIGNIFICANT, APPROPRIATE MITIGATION MEASURES SHALL BE FORMULATED AND IMPLEMENTED.
7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
9. IN THE EVENT THAT ARCHEOLOGICAL FEATURES SHOULD BE DISCOVERED AT ANY TIME DURING THE GRADING, SCRAPING OR EXCAVATION, ALL WORK SHOULD BE HALTED IN THE VICINITY OF THE FIND AND AN ARCHAEOLOGIST SHOULD BE CONTACTED IMMEDIATELY TO EVALUATE THE DISCOVERED MATERIAL TO ASSESS ITS AREAL EXTENT, CONDITION, AND SCIENTIFIC SIGNIFICANCE. IF THE DISCOVERED MATERIAL IS DEEMED POTENTIALLY SIGNIFICANT, A QUALIFIED ARCHAEOLOGIST SHOULD MONITOR ANY SUBSEQUENT ACTIVITY IN THE PROXIMITY.
10. IN THE EVENT THAT HUMAN SKELETAL REMAINS ARE ENCOUNTERED, THE APPLICANT IS REQUIRED BY COUNTY ORDINANCE NO. B6-18 TO IMMEDIATELY NOTIFY THE COUNTY CORONER. UPON DETERMINATION BY THE COUNTY CORONER THAT THE REMAINS ARE NATIVE AMERICAN, THE CORONER SHALL CONTACT THE CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION, PURSUANT TO SUBDIVISION (c) OF SECTION 7050.5 OF THE HEALTH AND SAFETY CODE AND THE COUNTY COORDINATOR OF INDIAN AFFAIRS. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY CHAPTER. IF ARTIFACTS ARE FOUND ON THE SITE A QUALIFIED ARCHAEOLOGIST SHALL BE CONTACTED ALONG WITH THE COUNTY PLANNING OFFICE. NO FURTHER DISTURBANCE OF THE ARTIFACTS MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY PLANNING OFFICE.
11. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
12. UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%.
13. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION.
14. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THIS PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
15. AN APPROVED RESIDENTIAL FIRE SPRINKLER SYSTEM COMPLYING WITH FIRE MARSHAL STANDARD CFMO-SP6 IS REQUIRED TO BE INSTALLED THROUGHOUT THE STRUCTURE.
16. ALL NEW ON-SITE UTILITIES, MAINS AND SERVICES SHALL BE PLACED UNDERGROUND AND EXTENDED TO SERVE THE PROPOSED RESIDENCE.
17. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.
18. ALL ROOF RUNOFF SHALL BE DIRECTED TO LANDSCAPED OR NATURAL AREAS AWAY FROM BUILDING FOUNDATIONS, TO ALLOW FOR STORM WATER INFILTRATION INTO THE SOIL AND SHEET FLOW.

NOTE:

WHERE THE FIRM OF HANNA & BRUNETTI DOES NOT PROVIDE CONSTRUCTION STAKES, SAID FIRM WILL ASSUME NO RESPONSIBILITY WHATSOEVER FOR IMPROVEMENTS CONSTRUCTED THEREFROM.

NOTE TO CONTRACTOR

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKER'S DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

FLOOD ZONE STATEMENT:

FLOOD INSURANCE RATE MAP
COMMUNITY PANEL NUMBER: 06085C0463H
MAP REVISED: MAY 18, 2009

PROJECT LOCATED IN ZONE D

ZONE D DESCRIPTION
AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE

BASIS OF BEARINGS:

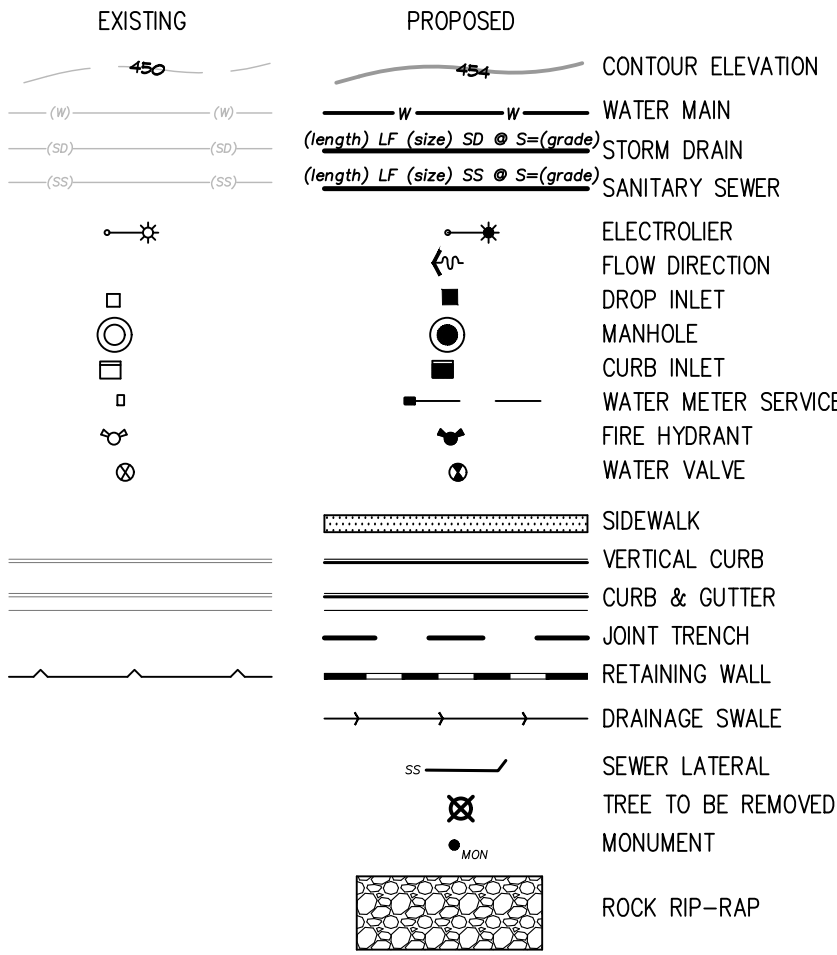
THE BASIS OF BEARINGS FOR THESE PLANS ARE BASED ON THE PARCEL MAP RECORDED IN BOOK 404 OF MAPS, AT PAGE 7 DATED SEPTEMBER 19th, 1977; SANTA CLARA COUNTY OFFICIAL RECORDS.

BENCHMARK

BENCHMARK ID: BM525
ELEVATION: 415.26 FEET (NAVD88)
ORGANIZATION: SANTA CLARA VALLEY WATER DISTRICT

DESCRIPTION:
BRASS DISK AT 17710 COCHRANE ROAD; AT INTERSECTION WITH EAST MAIN AVENUE; DISK IS ON TOP OF THE NORTHEAST END OF A 10 FEET LONG BY 0.65 FEET WIDE CONCRETE HEADWALL FOR A 24 INCH PIPE CULVERT; 23 FEET NORTHWESTERLY FROM PROJECTED CENTERLINE FOR EAST MAIN AVENUE. CITY OF MORGAN HILL

LEGEND



ABBREVIATIONS

AC	ASPHALT CONCRETE	FH	FIRE HYDRANT	RWL	RAINWATER LEADER
AB	AGGREGATE BASE	FL	FLOWLINE	S	SLOPE
AD	AREA DRAIN	FOC	FACE OF CURB	SD	STORM DRAIN PIPE
AGG	AGGREGATE	G	GAS LINE	SS	SANITARY SEWER PIPE
BC	BEGINNING OF CURVE	GM	GAS METER	STM	STORM DRAIN MANHOLE
BLDG	BUILDING	GB	GRADE BREAK	SS MH	SANITARY SEWER MANHOLE
BOC	BACK OF CURB	GUY	GUY WIRE FOR POLE	SP	SERVICE POLE
BO	BLOW OFF	GV	GATE VALVE	STD	STANDARD
BWF	BARBWIRE FENCE	HDPE	HIGH DENSITY POLYETHYLENE	SQ	SQUARE
CATV	CABLE TELEVISION	HP	HIGH POINT	SW	SIDEWALK
CB	CATCH BASIN	INV	INVERT OF PIPE	T	TELEPHONE LINE
C&G	CURB & GUTTER	IP	IRON PIPE	TBM	TEMPORARY BENCHMARK
CI	CURB INLET	JP	JOINT POLE	TC	TOP OF CURB
CL	CENTERLINE	JT	JOINT TRENCH	TG	TOP OF GRATE
CMP	CORRUGATED METAL PIPE	LF	LINEAR FEET	TOB	TOP OF BANK
CMU	CONCRETE MASONRY UNIT	LP	LOW POINT	TOE	TOE OF BANK
CO	CLEAN OUT	MAX	MAXIMUM	TW	TOP OF WALL
CONC	CONCRETE	MIN	MINIMUM	TYP	TYPICAL
CONST	CONSTRUCTION	N.I.C.	NOT IN CONTRACT	W	WATER LINE
DI	DROP INLET	(N)	NEW	WM	WATER METER
DIP	DUCTILE IRON PIPE	OHU	OVERHEAD UTILITY	WV	WATER VALVE
DWY	DRIVEWAY	PB	PULL BOX		
E	ELECTRIC LINE	PCC	PORTLAND CONCRETE CEMENT		
EC	END OF CURVE	PL	PROPERTY LINE		
EG	EXISTING GRADE	PRC	POINT REVERSE CURVE		
ELEV	ELEVATION	P.S.E.	PUBLIC SERVICE EASEMENT		
EP	EDGE OF PAVEMENT	P.S.D.E.	PRIVATE STORM DRAIN EASEMENT		
ER	END OF RETURN	P.U.E.	PUBLIC UTILITY EASEMENT		
ESMT	EASEMENT	PVI	POINT OF VERTICAL INTERSECTION		
(E)	EXISTING	PVC	POLYVINYL CHLORIDE PIPE		
R	RADIUS	R	RADIUS		
FF	FINISH FLOOR	RCP	REINFORCED CONCRETE PIPE		
FG	FINISH GRADE	R/W	RIGHT OF WAY		

APPROVED FOR ISSUANCE
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PRELIMINARY PLANS
NOT FOR CONSTRUCTION

Notes, Abbreviations & Legend

Lands of Gutierrez -apn 728-24-008

UNINCORPORATED
OCTOBER 2020

SANTA CLARA COUNTY
CALIFORNIA

SHEET

6

OF 9

JOB NO.

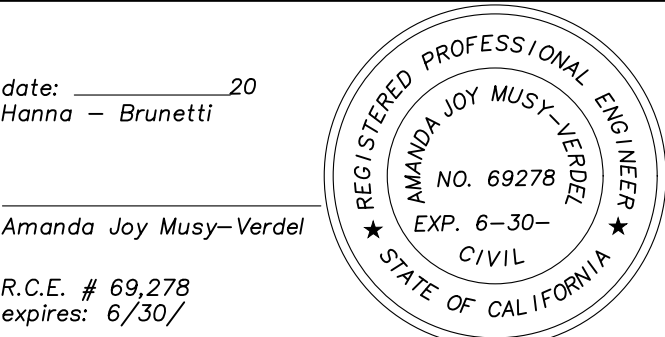
13036

APPLICANT: GUTIERREZ

ROAD: 2245 LIBERATA DRIVE

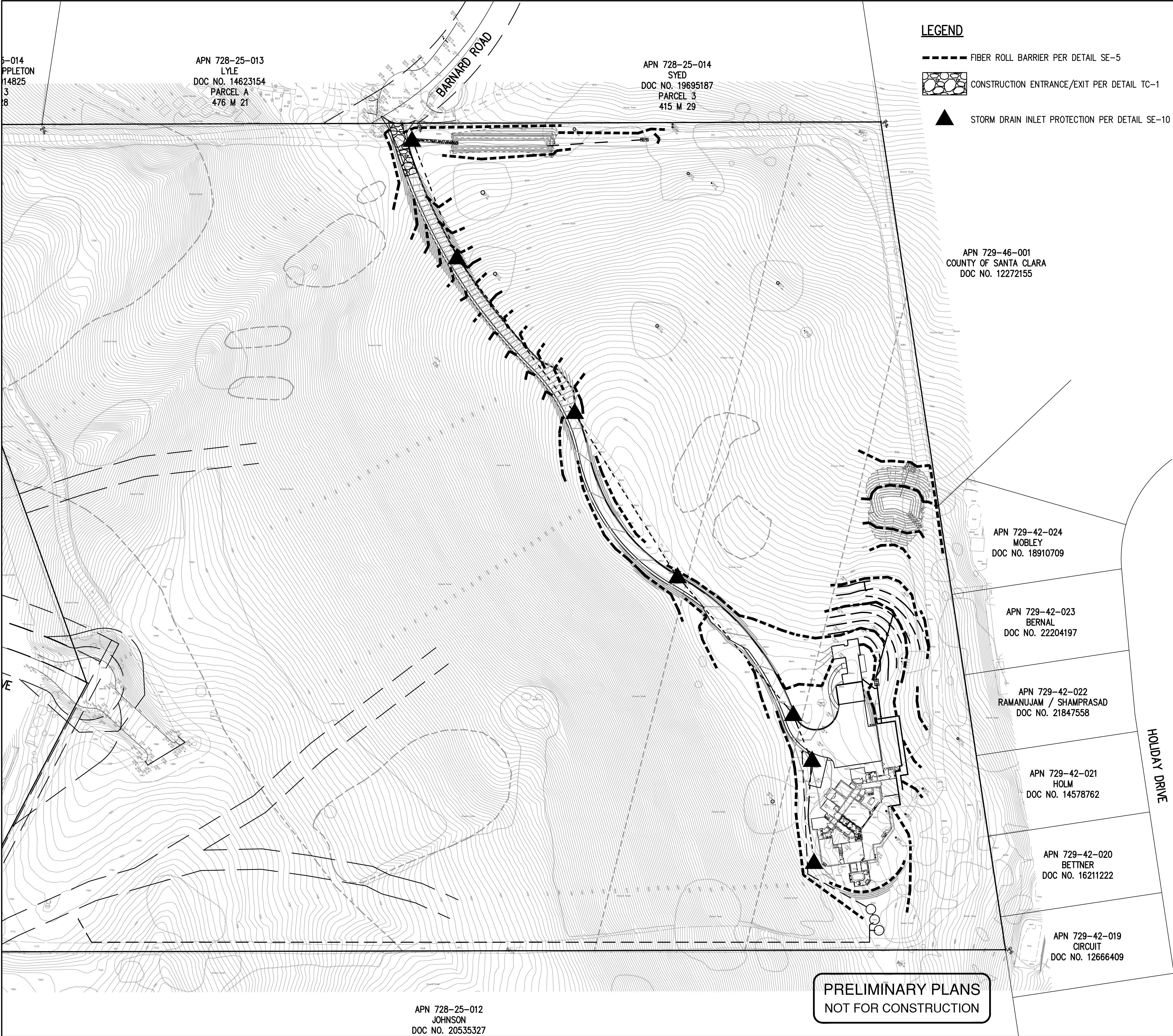
COUNTY FILE NO.: PLN17-10080 (R3)

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REFERENCES

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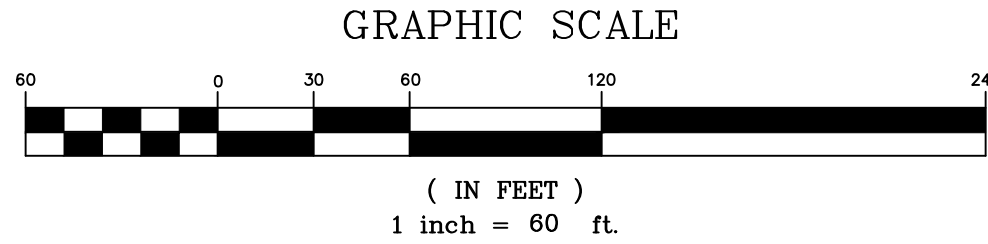
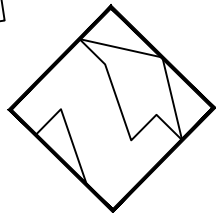


EROSION CONTROL NOTES

- EROSION CONTROL MEASURES SHALL BE EFFECTIVE FOR CONSTRUCTION DURING THE RAINY SEASON; OCTOBER 15 THROUGH APRIL 15.
- NO STORM WATER RUNOFF SHALL BE ALLOWED TO DRAIN INTO THE EXISTING AND/OR PROPOSED UNDERGROUND STORM SYSTEM UNTIL SUITABLE EROSION CONTROL MEASURES ARE FULLY IMPLEMENTED. NO STORM WATER RUNOFF SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM THAT IS NOT CLEAR, AND FREE OF SILTS.
- A FIBER ROLL BARRIER PER "DETAIL SE-5" SHALL BE INSTALL ALONG THE PERIMETER OF THE PROJECT SITE. THE LOCATION OF THE FIBER ROLL ALONG THE PERIMETER SHALL BE ADJUSTED TO ELIMINATE SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE. A FIBER ROLL SHALL ALSO BE REQUIRED AROUND THE PERIMETER OF ANY STOCKPILE OR OTHER SITE OF BARE, LOOSE EARTH.
- ALL STORM DRAIN MANHOLES, CATCH BASINS, AND/OR DROP INLETS THAT ARE TO ACCEPT STORM WATER SHALL HAVE INLET PROTECTION MEASURES PER DETAIL SE-10. STORM WATER RUNOFF SHALL BE DIRECTED TO THESE INLETS ONLY. STORM DRAIN CATCH BASINS THAT ARE NOT COMPLETE, SHALL BE BLOCKED OFF COMPLETELY.
- THE NAME, ADDRESS, AND 24 HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR THE IMPLEMENTATION OF THE EROSION CONTROL PLAN SHALL BE PROVIDED TO THE COUNTY.
- PRIOR TO GRADING, AN ENTRANCE SHALL BE CONSTRUCTED, CONSISTING OF A MINIMUM OF 50 LF OF DRAIN ROCK, 3" IN DIAMETER, PLACED OVER MIRAFI 500X (OR EQUAL) PER DETAIL TC-1. THE ENTRANCE SHALL CONFORM TO "CONSTRUCTION ENTRANCE DETAIL TC-1". THERE SHALL BE ONLY ONE ENTRANCE/EXIT POINT TO THE SITE DURING THE RAINY SEASON. THE LOCATION SHALL BE AS SHOWN ON THESE PLANS, OR AT A LOCATION APPROVED BY THE COUNTY.
- ALL AREAS OF BARE, TURNED OR DISTURBED EARTH SHALL BE STABILIZED BY USE OF HYDROSEED PER THE TABLE BELOW. ALL STOCKPILES, AND/OR BORROW AREAS SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES SUCH AS A PERIMETER SILT FENCE, AND OTHER METHODS TO PREVENT ANY EROSION OR SILTS MIGRATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THE EROSION CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS, BUT ONLY WITH THE APPROVAL OF, OR AT THE DIRECTION OF THE COUNTY INSPECTOR. THE STORM DRAIN SYSTEM SHALL MAINTAIN A FORM OF DRAIN INLET PROTECTION UNTIL COUNTY ACCEPTS THE FINAL STREET IMPROVEMENTS. THE DRAIN INLET PROTECTION SHALL BE MAINTAINED, EFFECTIVE AND SUBJECT TO COUNTY INSPECTOR'S APPROVAL.
- ALL PAVED STREET, AND AREAS ADJACENT TO THE SITE SHALL BE KEPT CLEAR OF EARTH MATERIALS AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO ELIMINATE SEDIMENT LADEN RUNOFF FROM ENTERING THE STORM DRAIN SYSTEM.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT AND REPAIR ALL EROSION CONTROL FACILITIES AT THE END OF EACH DAY DURING THE RAINY SEASON. ANY DAMAGED STRUCTURAL MEASURES ARE TO BE REPAIRED BY END OF THE DAY. TRAPPED SEDIMENT IN "SD INLETS" (AND OTHER EROSION CONTROL MEASURES) SHALL BE REMOVED TO MAINTAIN TRAP EFFICIENCY. REMOVED SEDIMENT SHALL BE DISPOSED BY SPREADING ON SITE, WHERE IT WILL NOT MIGRATE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREVENT THE FORMATION OF AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM A FAILURE TO DO SO.
- ALL DRAIN SWALES SHALL BE PER DETAIL EC-9.
- INCOMPLETE GRADING SHALL NOT BE ALLOWED. CONTRATOR SHALL MAINATIN A DRAIN PATH AS SHOWN ON THIS PLAN. SAID DRAIN PATH SHALL BE MAINTAINED LINED DRAIN SWALES, AND INLET PROTECTION AT A MINIMUM. IF PONDING DOES OCCUR ON THE SITE AFTER GRADING, THE WATER MUST BE FREE AND CLEAR OF SEDIMENT PRIOR TO DISCHARGE TO THE STORM DRAIN SYSTEM. THIS REQUIREMENT MAY NECESSITATE THE USE OF NATURAL AND/OR MECHANICAL DESILTING METHODS, SUBJECT TO APPROVAL BY THE COUNTY INSPECTOR.
- F THESE EROSION CONTROL MEASURE PROVE INADEQUATE, STRAW MULCH, TACKIFIER, AND ADDITIONAL HYDROSEEDING MAY BE REQUIRED.

HYDROSEED TABLE	
ITEM	LBS/ACRE
COMMON BARLEY	45
ANNUAL RYEGRASS	45
CRIMSON CLOVER	10
FERTILIZER 7-2-3	400
FIBER MULCH	2000
TACKIFIER	100

- ALL GRADING WORK BETWEEN OCTOBER 15th AND APRIL 15th IS AT THE DISCRETION OF THE SANTA CLARA COUNTY BUILDING OFFICIAL.
- PROVIDE SHRUBS AND/OR TREES REQUIRED ON SLOPES GREATER THAN 15 FEET IN VERTICAL HEIGHT.
- THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER SHALL INSTALL AND MAINTAIN THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL WITHIN THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, WASTE MATERIALS, AND SEDIMENT CAUSED BY EROSION FROM CONSTRUCTION ACTIVITIES ENTERING THE STORM DRAIN SYSTEM, WATERWAYS, AND ROADWAY INFRASTRUCTURE. BMP'S SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING PRACTICES APPLICABLE TO THE PUBLIC ROAD AND EXPRESSWAY FACILITIES:
 - REDUCTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN/STAGING AREAS.
 - PREVENTION OF TRACKING OF MUD, DIRT AND CONSTRUCTION MATERIALS ONTO PUBLIC ROAD RIGHT OF WAY.
 - PREVENTION OF DISCHARGE OF WATER RUNOFF DURING DRY AND WET WEATHER CONDITIONS ONTO PUBLIC ROAD RIGHT OF WAY.
- THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY SHALL HAVE SEASONALLY APPROPRIATE BMP'S INSTALLED AND MAINTAINED AT ALL TIMES.



APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR
CONSTRUCTION PERMIT AND PLAN
COVER SHEET FOR SPECIAL
CONDITIONS AND PERMIT NUMBERS

LEGEND

- FIBER ROLL BARRIER PER DETAIL SE-5
- CONSTRUCTION ENTRANCE/EXIT PER DETAIL TC-1
- STORM DRAIN INLET PROTECTION PER DETAIL SE-10

APN 729-46-001
COUNTY OF SANTA CLARA
DOC NO. 12272155

APN 729-42-024
MOBLEY
DOC NO. 18910709

APN 729-42-023
BERNAL
DOC NO. 22204197

APN 729-42-022
RAMANUJAM / SHAMPRASAD
DOC NO. 21847558

APN 729-42-021
HOLM
DOC NO. 14578762

APN 729-42-020
BETTNER
DOC NO. 16211222

APN 729-42-019
CIRCUIT
DOC NO. 12666409

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

APN 728-25-012
JOHNSON
DOC NO. 20535327

REVISIONS:		
DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1990
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EAGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING@HANNABRUNETTI.COM

DATE: *OCTOBER 2010*
HORIZ. SCALE: *1"=60'*
VERT. SCALE: *NONE*
DESIGNED BY: *AM*
CHECKED BY:
DRAWN BY: *TM*

date: 20
Hanna - Brunetti

Amanda Joy Musy-Verdel

R.C.E. # 69,278
expires: 6/30/



REFERENCES

UNINCORPORATED
OCTOBER 2020

Erosion Control Plan

Lands of Gutierrez apn 728-24-008

SANTA CLARA COUNTY
CALIFORNIA

SHEET

7

OF 9

JOB NO.

13036

APPLICANT: GUTIERREZ

ROAD: 2245 LIBERATA DRIVE

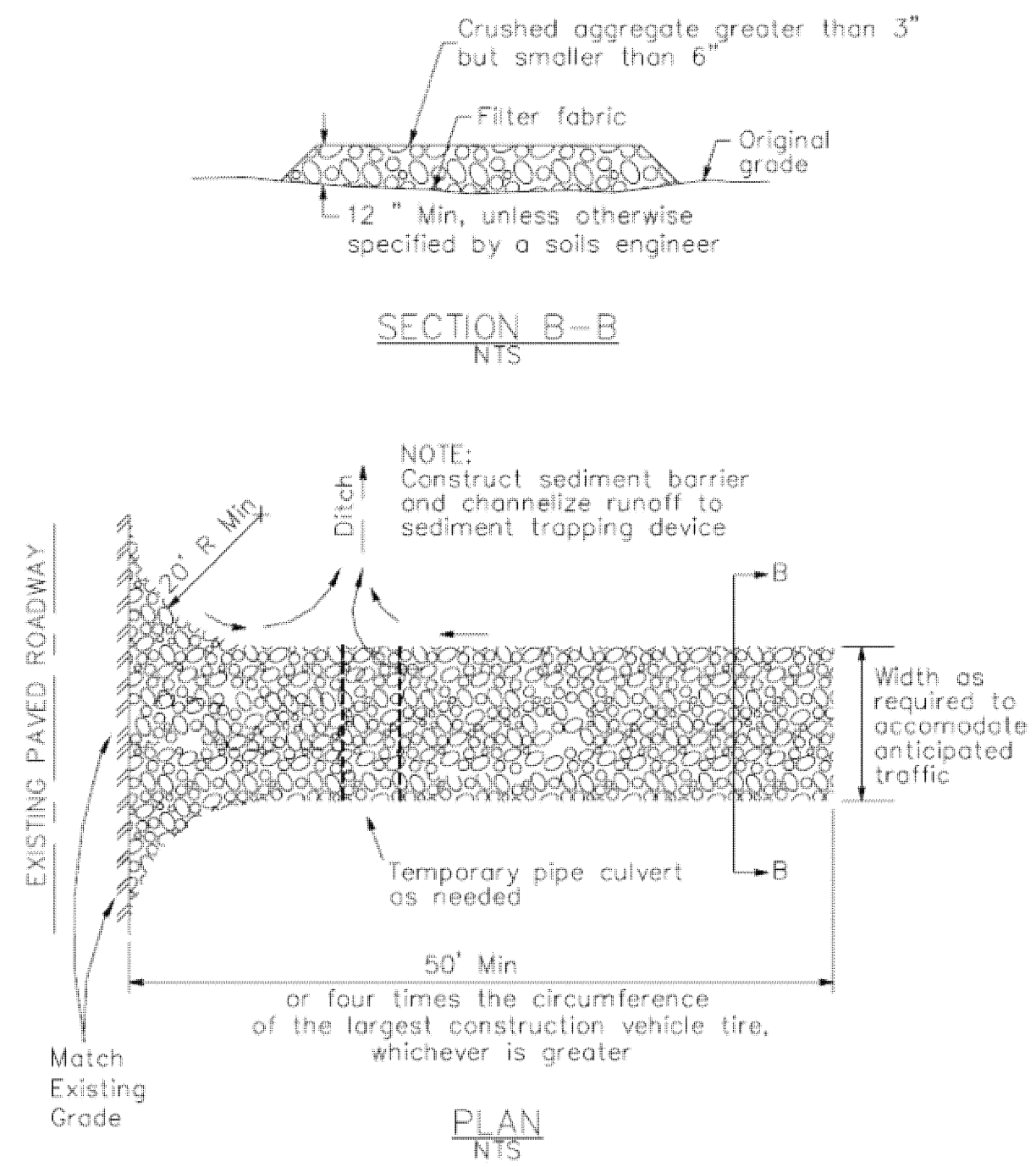
COUNTY FILE NO.: PLN17-10080 (R3)

JOB NO. 13036

3

Stabilized Construction Entrance/Exit

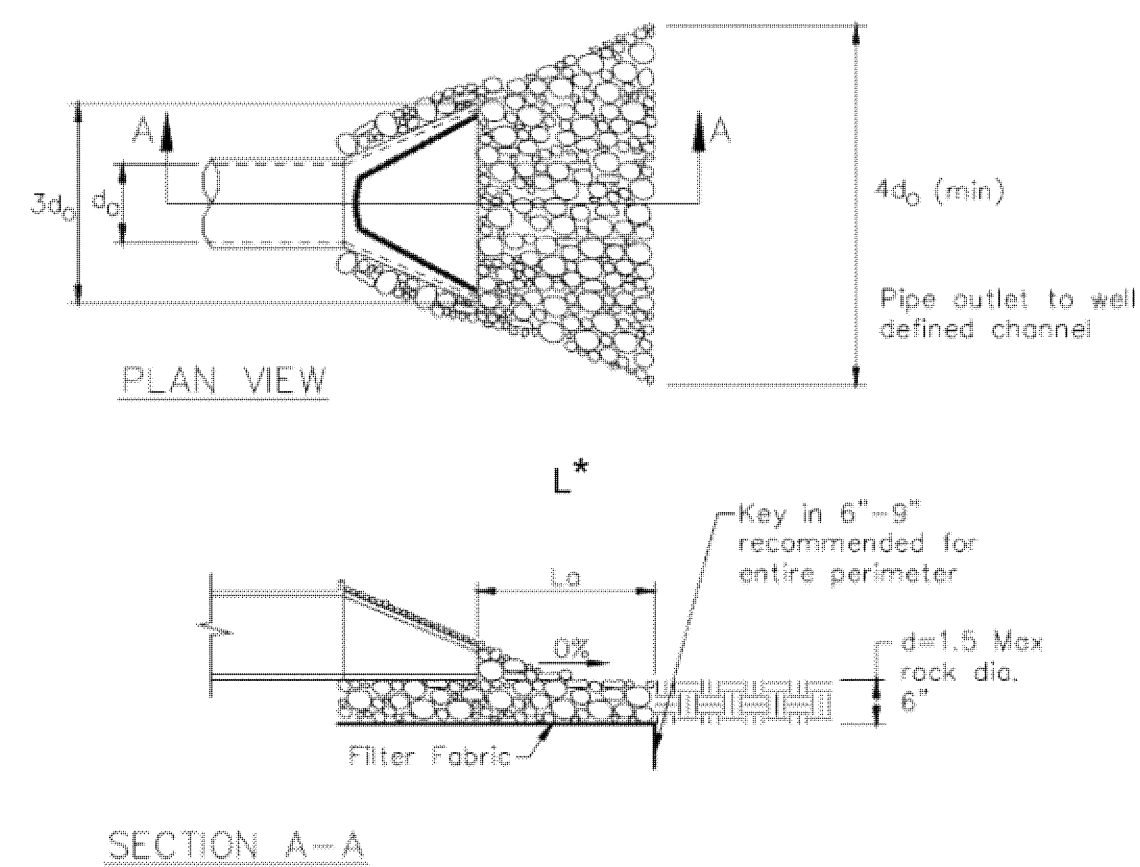
CASQA Detail TC-1



4

Velocity Dissipation Devices

CASQA Detail EC-10



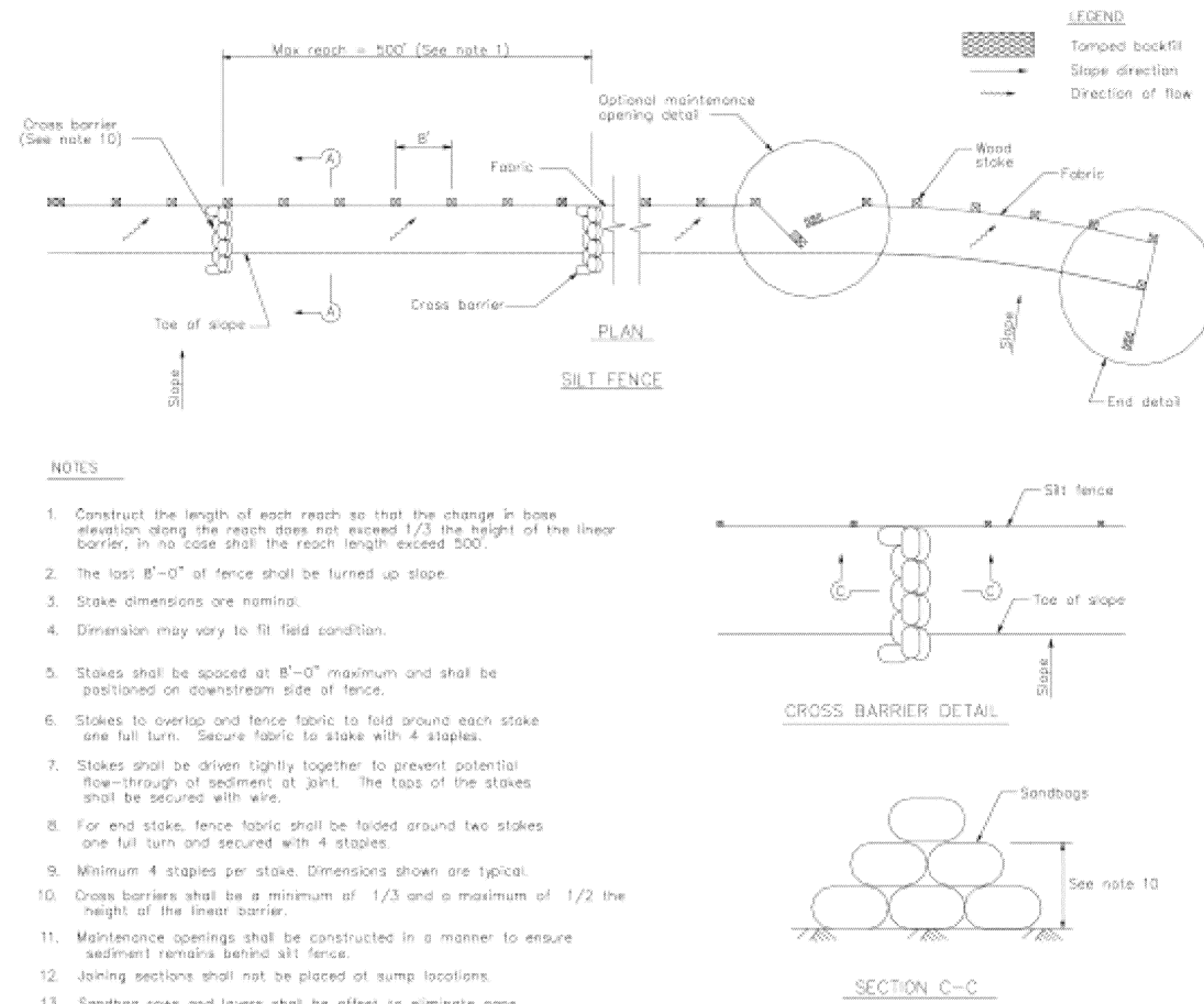
* Length per ABAG Design Standards

Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

1

Silt Fence

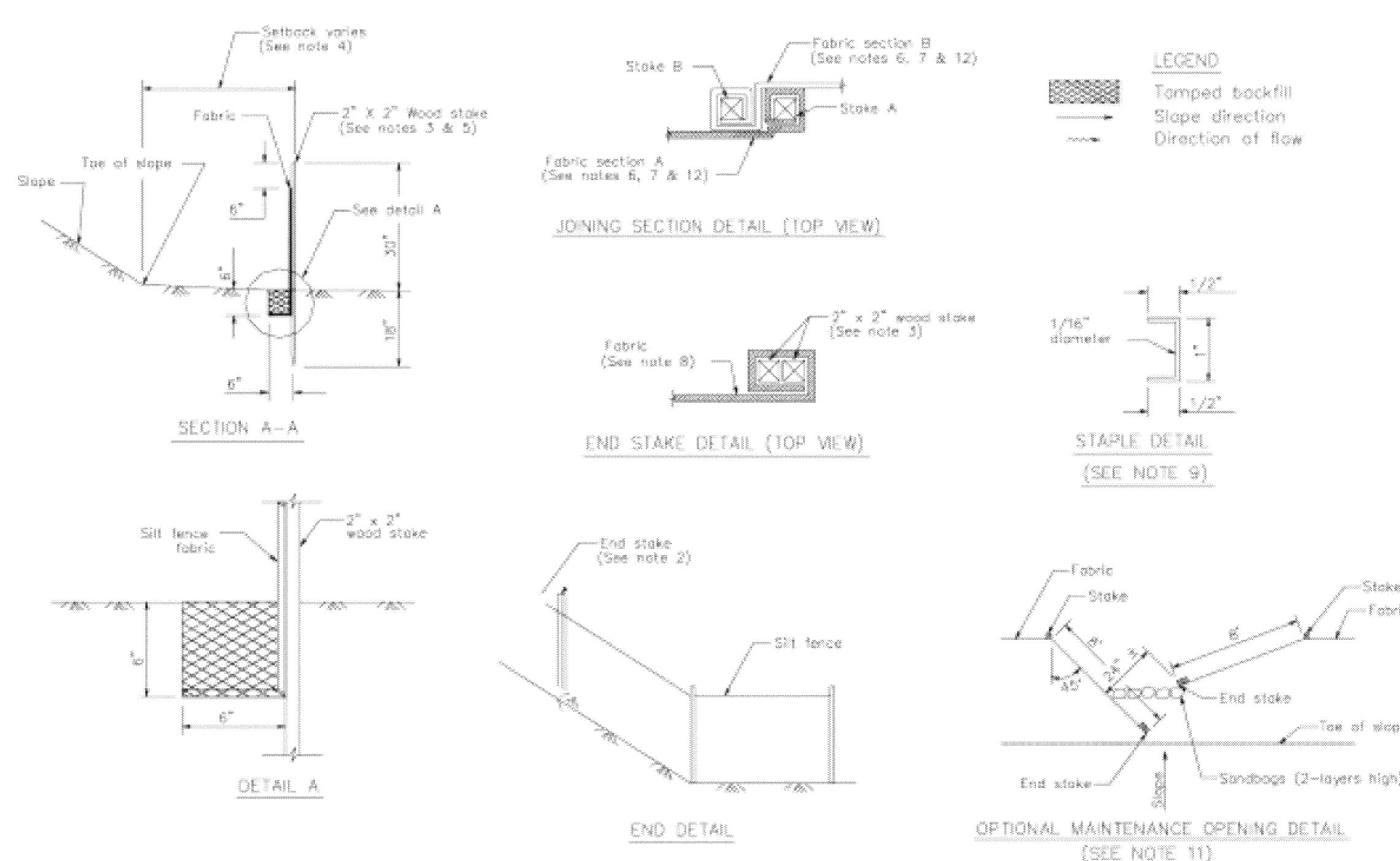
CASQA Detail SE-1



2

Silt Fence

CASQA Detail SE-1

**STANDARD BEST MANAGEMENT PRACTICE NOTES**

- Solid and Demolition Waste Management:** Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C3) or latest.
- Hazardous Waste Management:** Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-5 to C-6) or latest.
- Spill Prevention and Control:** Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8, C-13 to C-14) or latest.
- Vehicle and Construction Equipment Service and Storage:** An area shall be designated for the maintenance, where on-site maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C9) or latest.
- Material Delivery, Handling and Storage:** In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with secured plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
- Handling and Disposal of Concrete and Cement:** When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to C-16) or latest.
- Pavement Construction Management:** Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to C-18) or latest.
- Contaminated Soil and Water Management:** Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or latest.
- Sanitary/Septic Water Management:** Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or latest.
- Inspection & Maintenance:** Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

STANDARD EROSION CONTROL NOTES

- Sediment Control Management:**
 - Tracking Prevention & Clean Up:** Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or, more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-31 to B-33) or latest.
 - Storm Drain Inlet and Catch Basin Inlet Protection:** All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber roles or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.
 - Storm Water Runoff:** No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above ground watercourses until appropriate erosion control measures are fully installed.
 - Dust Control:** The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.
 - Stockpiling:** Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures (tarps, straw bales, silt fences, etc.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.
- Erosion Control:** During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
- Inspection & Maintenance:** Disturbed areas of the Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plans must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.
- Project Completion:** Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
- It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
- Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

IMPROVEMENT PLANS

FOR THE
HOME GRADING AND DRAINAGE
ON THE LANDS OF GUTIERREZ

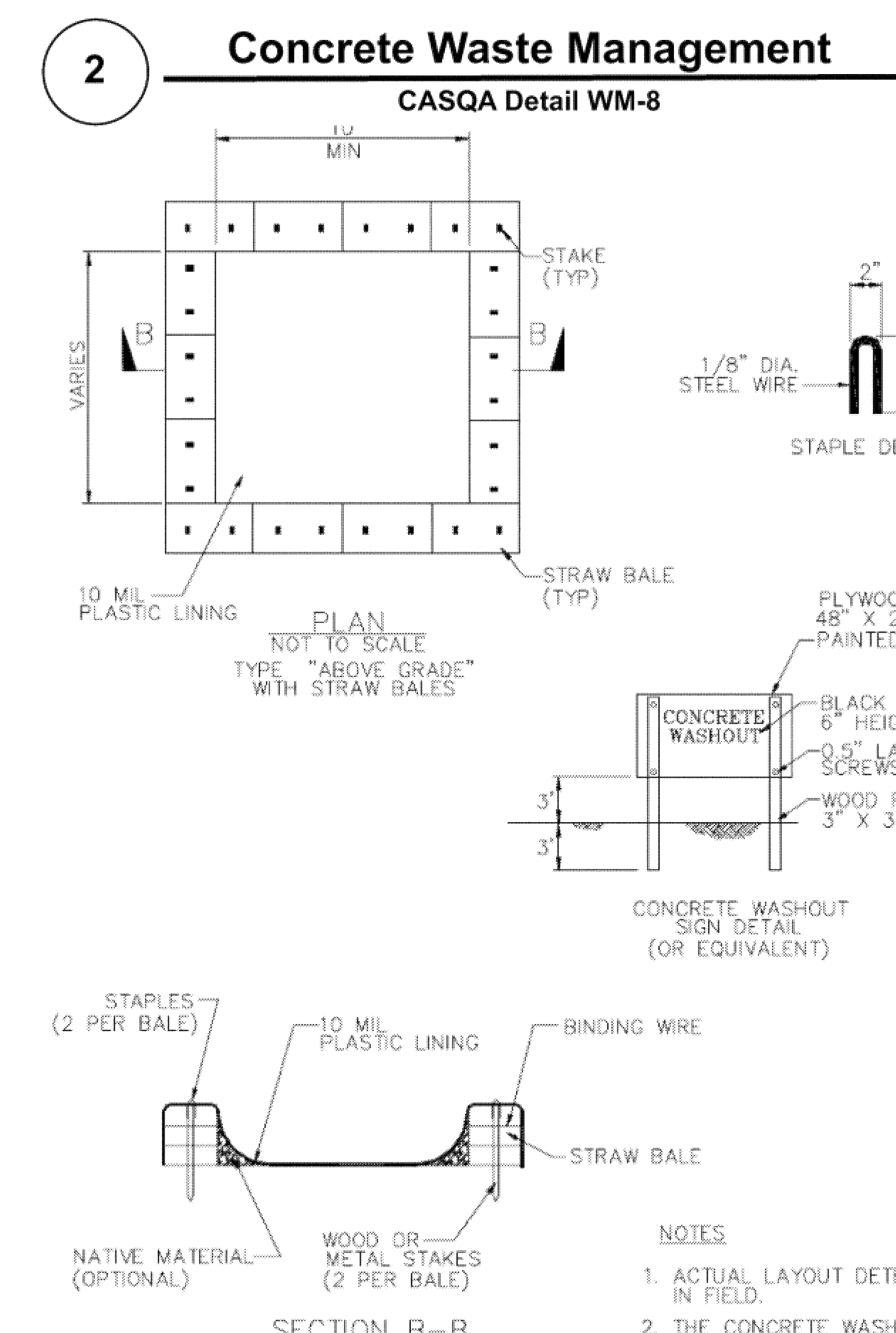
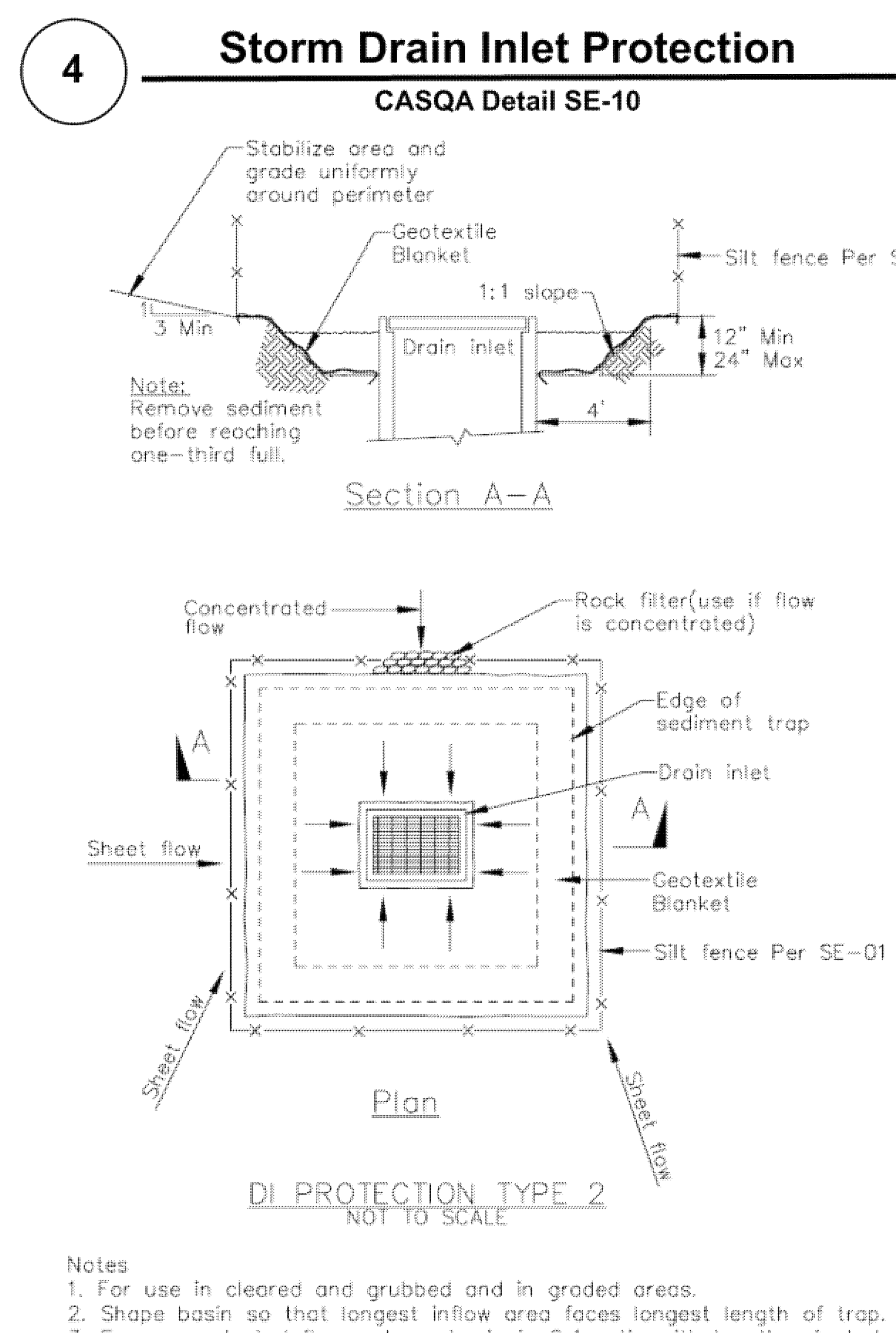
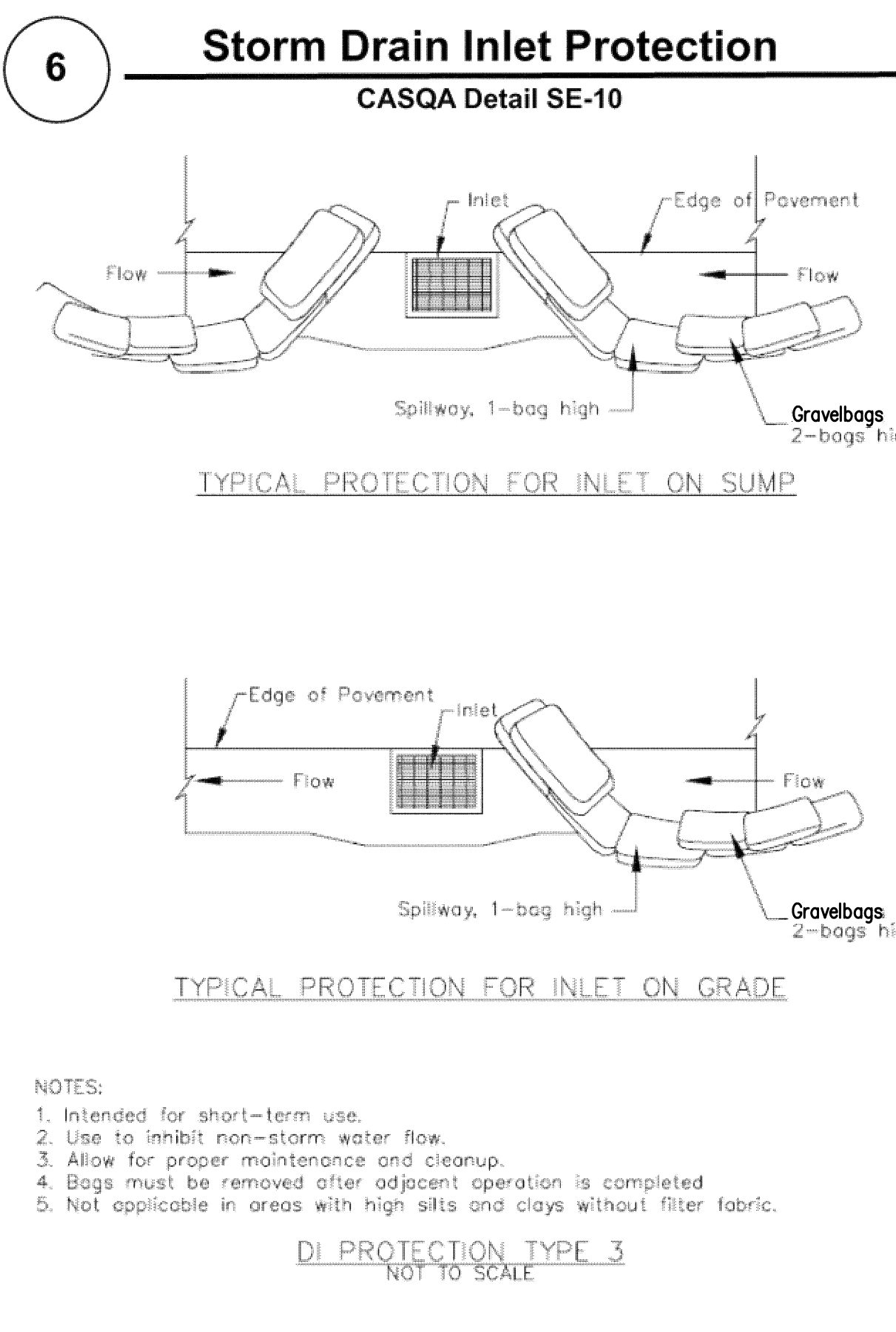
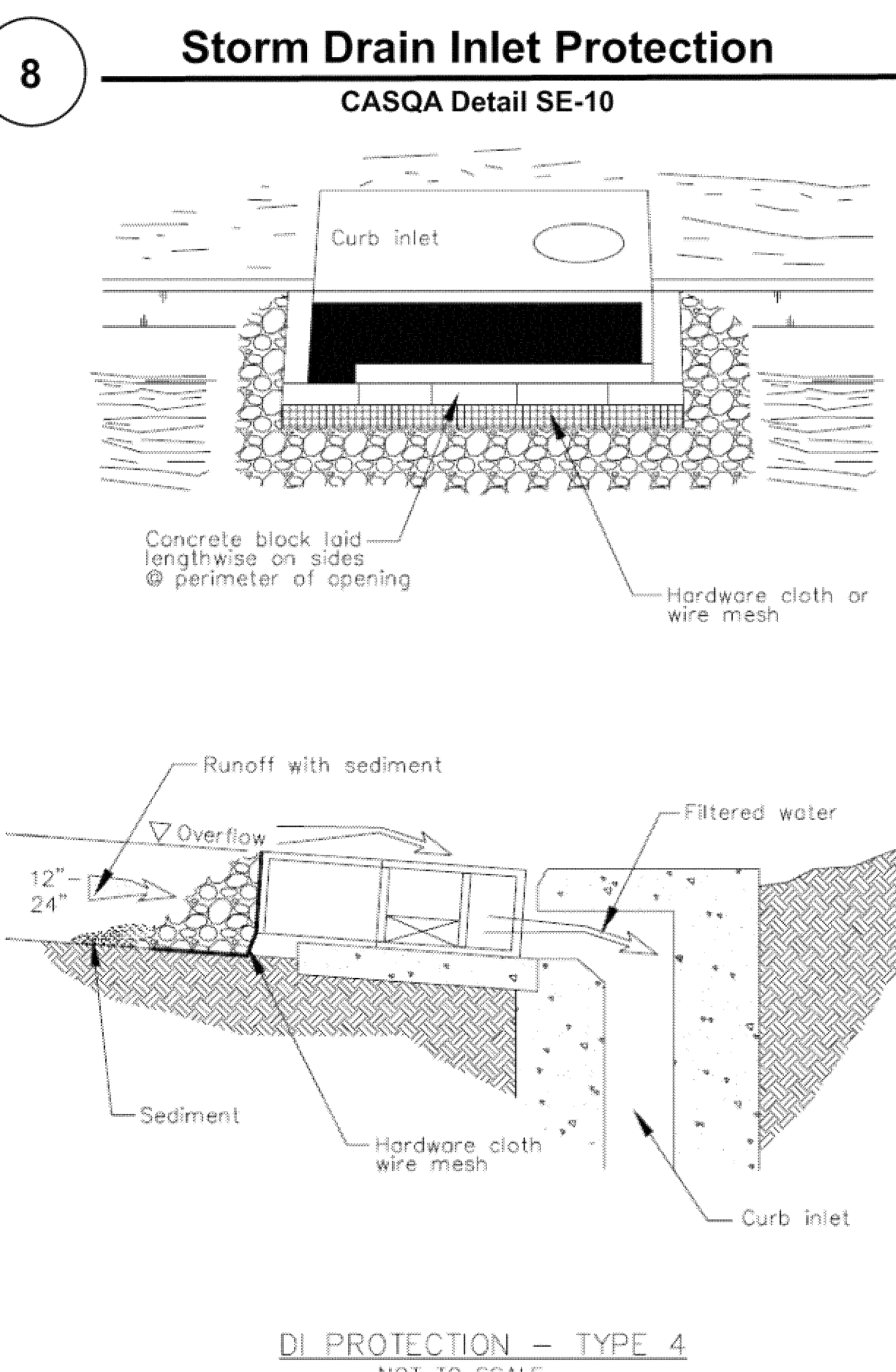
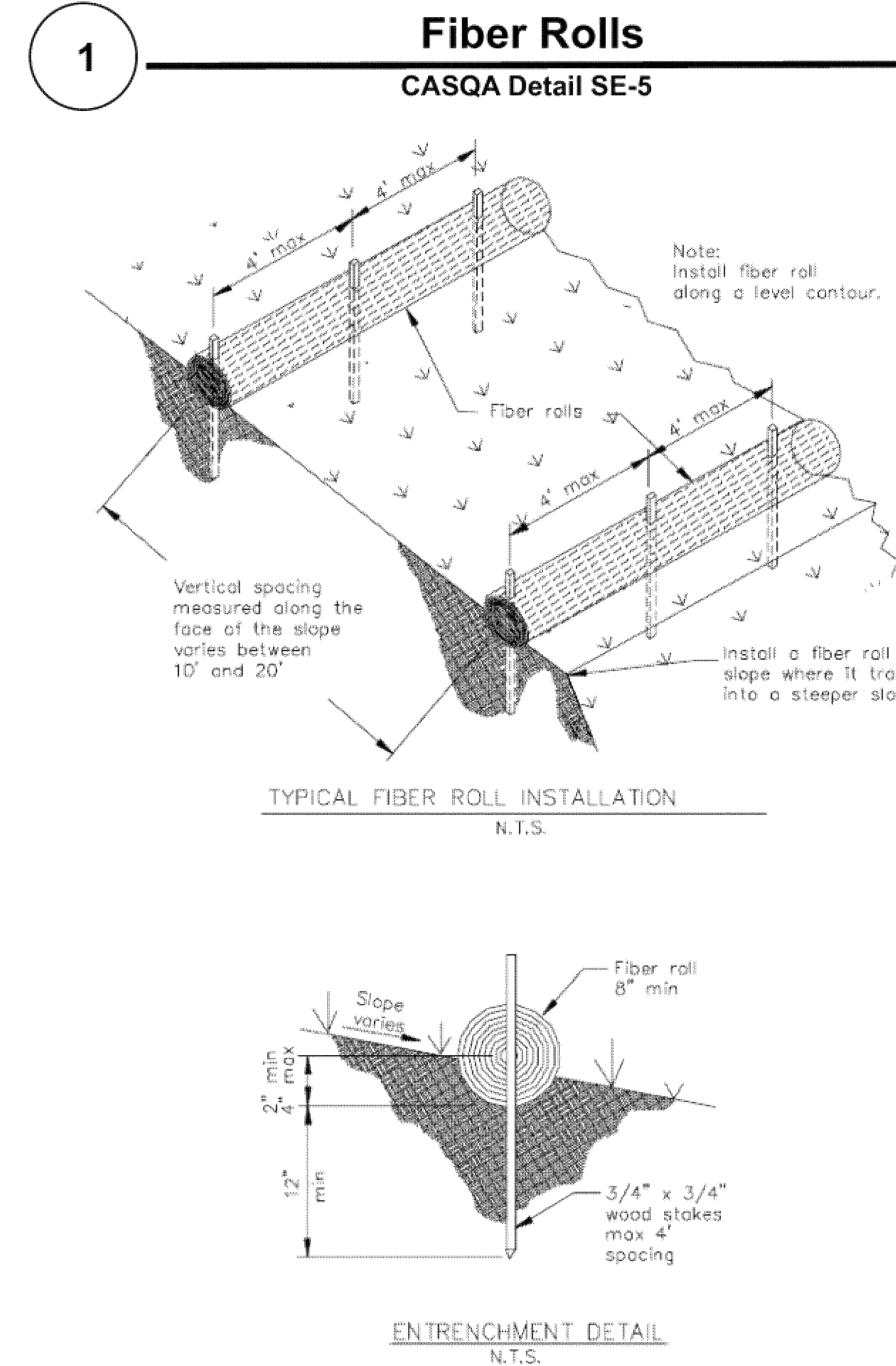
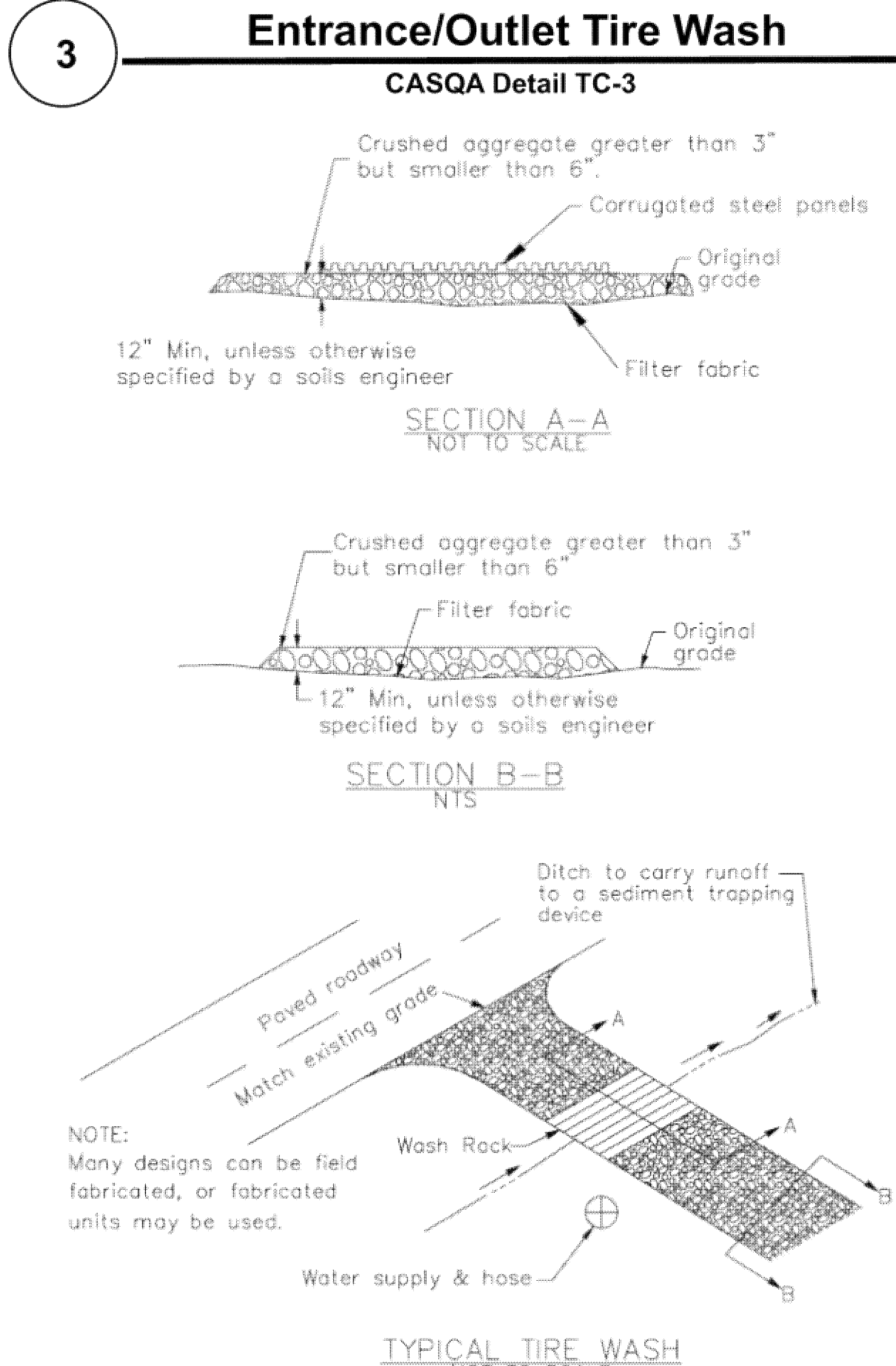
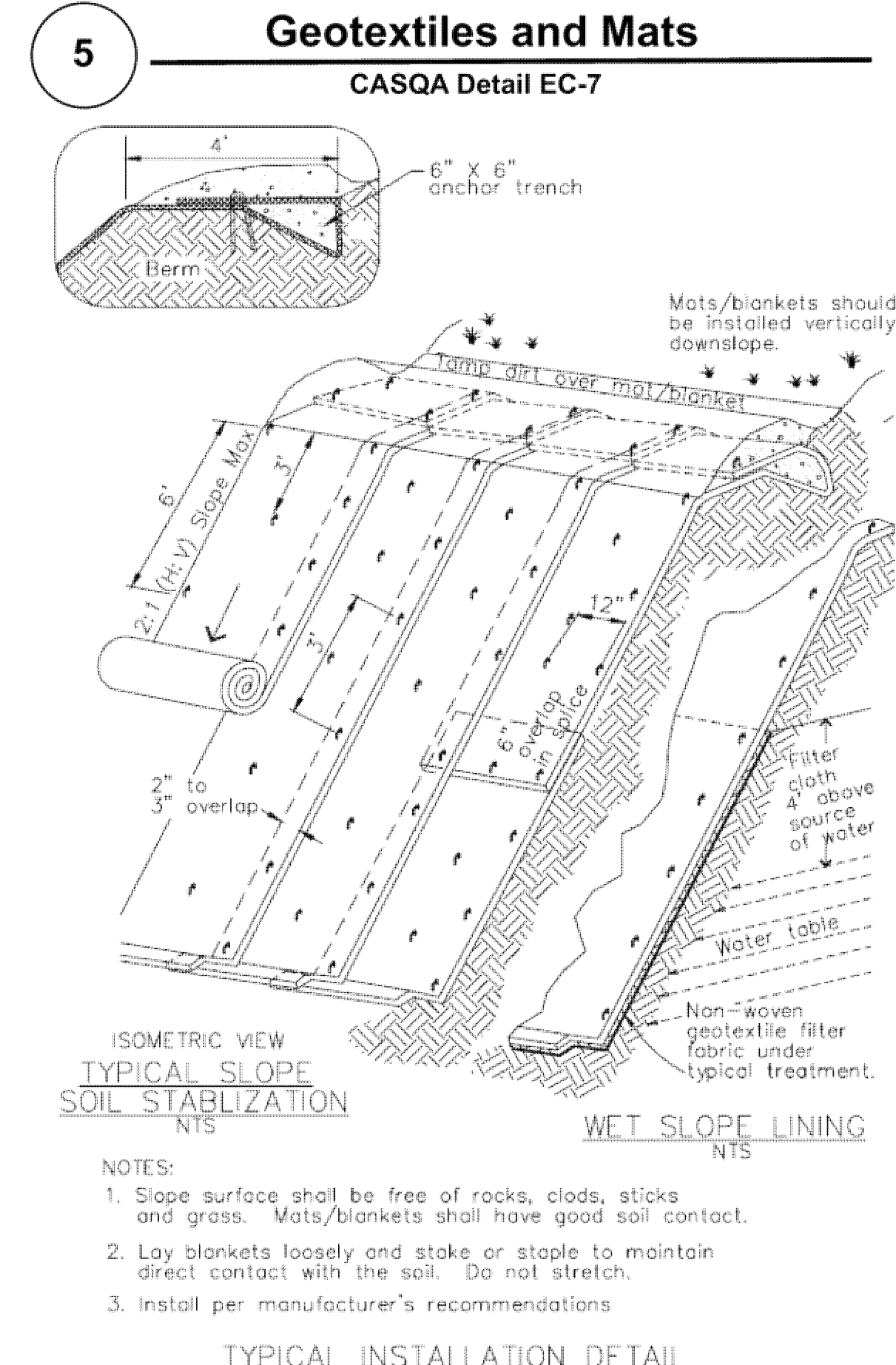
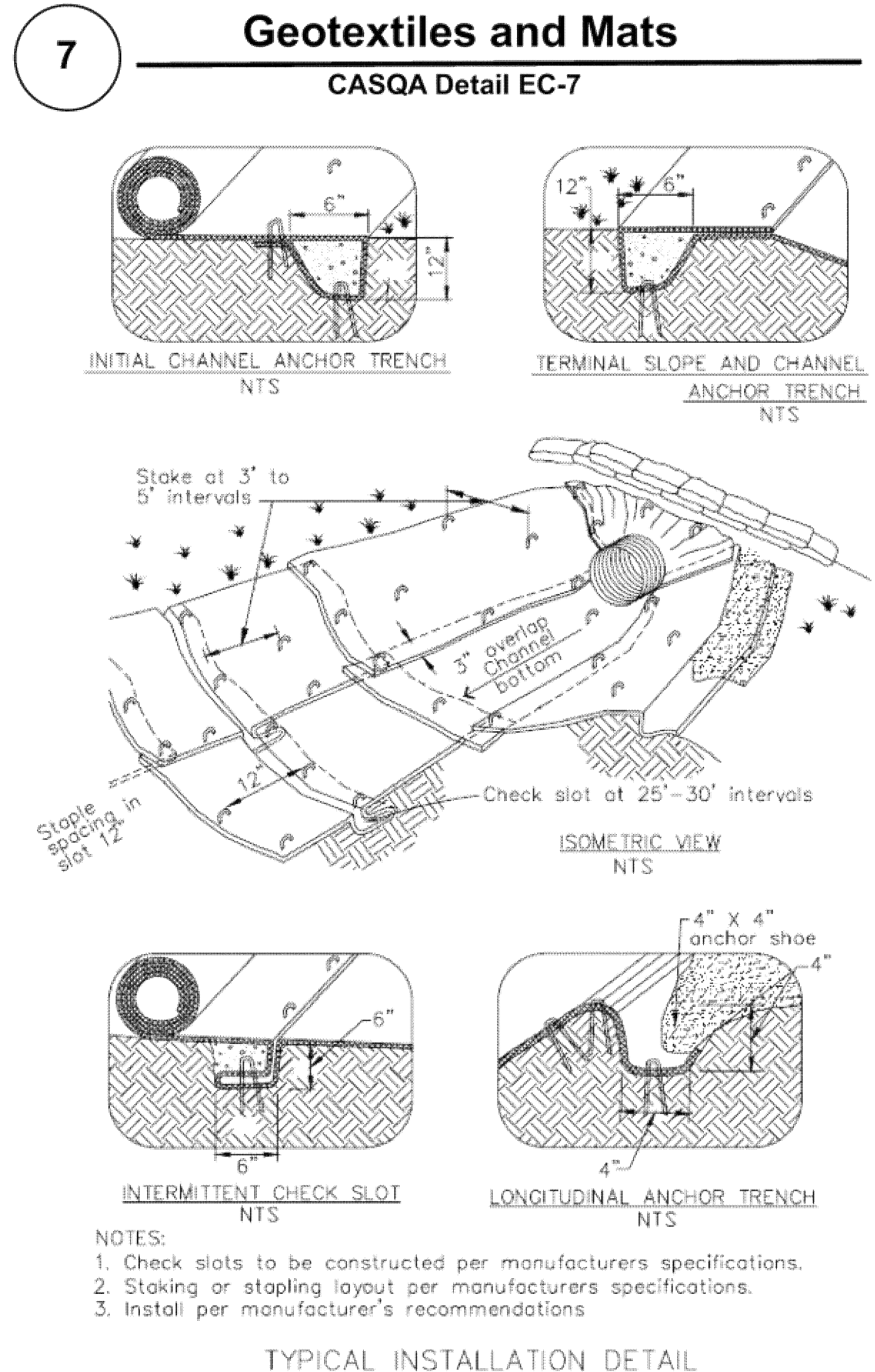
2245 LIBERATA DRIVE, MORGAN HILL

PARCEL 4: PARCEL MAP RECORDED IN BOOK 404 OF MAPS, AT PAGE 7
DATED SEPTEMBER 19th, 1977

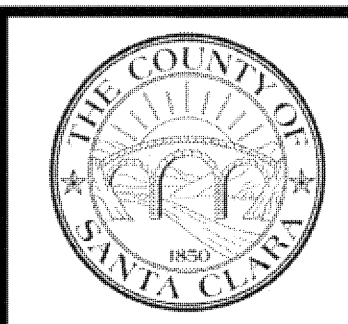
SANTA CLARA COUNTY, CALIFORNIA

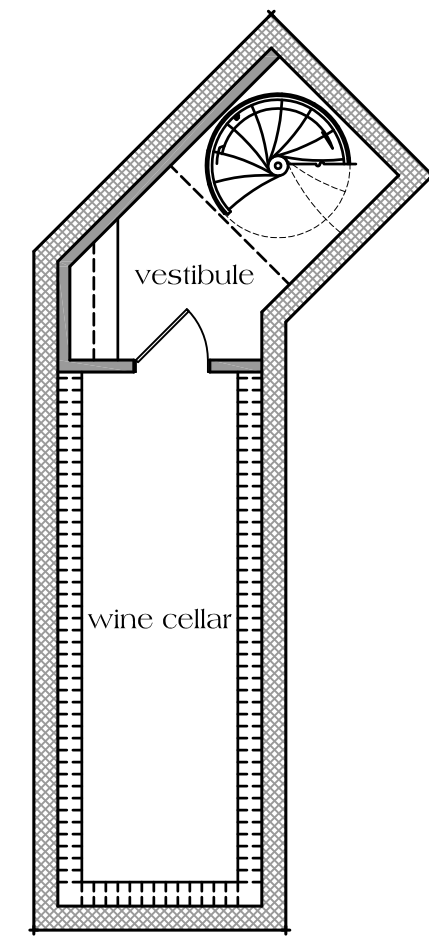
A.P.N.: 728-24-008

Project Information

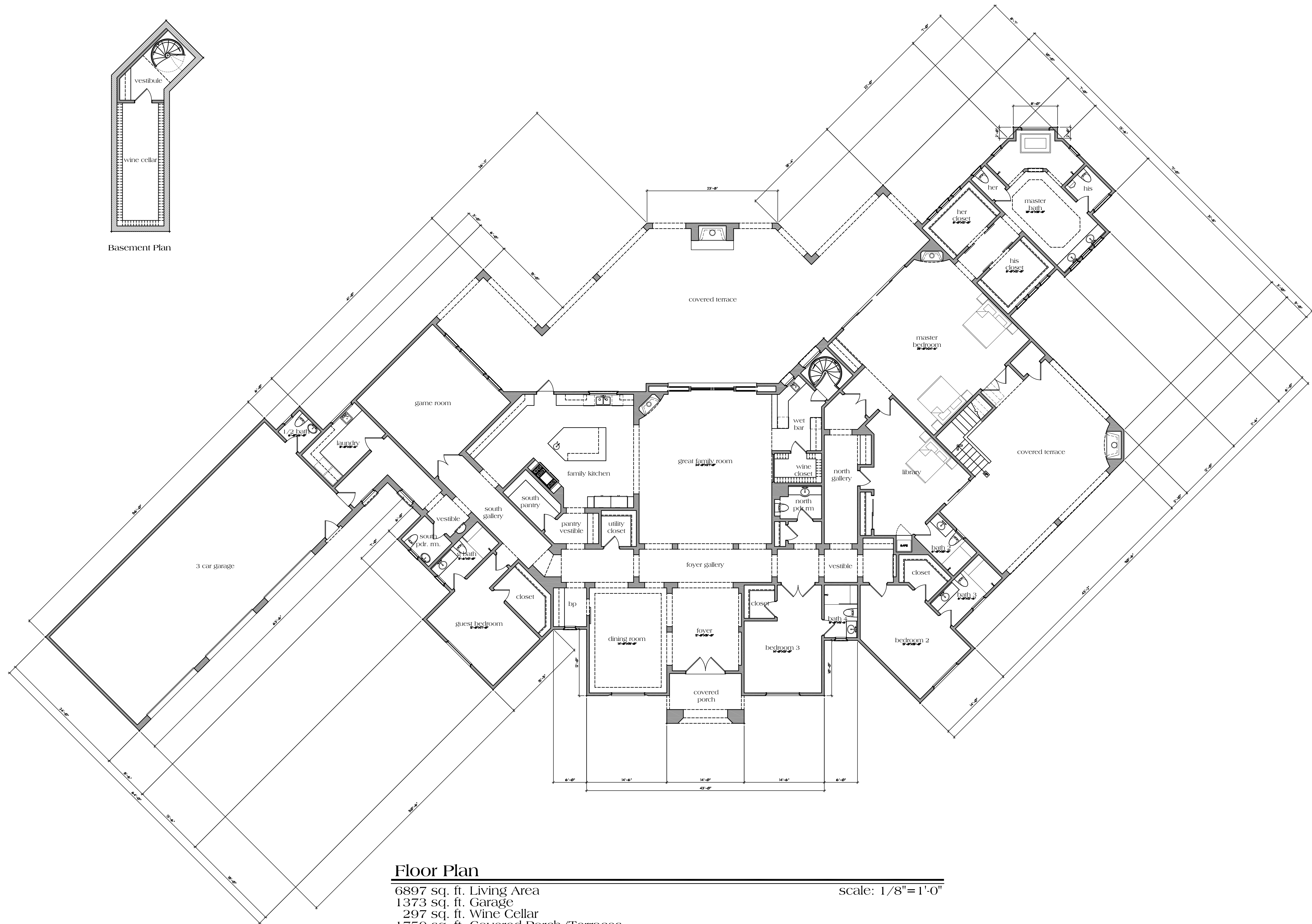


Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.





Basement Plan



Floor Plan

6897 sq. ft. Living Area
1373 sq. ft. Garage
297 sq. ft. Wine Cellar
1750 sq. ft. Covered Porch/Terraces

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

NO. / DATE / REVISION

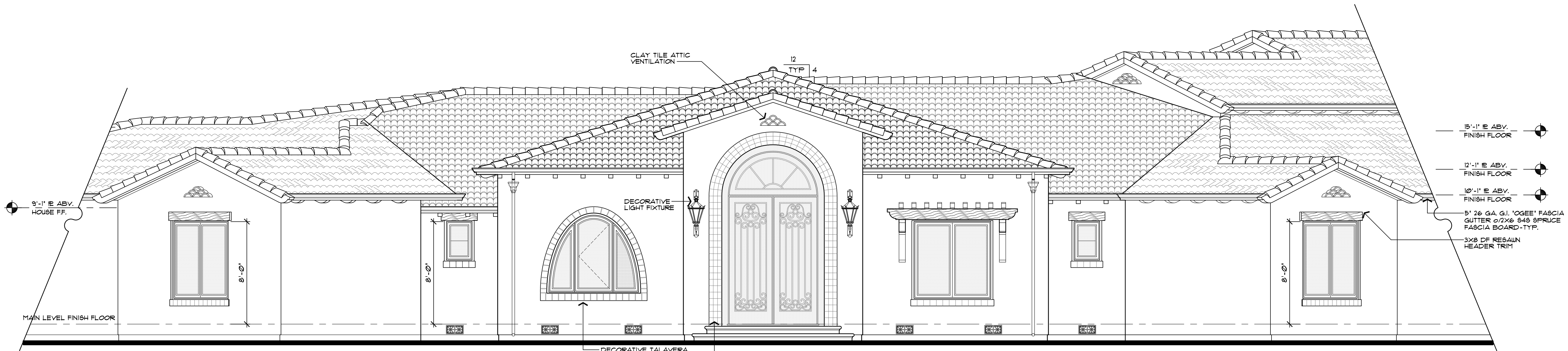
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DRAWING TITLE	Floor Plan
JOB TITLE	Gutiérrez Property
JOB ADDRESS	2245 Liberata Drive Morgan Hill, California

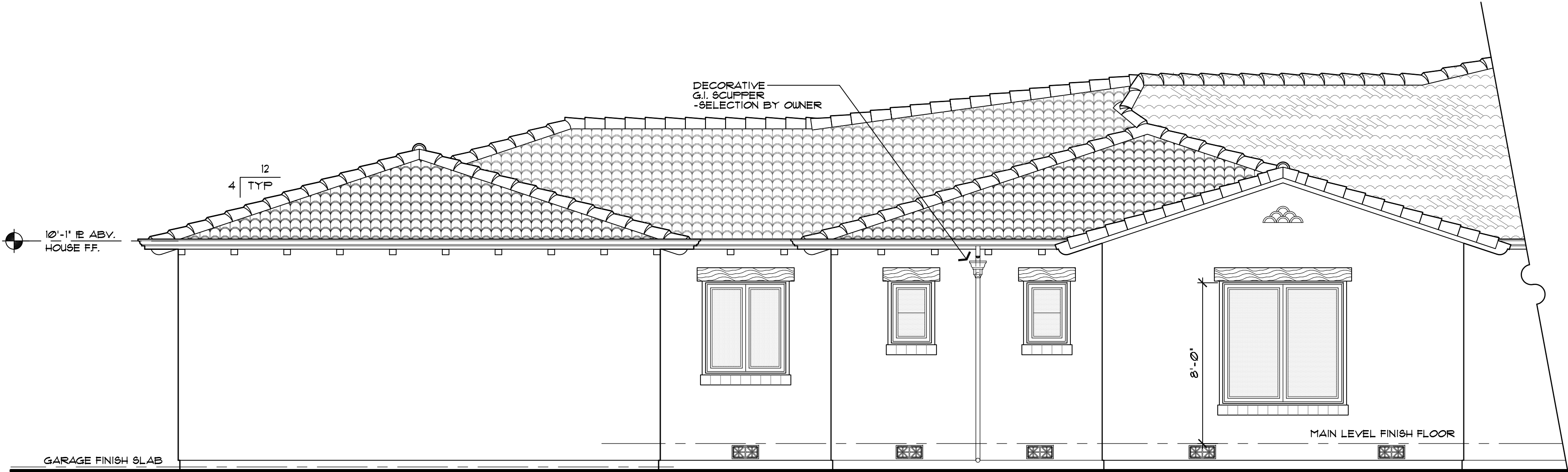
DATE	JAN. 9 2019
SCALE	1/8" = 1'-0"
PROJECT MANAGER	SCOTT ZAULETA
DRAWN	SEN
JOB NO.	DZ4716
SHEET	

A2

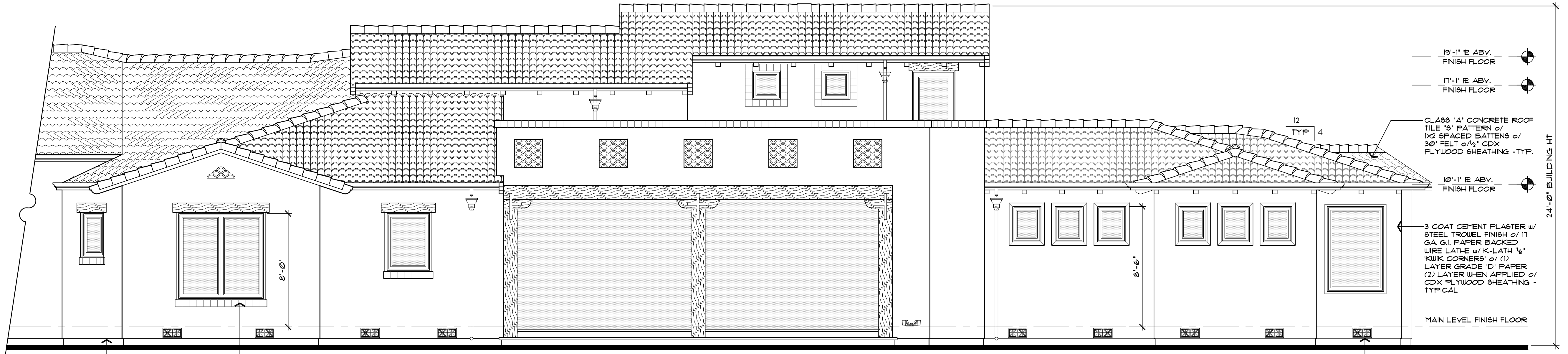


front entry elevation

- COLORS:**
1. ROOFING MATERIAL
EAGLE ROOFING - CAPISTRANO
'SAN BENITO BLEND' (LRV 34)
2. BASE COLOR (STUCCO)
KELLY-MOORE - 'MAN CAVE'
KMB120-2 (LRV 15)
3. TRIM COLOR
(WINDOW/DOOR HEADER & TRELLIS BEAMS)
KELLY-MOORE - 'COOKIE CRUMB'
KMB121-3 (LRV 34)
4. TRIM COLOR
(ALL DOORS)
KELLY-MOORE - 'WOODBRIDGE TRAIL'
KMB101-3 (LRV 35)
5. LIMESTONE TRIM
VERISTONE
COLOR : OAKWOOD (LRV 35)
FINISH: TRAVERTINE
6. WINDOWS
MILGARD WINDOWS (TUSCANY LINE)
'BRONZE FRAMES' (LRV 1)
7. ACCENT TRIM
(GUTTER, EAVES, ENTRY AND GARAGE DOORS)
KELLY-MOORE - 'OXFORD BROWN'
411 (LRV 6)



North Wing (Front) elevation



South Wing (Front) elevation

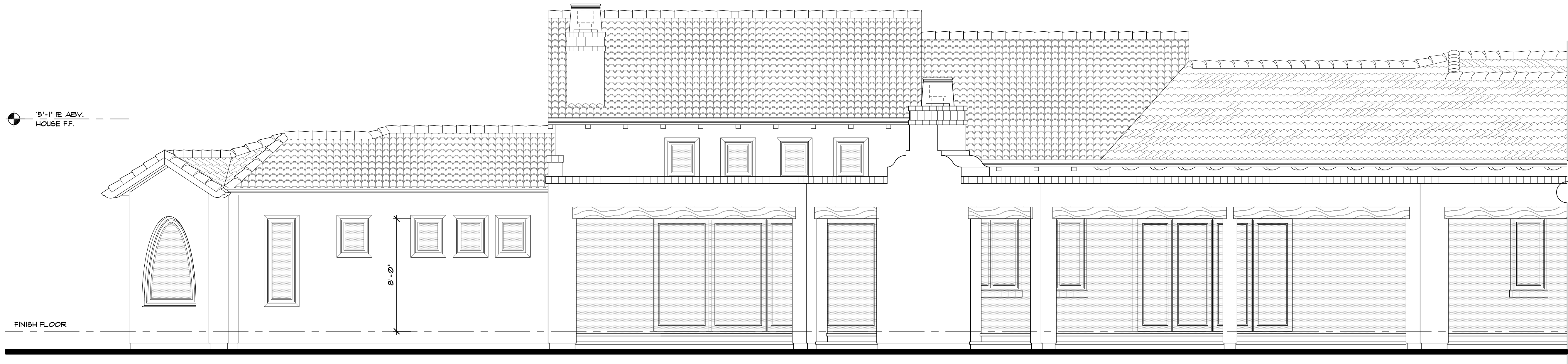
NO.	DATE/ REVISION

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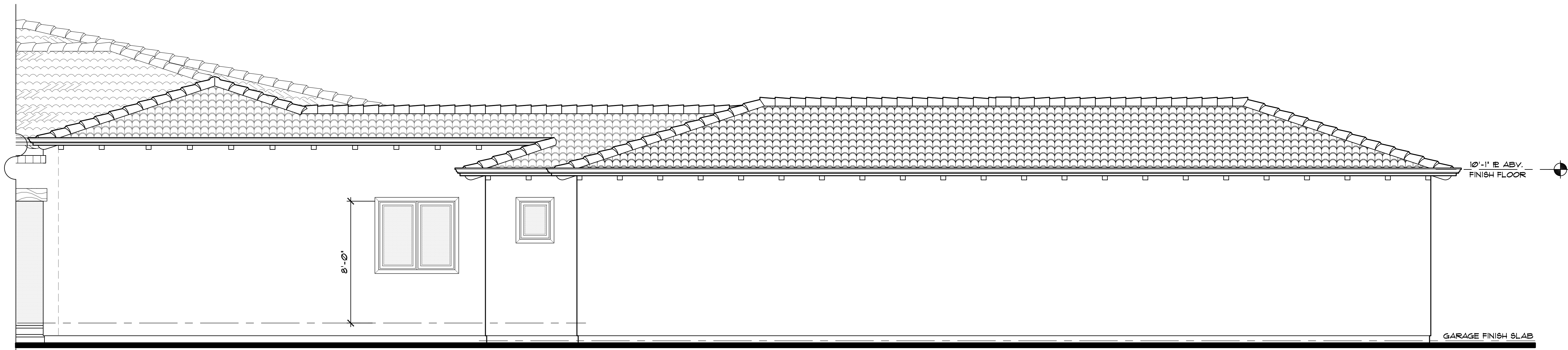
DAZ Design Associates, Inc.
A California Corporation
18046 Sutter Blvd., Suite 500
Morgan Hill, California 95037
Phone: (408) 778-7005 Fax: (408) 778-7004
email: dazdesign@gaile.com

DRAWING TITLE	Exterior Elevations
JOB TITLE	Gutiérrez Property
JOB ADDRESS	2245 Liberata Drive Morgan Hill, California

DATE	JAN. 9, 2019
SCALE	1/4" = 1'-0"
PROJECT MANAGER	SCOTT ZAULETA
DRAWN	SEN
JOB NO.	DZ4716
SHEET	



left side elevation



left side elevation



right side elevation

NO.	DATE/ REVISION

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email: dazdesign@gahe.com

DRAWING TITLE	Exterior Elevations
JOB TITLE	Gutierrez Property
JOB ADDRESS	2245 Liberata Drive Morgan Hill, California

DATE	JAN 9 2019
SCALE	1/4" = 1'-0"
PROJECT MANAGER	SCOTT ZAUEA
DRAWN	SEN
JOB NO.	DZ4716
SHEET	



rear elevation

NO. / DATE / REVISION

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email: dazdesign@gahtc.com



DRAWING TITLE	Exterior Elevations
JOB TITLE	Gutiérrez Property
JOB ADDRESS	2245 Liberata Drive Morgan Hill, California

DATE

JAN 9 2019

SCALE

1/4" = 1' - 0"

PROJECT MANAGER

SCOTT ZAQUETA

DRAWN

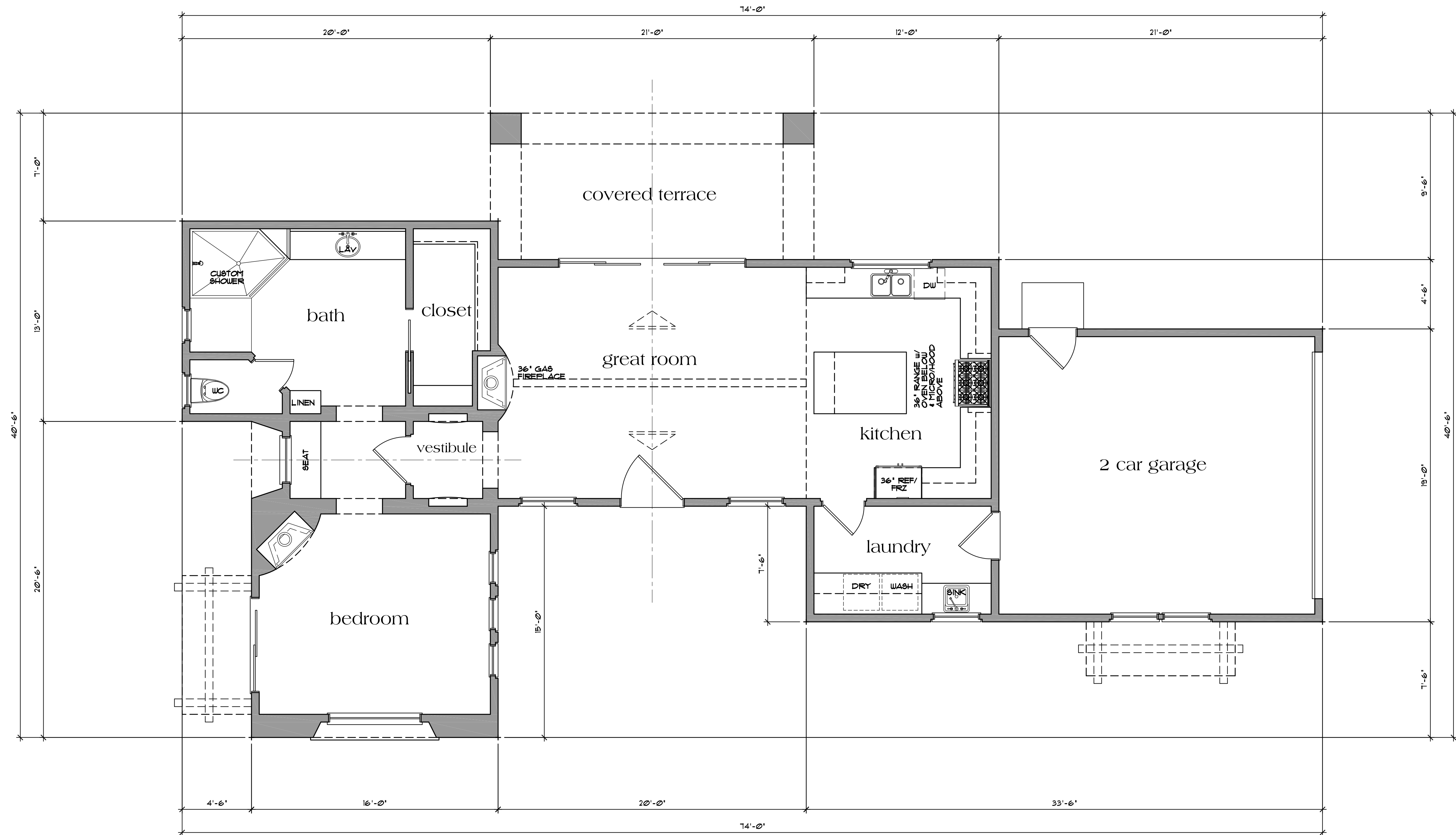
SEN

JOB NO.

DZ4716

SHEET

A3.3



Floor Plan

1198 sq. ft. Living Area
198 sq. ft. Covered Terrace
399 sq. ft. Garage

scale: 1/4"=1'-0"

NO./ DATE/ REVISION

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Design Associates, Inc.

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18646 Sutter Blvd., Suite 500

Morgan Hill, California 95037

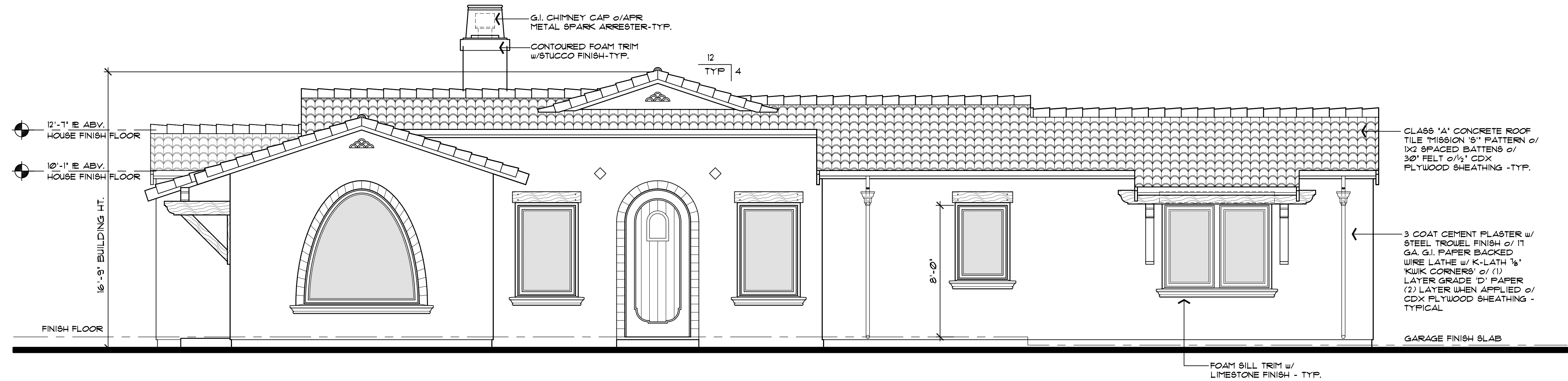
Phone: (408) 778-7005 • Fax: (408) 778-7004

email: dazdesign@gailk.com

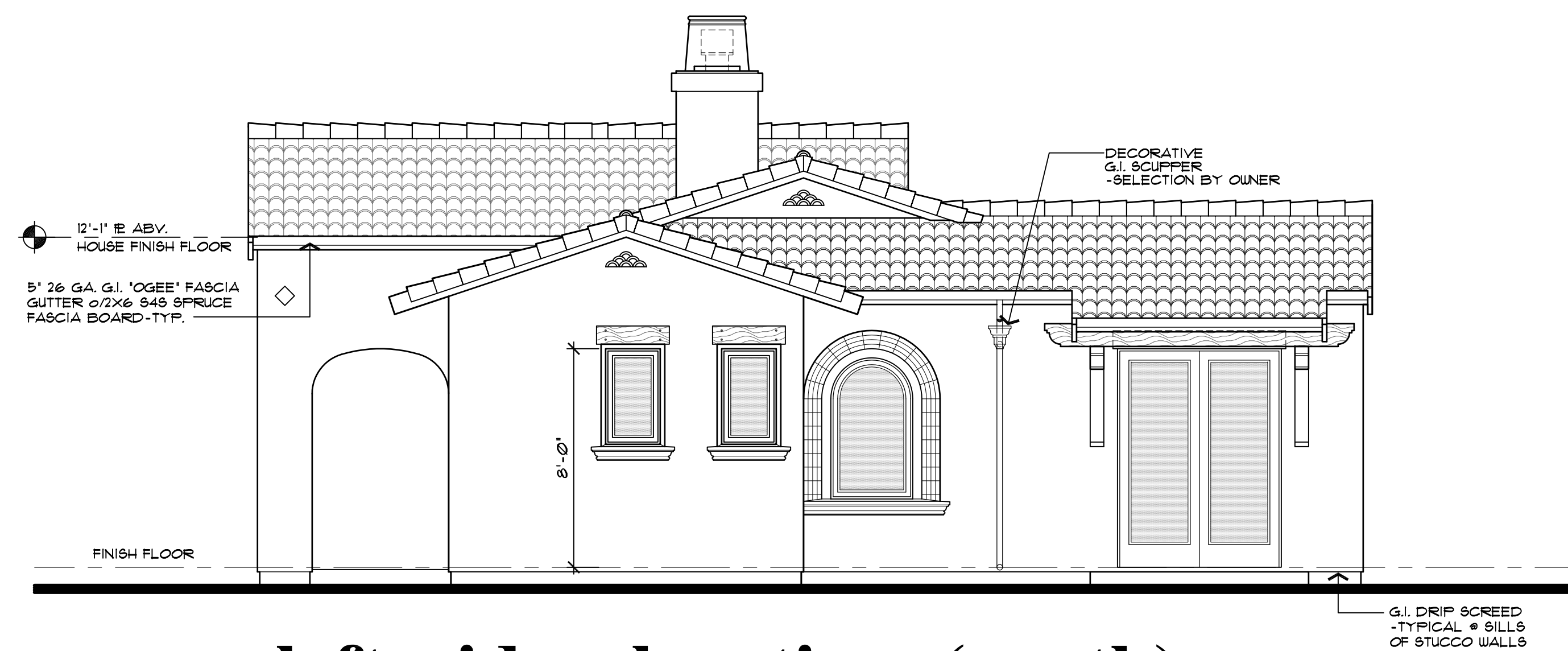


DRAWING TITLE	Floor Plan
JOB TITLE	Gutierrez Property
JOB ADDRESS	Guest House 2245 Liberata Drive Morgan Hill, California

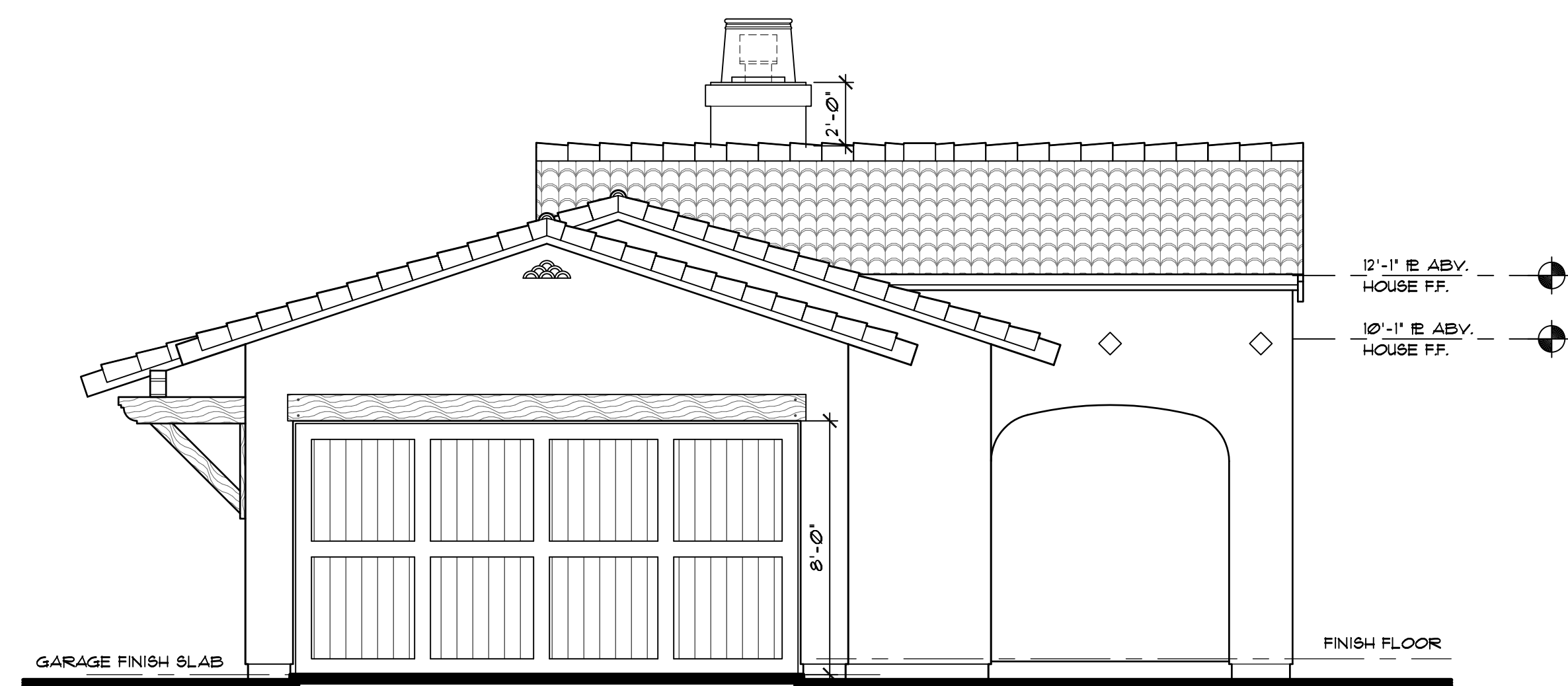
DATE	JAN 9 2019
SCALE	1/4"=1'-0"
PROJECT MANAGER	SCOTT ZAURETA
DRAWN	SEN
JOB NO.	DZ4716
SHEET	



front elevation (west)



left side elevation (north)



right side elevation (south)



rear elevation (east)

NO.	DATE/ REVISION

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DRAWING TITLE	Exterior Elevations
JOB TITLE	Gutierrez Property
JOB ADDRESS	Guest House 2245 Liberata Drive Morgan Hill, California

DATE	JAN 9 2019
SCALE	1/4" = 1'-0"
PROJECT MANAGER	SCOTT ZAUETA
DRAWN	SEN
JOB NO.	DZ4716
SHEET	A5



2. COLOR:
EAGLE ROOFING - MATERIAL
'SAN BENITO BLEND' (LRY 34)
3. BASE COLOR (STUCCO)
KELLY-MOORE - 'MAN CAVE'
K*1512-2 (LRY 15)
3. TRIM COLOR
(WINDOW/DOOR HEADER & TRELLIS BEAMS)
KELLY-MOORE - 'COOKIE CRUMB'
K*1512-3 (LRY 34)
4. TRIM COLOR
(ALL DOORS)
KELLY-MOORE - 'WOODBIDGE TRAIL'
K*15101-3 (LRY 35)
5. LIMESTONE TRIM
VERISTONE
COLOR: OAKWOOD (LRY 35)
FINISH: TRAVERTINE
6. WINDOWS
MILGARD WINDOWS (TUSCANY LINE)
BRONZE FRAMES' (LRY 7)
7. ACCENT TRIM
BUTTER, EGGS, ENTRY & GARAGE DOORS
KELLY-MOORE - 'OXFORD BROWN'
41T (LRY 6)

[illegible]

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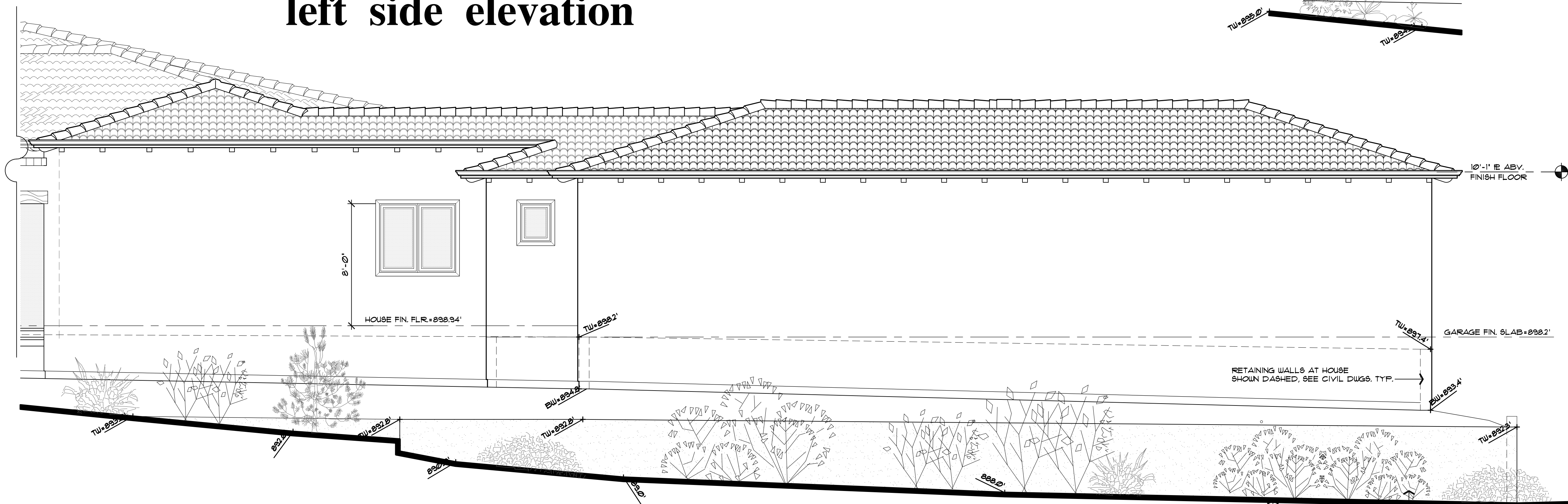
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JOB TITLE	Gutierrez Property
JOB ADDRESS	2245 Liberata Drive Morgan Hill, California

DATE	JAN. 9, 2019
SCALE	1/4" = 1' - 0"
PROJECT MANAGER	SCOTT ZAUETA
DRAWN	SEZ
JOB NO.	DZ4716
SHEET	



left side elevation



left side elevation



right side elevation

NO.	DATE/ REVISION

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DATE	JAN. 9, 2019
SCALE	1/4" = 1' - 0"
PROJECT MANAGER	SCOTT ZAULETA
DRAWN	SEN
JOB NO.	DZ4716
SHEET	




rear elevation

NO. / DATE / REVISION

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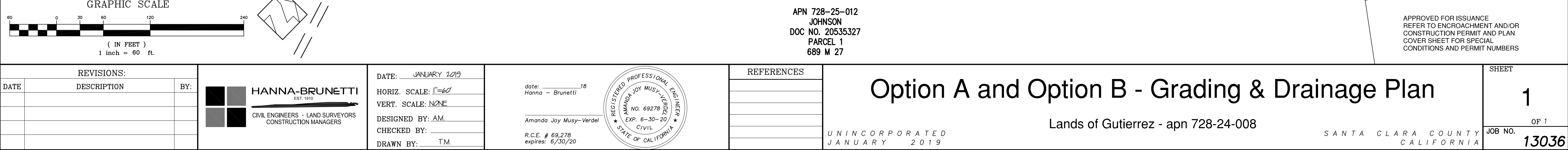
DRAWING TITLE	Exterior Elevations
JOB TITLE	Gutiérrez Property
JOB ADDRESS	2245 Liberata Drive Morgan Hill, California

DATE	JAN 9 2019
SCALE	1/4" = 1'-0"
PROJECT MANAGER	SCOTT ZAUETA
DRAWN	SEN
JOB NO.	DZ4716
SHEET	A3.3

ATTACHMENT E
Alternative Site Analysis Map

PLAN # _____
SHEET _____ OF _____

PLAN # _____
SHEET _____ OF _____



ATTACHMENT F
Geotechnical and Geological Hazard Evaluation

**GEOTECHNICAL ENGINEERING INVESTIGATION AND
GEOLOGIC HAZARDS EVALUATION
GUTIERREZ RESIDENCE AND GUEST HOUSE
2245 LIBERATA DRIVE, MORGAN HILL
SANTA CLARA COUNTY, CALIFORNIA**

January 30, 2015

Prepared for

Mr. Martin Gutierrez
740 Jarvis Drive
Morgan Hill, CA 95037

Prepared by

Earth Systems Pacific
500 Park Center Drive, Suite 1
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January 30, 2015

File No. SH-12630-SA

Mr. Martin Gutierrez
740 Jarvis Drive
Morgan Hill, CA 95037

Project: **Gutierrez Residence and Guest House**
2245 Liberata Drive
Morgan Hill, California

Subject: **Geotechnical Engineering Investigation and Geologic Hazards Evaluation**

Reference: Proposal for a Geotechnical Engineering Investigation and Geologic Hazards Evaluation, Gutierrez Residence and Guest House, 2245 Liberata Drive, Morgan Hill, California, by Earth Systems Pacific, dated October 27, 2014.

Dear Mr. Gutierrez:

In accordance with your authorization of the above referenced proposal, this geotechnical engineering investigation and geologic landslide hazard evaluation has been prepared by Earth Systems Pacific (Earth Systems) for use in the development of plans and specifications for your proposed residence and guest house in Morgan Hill, California. Preliminary geotechnical recommendations for site preparation and grading; foundations; slabs-on-grade and exterior flatwork; utility trench backfill; site drainage and finish improvements; and observation and testing are presented herein.

We appreciate the opportunity to have provided services for this project and look forward to working with you again in the future. Please do not hesitate to contact this office if there are any questions concerning this report.

Respectfully submitted,

Earth Systems Pacific



Girmay Weldegiorgis
Senior Engineer
CE 74044

Brett Faust
Senior Engineering Geologist
CEG 2386



George J. Barnett
Principal Engineer
GE 2309



Distribution: Mr. Martin Gutierrez (2)
Scott Zazueta – D&Z Design Associates (4+pdf)

Doc. No.: 1502-011.SER



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1.0 INTRODUCTION

Site Setting

The subject property is located at the end of Liberata Drive in the Morgan Hill area of Santa Clara County, California (APN 728-24-008). The approximate center of the proposed improvements is located at 37.1568°N latitude and 121.6185°W longitude on the United States Geological Survey's Mt. Sizer 7.5-minute Quadrangle.

The property is located in the Diablo Mountain Range between Anderson Reservoir and Holiday Lakes Estates to the northeast and Santa Clara Valley to the southwest. The site is crossed by a northwest-trending ridgeline with steep south-facing slopes and moderately inclined north-facing slopes. The majority of the property is covered by wild grass and shrubs, and sparse oak trees exist throughout the site.

The property is accessed via Barnard Road and is bounded by an undeveloped parcel on the north, and developed residential properties on the other sides.

Planned Development

It is our understanding that a main residence and a guest house will be built at the site. As shown on the preliminary site plan provided by D&Z Design Associates, the project will consist of a new single family residence and detached guest house located on the crest of a ridge at the site. Both structures will have attached garages. The structures will be accessed by a driveway originating at the cul-de-sac end of Barnard Road at the northwestern property line. A new stable is also planned near the southern portion of the property, close to the cul-de-sac at the end of Liberata Drive.

It is anticipated that the main residence and guest house will be of one- or two-story wood-frame construction over raised-wood floors, and that the proposed garages will have concrete floor slabs-on-grade. The building pad for the main residence will be constructed by placing up to about 12 feet of fill over the slope north of the proposed home. Up to about 2 feet of fill will be placed at the guest house site. Moderate cuts and minor fills are planned along the proposed driveway alignment, and a stormwater retention pond will be constructed near the end of Barnard Road. A second retention pond is planned north of the main residence. The residence and guest house will be served by conventional on-site septic systems.

**Scope of Services**

The scope of work for the geotechnical engineering investigation and geologic hazard evaluation included general site reconnaissance, subsurface exploration, laboratory testing of selected samples, engineering evaluation of the data collected, and preparation of this report. The analysis and subsequent recommendations were based on the Site Plan prepared by D&Z Design Associates, Inc., Sheet A1, dated September 30, 2014.

The geotechnical engineering report and recommendations are intended to comply with the considerations of Section 1803 of the California Building Code (CBC), 2013 Edition, and common geotechnical engineering practice in this area at this time under similar conditions. The tests were performed in general conformance with the standards noted, as modified by common geotechnical practice in this area at this time under similar conditions. The geologic hazards assessment is intended to be in conformance with common geologic practice in this area at this time under similar conditions.

Preliminary geotechnical recommendations for site preparation and grading, foundations, slabs-on-grade and exterior flatwork, utility trench backfill, site drainage and finish improvements, and geotechnical observation and testing are presented. Discussions of our landslide and fault rupture hazard are also included. It is our intent that this report be used by the client to form the geotechnical basis of the design of the project as described herein, and in the preparation of plans and specifications.

Analyses of the soil for mold or other microbial content, asbestos, percolation rates, corrosion potential, radioisotopes, hydrocarbons, or other chemical properties are beyond the scope of this report. This report also does not address issues in the domain of contractors such as, but not limited to, site safety, loss of volume due to stripping of the site, shrinkage of soils during compaction, excavatability, shoring, temporary slope angles, and construction means and methods. Ancillary features such as swimming pools, temporary access roads, fences, light poles, and non-structural fills are not within our scope and are also not addressed.

To verify that pertinent issues have been addressed and to aid in conformance with the intent of this report, it is requested that grading and foundation plans be submitted to this office for review as they near completion. In the event that there are any changes in the nature, design, or locations of improvements, or if any assumptions used in the preparation of this report prove to be incorrect, the conclusions and recommendations contained herein should not be considered valid unless the changes are reviewed and the conclusions of this report are verified or modified in writing by the geotechnical engineer. The criteria presented in this report are



considered preliminary until such time as they are verified or modified in writing by the geotechnical engineer in the field during construction.

2.0 GEOLOGY

The site is located in the foothills of the Diablo Mountain Range within the geologically complex Coast Ranges province of Central California. The Diablo Range and the Santa Cruz Mountains, respectively, form the eastern and western boundaries of the Santa Clara Valley in the Coast Ranges geomorphic province in central California. These northwest-trending mountain ranges are the result of tectonic uplift that has been interpreted to have been occurring since Pliocene-Pleistocene time (beginning approximately 3 to 5 million years before present). The regional basins now occupied by San Pablo and San Francisco Bays, and the Santa Clara Valley, were formed by related tectonic processes during Pleistocene time.

The predominant structural feature in the California Coast Ranges is the San Andreas fault zone, which is the structural boundary between two tectonic plates: the Pacific Plate to the west of the San Andreas fault zone and the North American Plate east of the fault. These two plates are moving past each other at approximately 5.1 cm/year at the mouth of the Gulf of California and 1 to 3 cm/year in the central and northern parts of California (Brown, 1990). The Calaveras and Hayward faults, located in the Diablo Range on the east side of the Santa Clara Valley, are interpreted to be part of the San Andreas fault system.

Site Geology

Based on the City of Morgan Hill's Geologic and Geotechnical Hazards maps (Pacific Geotechnical Engineering, PGE, 1991), the site lies in an area of complex landsliding and faulting. Santa Clara Formation sedimentary rocks, Franciscan complex rocks and serpentinite are mapped on the site. The margin of a massive landslide complex is mapped on the southern portion of the site, and the Coyote Creek thrust fault is mapped across the northern portion. Santa Clara Formation rocks were characterized by PGE as a collection of poorly consolidated sedimentary and volcanic rocks that consist of interbedded conglomerate, sandstone, siltstone, claystone and volcanics. Pacific Geotechnical Engineering notes that these rocks have been considerably deformed and that there is a sequence of folds north and east of Holiday Lake Estates below the high-water line of Anderson Reservoir. Bedding attitudes near the site are shown to strike east-west and dip about 30 degrees to the north. Franciscan complex rocks are mapped within the Coyote Creek Thrust fault zone, and serpentinite is mapped on the northeast portion of the site. A Site Geology and Boring Location Map based on PGE's map is included with this report.

**Faulting**

The site is located within the seismically active San Francisco Bay area, but is not within a State Earthquake Fault Zone (Hart and Bryant, 1997). However, the site is located within a County fault rupture hazard zone. Active faults are defined by the California Geological Survey (CGS) as faults that are well defined and have experienced movement within the last 11,000 years (Hart and Bryant, 2007). A generally accepted definition of a potentially active fault is one that shows evidence of displacement older than 11,000 years and younger than 2,000,000 years (i.e., Pleistocene in age). Inactive faults are classified as not having been active within the last two million years.

The major active faults in the San Francisco Bay Area are the San Andreas, Hayward, and Calaveras faults. The nearest active fault is the Calaveras, which is a major branch of the San Andreas Fault system that merges with the San Andreas Fault south of Hollister. It is a right-lateral, strike-slip fault that trends northwest through the Hollister Valley and enters the Diablo Range about 15 miles to the southeast. Based on the USGS Working Group on California Earthquake Probabilities (WGCEP, 2008), the Calaveras fault in the site vicinity has been assigned a slip rate of 15 mm/year and a maximum magnitude earthquake of 6.9.

The San Andreas fault is located approximately 13 miles southwest of the site. The Calaveras and Hayward faults are mapped, respectively, approximately 2 miles and 10 miles east and northeast of the site (CGS, 2010).

Whereas the Coyote Creek Thrust fault that crosses the site is not considered active, PGE (1991) notes that because of its structural position with respect to the Calaveras fault it should at least be considered potentially active.

Landsliding

The majority of the south-facing slopes at the site are located within a California Geological Survey (CGS) seismic hazard zone for earthquake induced landsliding (CGS, 2006), as shown (blue) on the Site Location Map. Both north and south-facing slopes at the site are located within a Santa Clara County landslide hazard zone.

As previously noted, the margin of a landslide complex is present on the southern portion of the property. Based on PGE (1991), the complex consists of many nested and coalescing landslides and includes static, dormant and recent landslides. The complex extends approximately 2,000 feet to the southeast and down to the valley floor. Several smaller landslides/slumps and debris flows are also mapped on the site. Two small slides are mapped



on the north-facing slopes within the footprint of the proposed main residence and the scarp of a rotational slump is mapped at the crest of the south-facing slopes adjacent to the main residence. There is no slope instability mapped near the guest house. The mapped landslides, slumps and debris flows are shown on the Site Geology and Boring Location Map.

3.0 FIELD INVESTIGATION AND LABORATORY TESTING

Geologic Reconnaissance

On November 12, 2014, we performed a geologic reconnaissance of the site. We did not observe evidence of active landsliding on the site. Ground features present on the site at the time of our reconnaissance generally agree with mapping by PGE (1991). However, there was one minor difference. Where their map shows Franciscan Complex greenstone within the Coyote Creek thrust fault zone, we encountered Franciscan Complex *mélange* in Boring B3 drilled in that area.

Subsurface Exploration

The subsurface exploration program consisted of 7 exploratory borings drilled at the site on November 12, 2014. The exploratory borings were drilled under the direction of an Earth Systems Pacific geologist at the approximate locations shown on the Site Geology and Boring Location Map. The borings were drilled to depths ranging from 11.5 feet to 25 feet below the ground surface. The borings were drilled using a Simco 2400 SK-1 drill rig equipped with a 6-inch diameter, continuous flight, solid-stem auger.

Soils encountered in the borings were categorized and logged in general accordance with the Unified Soil Classification System and rock was characterized with regard to type, hardness, and degree of weathering. Copies of the boring logs are presented in Appendix A. As the borings were drilled, samples were obtained using a brass-lined barrel sampler (ASTM D 3550-01/07 with shoe similar to D 2937-04) and a standard penetration test sampler (ASTM D 1586-11). The samplers were driven into the ground using a 140-pound hammer dropped from a height of approximately 30 inches. A bulk soil sample was also obtained from the auger cuttings.

General Subsurface Profile

Borings B1 to B5 were drilled in the vicinity of the proposed main residence, and Borings B6 and B7 were drilled near the east and west corners of the proposed guest house. The locations of Borings B3 to B5 were intended to identify bedrock materials and the location of faulting nearest the main residence.



In Boring B1 we encountered interbedded layers of pebble conglomerate and sandstone of the Santa Clara Formation to the final depth of 25 feet.

In Boring B2, a surface layer of 1.5 feet of dense clayey sand was underlain by interbedded layers of pebble conglomerate and sandstone of the Santa Clara Formation to the final depth of 20 feet.

Boring B3 encountered approximately 8 feet of stiff, dark gray, fat clay and medium dense, olive gray, clayey sand that was underlain by Franciscan Complex mélange to the final depth of boring at 11.5 feet.

In Boring B4, approximately 3 feet of stiff, dark yellow brown, lean clay with sand was underlain by weathered Santa Clara Formation siltstone/sandstone to the bottom of the boring at 11.5 feet.

Boring B5 encountered approximately 2.5 feet of dense, dark yellow brown, clayey sand that was underlain by soft Santa Clara Formation pebble conglomerate rock to the final depth of the boring at 11.5 feet.

Moderately soft to soft serpentinite rock was encountered in Borings B6 and B7 to the final depth of 9.5 and 10.0 feet, respectively. During drilling the soft rock pulverized to clayey sand.

No ground water was encountered in the borings. Copies of the boring logs are presented in Appendix A.

Laboratory Testing

Selected liner samples were tested for moisture content and dry density (ASTM D 2216-10 and D 2937-10), grain size distribution (ASTM D 422-63/07) and plasticity index (ASTM D 4318-10). Two liner samples were also tested for shear strength parameters (ASTM D 3080-11). Copies of the laboratory test results are included in Appendix B.

4.0 DATA ANALYSIS

Subsurface Soil Classification

Based on the data in the boring logs (See Appendix A), the site is assigned to Site Class C (very dense soil/soft rock) as defined by Table 20.3-1 of the ASCE 7-10.



Seismic Design Parameters

The following seismic design parameters represent the general procedure as outlined in Section 1613 of the California Building Code and in ASCE 7. The values determined below are based on the 2009 National Earthquake Hazard Reduction Program (NEHRP) maps and were obtained using the United States Geological Survey's Design Maps Web Application.

Summary of Seismic Parameters - CBC 2013 (Site Coordinates 37.1568°N, 121.6185°W)

Mapped Short Term Spectral Response Parameter - S_s	2.040g
Mapped 1 Second Spectral Response Parameter - S_1	1.007g
Site Class:	C
Site Coefficient - F_a	1.0
Site Coefficient - F_v	1.3
Site Modified Short Term Parameter - S_{Ms}	2.040g ($F_a * S_s$)
Site Modified 1 Second Parameter - S_{M1}	1.007g ($F_v * S_1$)
Site Design Short Term Parameter - S_{Ds}	1.360 ($2/3 S_{Ms}$)
Site Design 1 Second Parameter - S_{D1}	0.672 ($2/3 S_{M1}$)

Liquefaction

Soil liquefaction is a phenomenon where saturated granular soils near the ground surface undergo a substantial loss of strength due to increased pore water pressure resulting from cyclic stress applications induced by earthquakes or other vibrations. In this process, the soil acquires mobility sufficient to permit both vertical and horizontal movements, if not confined, which may result in significant deformations.

It is our opinion that liquefaction will have a minimal impact on the proposed residence and improvements. Liquefaction is most prevalent among saturated, loose uniformly graded sands and some silt soils, which are not present at the site. In general, the project site is predominantly underlain by stiff and dense soil deposits as well as sandstone/conglomerate rocks with a low susceptibility to liquefaction.

Slope Stability Evaluation

A quantitative slope stability analysis was performed for the south-facing slopes at the site located within a State seismic hazard zone. The stability of the slopes was evaluated for the static and dynamic cases by performing a computer analysis for a two-dimensional slope section A-A' (see Site Geology and Boring Location Map). The computer analysis was performed using Janbu's Simplified Method with the aid of the computer program PCSTABL version 6.54H (1996).



The seismic (dynamic) stability was evaluated using a seismic coefficient of 0.330g. This value is based on a the 10% in 50 year probabilistic acceleration of 0.675g derived from the USGS seismic hazards website, an earthquake magnitude of 7.0, and a distance from the controlling fault of 1.7 miles in accordance with guidelines in SP 117A (CGS 2009). A slope is considered to be stable if the static stability analyses results in a calculated static factor of safety of 1.5 or higher. Slopes are generally considered dynamically stable with a minimum calculated dynamic factor of safety of 1.0 for the screen test. If the dynamic factor of safety is less than 1.0, a Newmark displacement analysis is required to evaluate slope movement.

The slope section used in the analyses was selected based on the site geologic data obtained from site observations, subsurface drilling, and published geologic maps. The section location is shown on the Site Geology and Boring Location Map. The geologic sections are shown on the corresponding computer output plots in Appendix C. Values for cohesion (c) and friction angle (ϕ) used in modeling each unit in the cross-sections are listed in the following table:

Map Unit	c (psf)	Φ (deg)	Source
QTsc	872	42	Earth Systems (this study)
Qls	872	12	CGS, 2004

The parameters used for landslides (Qls) were obtained from the Seismic Hazard Zone Report for the Morgan Hill 7.5-Minute Quadrangle rather than from the Mt. Sizer Seismic Hazard Zone Report. In our opinion, the strength values stated in the Mt. Sizer report ($c=410$ psf and $\Phi=4$ degrees) are not representative of the landslide conditions in the site vicinity.

Results of Stability Evaluation

The computer program generated plots of the cross-sections analyzed, and the ten most critical failure surfaces (potential failure surfaces with lowest factor of safety (FOS)) for the existing and proposed slopes. The results of the stability analyses for static and dynamic conditions are summarized in the following table and are shown on the computer out puts presented in Appendix C.

Cross Section	Static FOS	Dynamic FOS	Newmark displacement
A-A'	3.13	1.5	-

**Faulting**

The locations of Borings B3 through B5 were intended to identify the location of faulting based on bedrock types encountered in the borings. Franciscan Complex *mélange* was encountered in Boring B3, and Santa Clara Formation rocks were encountered in Borings B4 and B5. Based on these findings, at its nearest point the Coyote Creek thrust fault lies approximately 20 feet outside the northeast corner of the proposed main residence footprint.

5.0 CONCLUSIONS**Site Suitability**

Based on the results of our analysis, in our opinion, the subject site is suitable for the proposed residential improvements from a geological and geotechnical engineering standpoint, provided that the recommendations included in this report are implemented in the project design and construction. The primary geotechnical considerations are the potential for excessive differential settlement of the main residence that would result from the proposed cuts and fills on the building pad, the existence of shallow landslides at the site of the main residence, and the expansion potential of the soil.

Slope Stability and Landslides

The results of the slope stability modeling indicate that the south-facing slopes are stable under both static and dynamic conditions. Modeling resulted in a static factor of safety of 3.13 and a dynamic factor of safety of 1.50. However, there are two small landslides beneath the northeast portion of the proposed main residence. Based on the subsurface conditions encountered in Borings B1 and B4 located within the landslides, landslide debris is present to a depth of about 3 feet. During grading, landslide materials should be removed until firm, undisturbed materials are exposed. Other than the two small landslides, there was no evidence of slope instability on the north facing slopes. Additionally, given the location of the building sites atop a ridge, the potential for debris flows to affect the main residence and guest house are very low.

Soil/ Bedrock Conditions

Our borings on the east side of the proposed main residence encountered lean to fat clay to depths of 3 to 8 feet that were underlain by *mélange*/sandstone/siltstone rocks (Borings B3 and B4). Within the general footprint of the main residence, 1.5 to 2.5 feet of dense, clayey sands underlain by conglomerate/sandstone were encountered (Borings B2 and B5). Bedrock is



present at ground surface north of the residence where fill material is proposed (Boring 1). The guest house area is underlain by moderately soft to soft serpentinite bedrock (Borings 6 and 7).

Soil Expansion Potential:

A plasticity index test of a sample of the clayey sand from the site resulted in a liquid limit (LL) of 40 and a plasticity index (PI) of 23, indicating that the sample tested has a high expansion potential. Expansive soils tend to swell with increases in soil moisture and shrink as the soil moisture decreases. The volume changes that the soils undergo in this cyclical pattern can stress and damage foundations, slabs, and other improvements if precautionary measures are not incorporated into the design and construction procedures. Use of a drilled pier foundation system is recommended to reduce the potential for excessive expansive soil movement for the main residence. The foundation piers should be sufficiently deep to withstand soil expansion forces. Due to the geologic conditions at the site, the guest house can be supported by conventional spread footings, but the footings should be deepened to the zone of lesser soil moisture fluctuation. Concrete slabs and exterior flatwork should be protected by covering the slab and flatwork areas with nonexpansive material. The soil should also be moisture conditioned during grading.

Foundations

Due to the variable depths of the proposed cuts and fills for the building pad for the main residence, it is recommended that that structure be supported by a system of drilled piers embedded into bedrock. It appears that very minimal grading will be performed at the proposed guest house location, and our subsurface investigation revealed shallow bedrock. Therefore, the guest house can be supported on conventional shallow foundations bearing in bedrock.

Groundwater

Groundwater was not encountered during subsurface exploration to depths of 25 feet below the existing ground surface. Earth Systems also did not observe seeps or springs indicative of groundwater at the site. Historical groundwater data was not readily available for review and could not be determined. While groundwater was not encountered at the time of drilling, variations in rainfall, irrigation, temperature, and other factors may affect water levels, and therefore groundwater levels should not be considered constant.

**Seismicity**

The San Francisco Bay area is recognized by geologists and seismologists as one of the most seismically active regions in the United States. The significant earthquakes in this area are generally associated with crustal movement along well-defined, active fault zones which regionally trend in a northwesterly direction. Although research on earthquake prediction has greatly increased in recent years, seismologists cannot predict when and where an earthquake will occur. Nevertheless, on the basis of current technology, it is reasonable to assume that the proposed residences will be subjected to at least one moderate to severe earthquake during their lifetimes. During such an earthquake, the hazard from fault offset on the site is slight, but strong shaking of the site is likely to occur. Therefore, at a minimum, the proposed improvements should be designed in accordance with the seismic design provisions of the latest California Building Code. It should be understood that the California Building Code seismic design parameters are not intended to prevent structural damage during an earthquake, but to reduce the potential for building collapse and loss of life.

6.0 RECOMMENDATIONS**Site Preparation and Grading**

1. The site should be prepared for grading by removing existing trees and their root systems, vegetation, debris, and other potentially deleterious materials from areas to receive improvements.
2. Ruts or depressions resulting from the removal of tree root systems, etc., should be properly cleaned out down to undisturbed native soil or rock. The bottom of the resulting depressions should be cross-scarified to a depth of at least eight inches and recompact as described later in this section. These depressions should then be backfilled with compacted, moisture conditioned structural fill, as recommended below. Clearing and backfilling operations should be conducted under the field observation of the geotechnical engineer.
3. A keyway should be established near the toe of the proposed fill slope for the main residence. The actual keyway location should be established by the geotechnical engineer at the time of grading. The keyways should be a minimum of 12 feet wide or 1-½ times as wide as the compaction equipment, whichever is wider. The keyway should penetrate a minimum of 3 feet into undisturbed firm soil or rock on the downhill side of the keyway.



4. The slope above the keyway, as well as any slopes steeper than 10 percent that are to receive fill, should be cut to level benches. The benches should be a minimum of 5 feet wide and should be bottomed into undisturbed firm soil or rock. The bottoms of keyway and benches should be angled 2 to 3 percent back into the slope.
5. During the slope keying and benching operations, the existing landslide material in the building pad area should be entirely removed to expose firm native soil or bedrock. The depth and lateral extent of the landslide material to be removed should be as recommended by the geotechnical engineer based on the conditions observed at the time of grading.
6. Where soil or soft weathered rock is exposed on the bottoms of keyways and benches, the surface should be scarified to a depth of approximately 8 inches, moisture conditioned to a level above optimum, and recompact to a minimum 95 percent of maximum dry density. Undisturbed firm rock exposed in the keyways and benches should not be scarified. The keyways and benches should be observed by the geotechnical engineer during grading.
7. Due to the potential that seepage of subsurface water could destabilize the fill slope, a subsurface drain should be installed in the keyway. The subsurface drain should consist of a rigid perforated pipe covered with permeable material or gravel encased by synthetic filter fabric, or manufactured synthetic drainage systems. The filter fabric should conform to Caltrans Standard Specifications, Section 88-1.02B, Class A. Permeable material should conform to Section 68-2.02F(3), Class 2, of the Caltrans Standard Specifications. The location and configuration of the drain should be as recommended by the geotechnical engineer based on conditions observed at the time of grading.
8. Fill should be placed in lifts not exceeding 8 inches in loose thickness, moisture conditioned to a level above optimum moisture content, and compacted to a minimum of 90 percent of maximum dry density. Organics and rock, debris, and irreducible material larger than 4 inches in diameter should be removed from the soil to be compacted.
9. To help reduce the effects of soil expansion on concrete slabs-on-grade, a minimum of 12 inches of nonexpansive material should be placed in the slab areas. The nonexpansive imported material should be compacted to a minimum 90 percent of



maximum dry density. Nonexpansive import should also be used to reduce the effects of soil expansion on exterior flatwork (refer to Slabs-on-grade and Exterior Flatwork).

10. Nonexpansive material is defined as being coarse grained (ASTM D 2487-11) with a plasticity index (ASTM D 4318-10) of 12 or less. Proposed nonexpansive material should be evaluated by the geotechnical engineer before being transported to the site, and on an intermittent basis during placement on the site. Processed aggregate base would be suitable for use as nonexpansive material. The slab and flatwork areas should be periodically moistened as necessary prior to placement of the nonexpansive import to maintain the soil moisture content above optimum.
11. If fill is to be imported for general use at the site (other than nonexpansive imported material), the fill should be coarse grained with a plasticity of 20 or less. Proposed imported soils should be evaluated by a representative of this firm before being transported to the site, and on an intermittent basis during placement on the site.
12. In areas to receive pavement, the upper 8 inches of subgrade soil should be compacted to a minimum 92 percent of maximum dry density. The aggregate base courses should be compacted to a minimum 95 percent of maximum dry density. The subgrade and base should be firm and unyielding when proofrolled with heavy, rubber-tired equipment prior to paving. The pavement subgrade soils should be periodically moistened as necessary prior to placement of the aggregate base to maintain the soil moisture content near optimum.
13. Due to the fine-grained nature of the upper soils, and depending on moisture conditions at the time of construction, there is a potential for the soils to become unstable during grading. Unstable soils hinder compactive effort and are inappropriate for placement of additional fill. Alternatives to correct instability include aeration to dry the soils, lime treatment, and the use of gravel or geotextiles as stabilizing measures. Recommendations for stabilization should be provided by a representative of this firm as needed during construction.
14. Cut and fill slopes should not be steeper than 2:1, measured horizontally to vertically. It is recommended that fill slopes be over-filled by at least one foot laterally during placement and trimmed back after construction to create a firm surface. Finished slopes should be track-walked or otherwise compacted under the observation of the geotechnical engineer at the completion of construction. Graded slopes should be planted for erosion control as soon after construction as possible.



Foundations

Main Residence

1. The main residence should be supported by a foundation system utilizing drilled cast-in-place concrete piers interconnected with grade beams. The piers should have minimum diameters of 16 inches and should be reinforced as directed by the architect/engineer. To help resist uplift forces on grade beams at the garage door openings, piers should be provided at maximum 8-foot spacings at the door openings.
2. The piers should penetrate through any fill to be embedded a minimum of 8 feet into firm undisturbed bedrock. The geotechnical engineer should be present during pier drilling operations to observe the recommended penetration into firm native materials. As up to about 12 feet of fill will be placed in the building area, pier depths on the order of 20 feet should be planned. The pier drilling equipment should be selected accordingly, and difficulty should be expected during drilling.
3. The piers should be designed to derive support from skin friction against the bedrock. End bearing capacity of the piers, and skin friction in fill should be disregarded in the calculations.
4. The bedrock should be assigned a maximum allowable skin friction value of 600 psf. The allowable skin friction value for downward loads may be increased by one-third when transient loads such as wind or seismicity are included. Using the recommended design values, total and differential settlements are expected to be on the order of $\frac{1}{4}$ inch.
5. Lateral loads should be resisted by passive resistance of the bedrock against the piers. Passive resistance should be calculated based on an equivalent fluid pressure of 350 pcf acting on a width of 2 pier diameters.
5. All perimeter piers, and piers adjacent to the garage slab, should be laterally restrained by concrete grade beams. Grade beams should be reinforced as directed by the architect/engineer.
6. To help cut off subsurface water that could otherwise enter the subfloor area, perimeter grade beams should penetrate a minimum of 12 inches below lowest adjacent interior (crawl space) grade. To reduce uplift forces caused by soil expansion on the grade beams, 2-inch void forms or compressible styrofoam material should be placed at the bottoms of the grade beams.



7. The piers should not deviate from a plumb line by more than 2 percent of the pier length, as measured from the top to the point of interest. Adequate pier oversize may be assumed to provide the recommended tolerance. The bottoms of the pier excavations should be firm and should not contain excessive loose debris and slough material. Loose drilling spoils should be removed or compacted prior to placement of reinforcing steel.

Guest House

1. The guest house should be supported by conventional spread footings penetrating a minimum of 12 inches into firm undisturbed bedrock. To penetrate through the zone most affected by soil expansion, the footings should have minimum overall depths of 24 inches below lowest adjacent grade. In the event that firm rock is not exposed within the planned depths of the footings, deepening of the footing excavations may be necessary to achieve the recommended penetration into firm rock. The footing excavations should be observed by the geotechnical engineer prior to placement of formwork or reinforcement, and should be moistened to close any desiccation cracks prior to placement of concrete.
2. Minimum widths of continuous footings should be 12 inches. Isolated spread footings should be a minimum of 18 inches wide. All footings should be reinforced as directed by the architect/engineer.
3. Footings should be designed using a maximum allowable bearing capacity of 2,500 psf dead plus live load. This value may be increased by one-third when transient loads such as wind or seismicity are included. Using these criteria, long term total and differential foundation settlements are expected to be on the order of 1 inch and ½ inch, respectively.
4. Resistance to lateral loads should be calculated based on a passive equivalent fluid pressure of 350 pcf and a friction factor of 0.3. Passive and frictional resistance can be combined in the calculations without reductions. These values are based on the assumption that backfill adjacent to foundations is adequately compacted. The upper 12 inches of embedment should be neglected in calculating lateral passive resistance where landscape areas are adjacent to the foundations.



Slabs-on-Grade and Exterior Flatwork

1. Interior slabs-on-grade and exterior flatwork should have minimum thicknesses of 4 full inches and should be reinforced as directed by the architect/engineer. Based on soil expansion only, interior slab reinforcement should consist of #3 rebar spaced at 18 inches on center each way. Due to the soil expansion potential, steel reinforcement should also be provided for exterior flatwork.
2. Interior slabs and foundations should be doweled together as required by the architect/engineer; based on soil expansion potential only, the dowels should be a minimum of #3 rebar spaced on 18-inch centers. The garage slabs can be designed to be "free floating" based on the specifications of the architect/engineer. However, the slabs should be doweled into foundations at door openings.
3. To help protect slabs-on-grade from damage due to expansive soils, they should be underlain by a minimum of 12 inches of nonexpansive imported material (refer to Site Preparation and Grading).
4. In areas where moisture transmitted from the subgrade would be undesirable, a vapor retarder should be utilized beneath the floor slab. The vapor retarder should comply with ASTM Standard Specification E 1745-11 and the latest recommendations of ACI Committee 302. The vapor retarder should be installed in accordance with ASTM Standard Practice E 1643-11. Care should be taken to properly lap and seal the vapor retarder, particularly around utilities, and to protect it from damage during construction.
5. If sand, gravel or other permeable material is to be placed over the vapor retarder, the material over the vapor retarder should be only lightly moistened and not saturated prior to casting the slab concrete. Excess water above the vapor retarder would increase the potential for moisture damage to floor coverings and could increase the potential for mold growth or other microbial contamination.
6. Exterior flatwork should be cast on a minimum 8-inch thick layer of compacted, nonexpansive material such as clean sand or aggregate base. A greater thickness of nonexpansive material would enhance flatwork performance. Prior to placement of the nonexpansive material, the soil surface in the flatwork area should be at or above optimum moisture content, and no desiccation cracks should be present.



7. Assuming that movement (i.e., ¼-inch or more) of exterior flatwork beyond the structure is acceptable, the flatwork should be designed to be independent of the building foundations. The flatwork should not be doveled to foundations, and a separator should be placed between the two. If differential movement of flatwork is considered undesirable, the flatwork should be designed and constructed in roughly the same manner as the structure slabs, and reinforced footings should be provided around the perimeter of the flatwork.
8. To reduce shrinkage cracks in concrete, the concrete aggregates should be of appropriate size and proportion, the water/cement ratio should be low, the concrete should be properly placed and finished, contraction joints should be installed, and the concrete should be properly cured. This is particularly applicable to slabs that will be cast directly upon a vapor retarder and those that will be protected from transmission of vapor by use of admixtures or surface sealers. Concrete materials, placement and curing specifications should be at the direction of the architect/engineer; ACI 302.1R-04 and ACI 302.2R-04 are suggested as resources for the architect/engineer in preparing such specifications.

Utility Trenches

1. A select, noncorrosive, granular, easily compactable material should be used as bedding and shading immediately around utility pipes. The site soils may be used for trench backfill above the select material.
2. Trench backfill in the upper 8 inches of subgrade beneath pavement areas should be compacted to a minimum of 92 percent of maximum dry density. Trench backfill in other areas should be compacted to a minimum of 90 percent of maximum dry density. Jetting of utility trench backfill should not be allowed.
3. Where utility trenches extend under perimeter foundations or areas to receive pavement, the trenches should be backfilled entirely with native soil compacted to a minimum of 90 percent of maximum dry density. The zone of native soil should extend a minimum distance of 2 feet on both sides of the foundation or pavement edge. If utility pipes pass through sleeves cast into the perimeter foundations, the annulus between the pipes and sleeves should be completely sealed.



Site Drainage and Finish Improvements

1. Unpaved ground surfaces should be finish graded to direct surface runoff away from site improvements at a minimum 5 percent grade for a minimum distance of 10 feet. The site should be similarly sloped to drain away from foundations, slopes, and other improvements during construction. If this is not feasible due to the terrain, property lines, or other factors, swales with improved surfaces, area drains, or other drainage facilities should be provided to divert drainage away from improvements.
2. Runoff should discharge in a nonerosive manner away from slopes, foundations and other improvements in accordance with the requirements of the governing agencies. The landscaping should be planned and installed to maintain proper surface drainage conditions.
2. Raised planter beds adjacent to foundations should be provided with sealed sides and bottoms so that irrigation water is not allowed to penetrate the subsurface beneath foundations. Outlets should be provided in the planters to direct accumulated irrigation water away from foundations.
3. Subfloor areas should be contoured to one or more low points to collect any water that might enter the crawl spaces. Drains should be provided at the low points to discharge such water outside the foundations by gravity flow.
4. The on-site soils are highly erodible. Stabilization of surface soils, particularly those disturbed during construction, by vegetation or other means during and following construction is essential to protect the site from erosion damage. Care should be taken to establish and maintain vegetation.
5. Irrigation systems should be controlled to the minimum levels that will sustain the vegetation without saturating the soil. Use of drip irrigation systems is recommended in planter beds adjacent to the residence.

Geotechnical Observation and Testing

1. It must be recognized that the recommendations contained in this report are based on a limited subsurface investigation and rely on continuity of the subsurface conditions encountered.
2. It is assumed that the geotechnical engineer will be retained to provide consultation during the design phase, to interpret this report during construction, and to provide construction monitoring in the form of testing and observation.



3. Unless otherwise stated, the terms "compacted" and "recompacted" refer to soils placed in level lifts not exceeding 8 inches in loose thickness and compacted to a minimum of 90 percent of maximum dry density. The standard tests used to define maximum dry density and field density should be ASTM D 1557-12 and ASTM D 6938-10, respectively, or other methods acceptable to the geotechnical engineer and jurisdiction. Unless otherwise stated, "moisture conditioning" refers to adjusting the soil moisture to at least optimum moisture prior to application of compactive effort.
4. At a minimum, the following should be provided by the geotechnical engineer:
 - Review of grading and foundation plans as they near completion
 - Professional observation during site preparation, grading, and foundation construction
 - Oversight of soil compaction testing during grading
 - Oversight of soils special inspection during grading
5. Special inspection of grading should be provided as per Sections 1705.6 and 1705.8, and Tables 1705.6 and 1705.8 of the CBC; the soils special inspector should be under the direction of the geotechnical engineer. In our opinion, the following operations should be subject to *continuous* soils special inspection:
 - Slope keying and benching
 - Removal of existing landslide material
 - Scarification and recompaction
 - Fill placement and compaction
 - Foundation pier drilling (main residence)
6. In our opinion, the following operations may be subject to *periodic* soils special inspection; subject to approval by the Building Official:
 - Site preparation
 - Installation of keyway drain
 - Proposed imported materials
 - Spread footing excavations (guest house)
 - Compaction of utility trench backfill
 - Compaction of pavement subgrade and aggregate base



7. It will be necessary to develop a program of quality control prior to beginning grading. It is the responsibility of the owner, contractor, or project manager to determine any additional inspection items required by the architect/engineer or the governing jurisdiction.
8. The locations and frequencies of compaction tests should be as per the recommendations of the geotechnical engineer at the time of construction. The recommended test locations and frequencies may be subject to modification by the geotechnical engineer based upon soil and moisture conditions encountered, the size and type of equipment used by the contractor, the general trend of the compaction test results, and other factors.
9. A preconstruction conference between a representative of the owner, the geotechnical engineer, the soils special inspector, the architect/engineer, and contractors is recommended to discuss planned construction procedures and quality control requirements. This firm should be notified at least 48 hours prior to beginning grading operations.
10. If Earth Systems Pacific is not retained to provide construction observation and testing services, it shall not be responsible for the interpretation of the information by others or any consequences arising there from.

7.0 CLOSURE

This report is valid for conditions as they exist at this time for the type of project described herein. Our intent was to perform the investigation in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the locality of this project at this time under similar conditions. No representation, warranty, or guarantee is either expressed or implied. This report is intended for the exclusive use by the client as discussed in the Scope of Services section. Application beyond the stated intent is strictly at the user's risk.

If changes with respect to the project type or location become necessary, if items not addressed in this report are incorporated into plans, or if any of the assumptions stated in this report are not correct, Earth Systems Pacific should be notified for modifications to this report. Any items not specifically addressed in this report should comply with the California Building Code and the requirements of the governing jurisdiction.



The preliminary recommendations of this report are based upon the geotechnical conditions encountered during the investigation, and may be augmented by additional requirements of the architect/engineer, or by additional recommendations provided by Earth Systems Pacific based on conditions exposed at the time of construction.

This document, the data, conclusions, and recommendations contained herein are the property of Earth Systems. This report should be used in its entirety, with no individual sections reproduced or used out of context. Copies may be made only by Earth Systems, the client, and their authorized agents for use exclusively on the subject project. Any other use is subject to federal copyright laws and the written approval of Earth Systems.

Thank you for this opportunity to have been of service. Please feel free to contact this office at your convenience if you have any questions regarding this report.



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Aerial Photographs (Stereo Pairs)

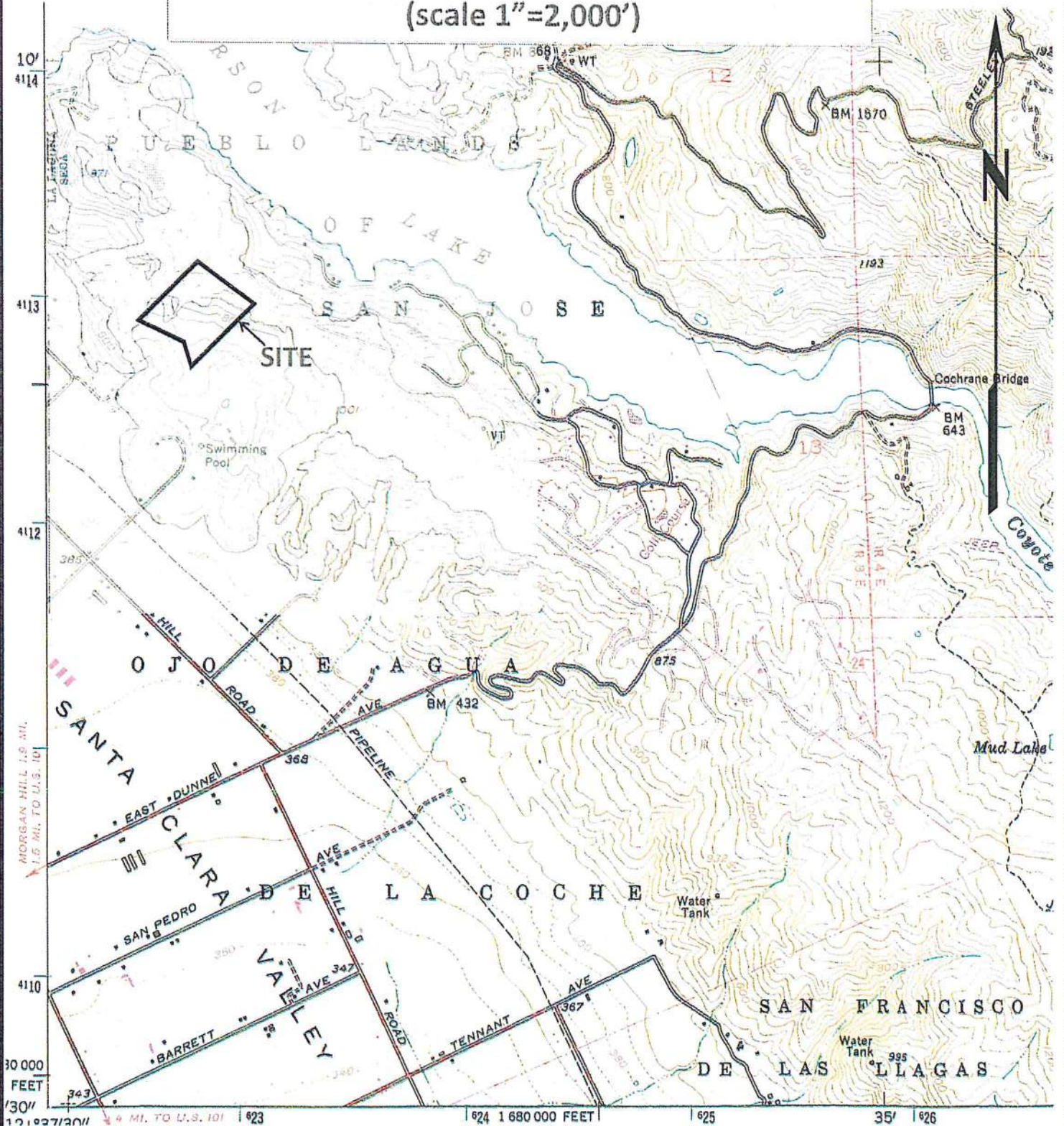
Date	Scale	Type	Source	Ref. No.
9/28/63	1:20,000	B&W	ESP Archives	CIV-6DD 209, 210

FIGURES

Site Location Map
Site Geology and Boring Location Map
Schematic Geologic Cross Section

Site Location Map

(scale 1"=2,000')

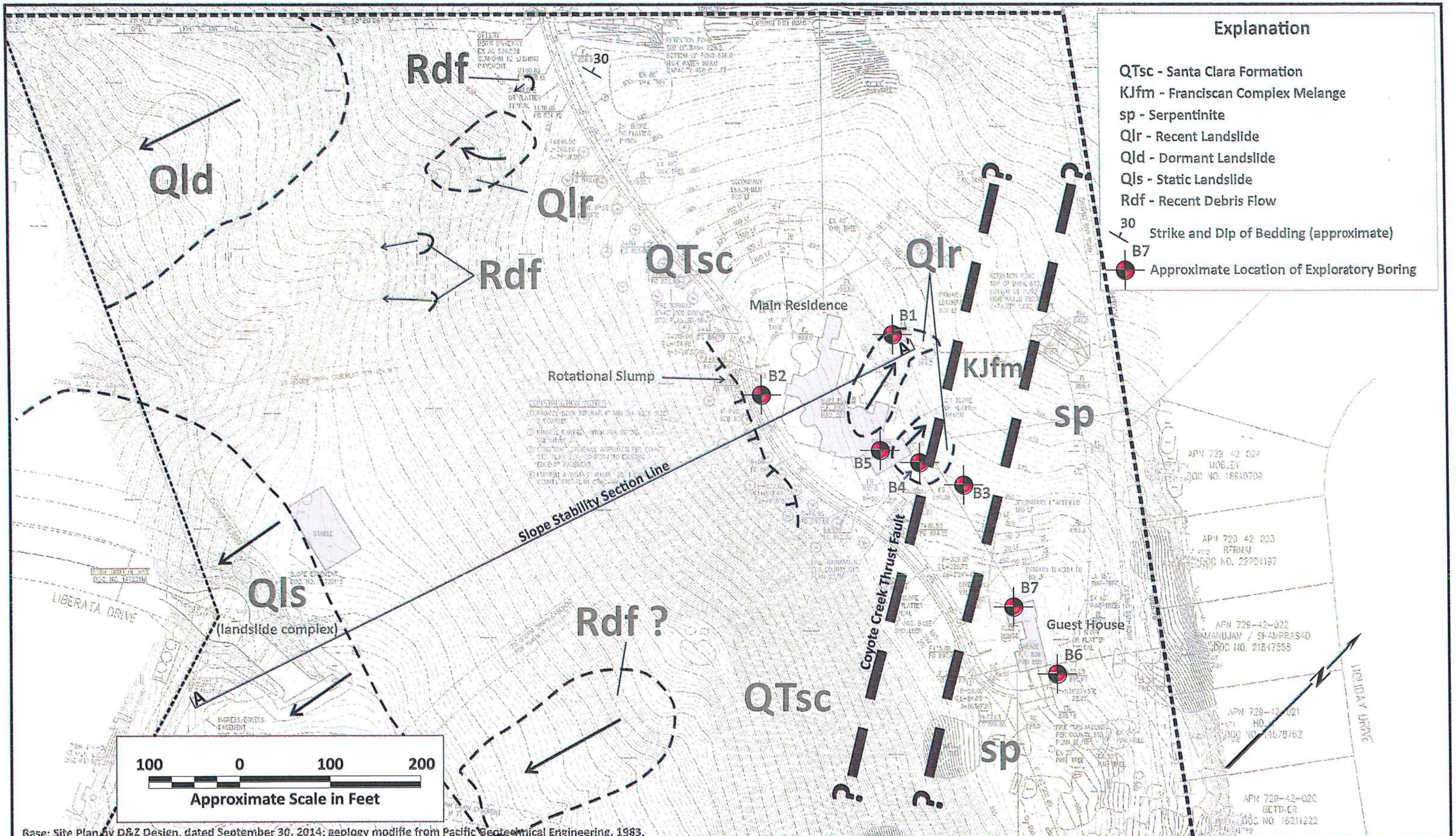


Base: U.S. Geological Survey Topographic Map of the Mt. Sizer 7.5-minute quadrangle, 1978.
 California Geological Survey Seismic Hazard Zone Map (2006) overlay (blue).



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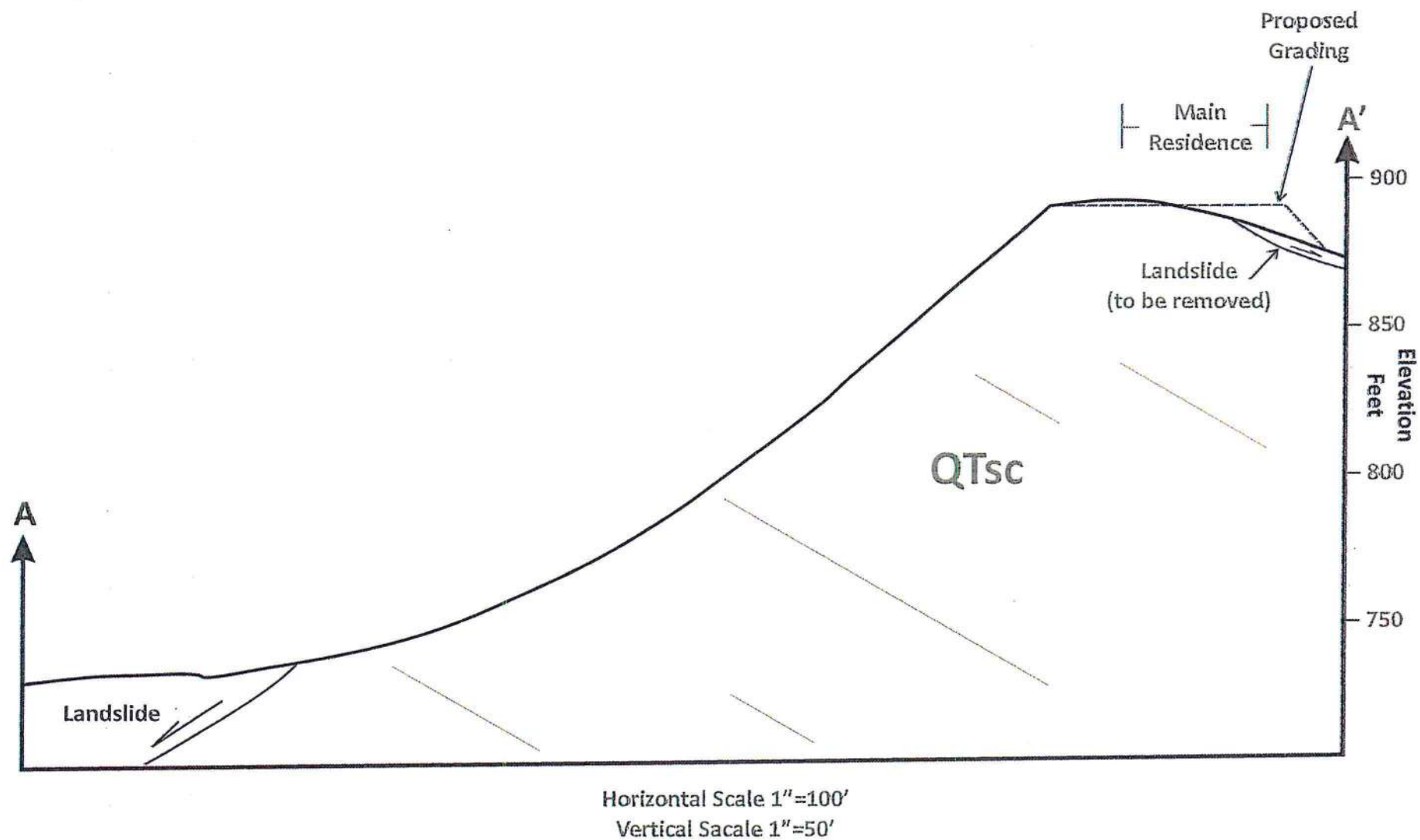
Gutierrez Residence and Guest House
2245 Liberata Drive
Morgan Hill, Santa Clara County, California



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Gutierrez Residence and Guest House
2245 Liberata Drive
Morgan Hill, CA 95037

Site Geology and Boring Location Map
SH-12630-SA



QTsc - Santa Clara Formation



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Gutierrez Residence and Guest House
2245 Liberata Drive
Morgan Hill, Santa Clara County, California

Schematic Geologic Cross Section

File No.: SH-12630-SA

APPENDIX A

Boring Logs



Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 1
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

DEPTH (feet)	USCS CLASS	SYMBOL	GUTIERREZ RESIDENCE 2245 Liberata Drive Morgan Hill, California	SAMPLE DATA					
			SOIL DESCRIPTION	INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN. POCKET PEN (t.s.f)
0	QTsc		Pebble Conglomerate, soft rock, buff to yellow brown, slightly moist, moderately weathered; Clayey sand with gravel	1.0-2.5	1-1		117.0	11.2	17 30 50/5
1									
2									
3									
4									
5									
6	QTsc		SANDSTONE, soft rock, yellow brown, moist, medium grained, moderately weathered; Clayey sand, Santa Clara Formation	3.5-5.0	1-2				25 34 42
7									
8									
9	QTsc		Pebble Conglomerate, soft rock, yellow brown, moist, moderately weathered; gravel clasts, less wathered than above; Clayey sand with gravel, Santa Clara Formation [$\Phi = 55^\circ$, C=296 psf]	8.5-9.5	1-3		120.4	8.5	29 50/6
10									
11									
12									
13									
14									
15	QTsc		SANDSTONE, very soft rock, yellow brown, moist, medium grained, moderately weathered; Clayey sand, Santa Clara Formation	13.5-15.0	1-4				11 14 14
16									
17									
18									
19									
20	QTsc		Pebble Conglomerate, soft rock, yellow brown, moist, moderately weathered; gravel clasts, less wathered than above; Clayey sand with gravel, apparent steeply dipping conglomerate siltstone contact in sample, Santa Clara formation	18.5-19.5	1-5		92.7	12.6	21 50/3
21									
22									
23									
24			- very soft rock						
25				23.5-25.0	1-6				12 13 14
26			End of boring at 25.0 feet No groundwater encountered						

LEGEND: 2.5" Mod Cal Sample 2.0" Cal Sample SPT Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.



Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 2
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

DEPTH (feet)	USCS CLASS	SYMBOL	GUTIERREZ RESIDENCE 2245 Liberata Drive Morgan Hill, California	SAMPLE DATA					
			SOIL DESCRIPTION	INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN. POCKET PEN (t.s.f)
0	SC		Clayey SAND with gravel, dense, dark to yellow brown, slightly moist; fine to medium grained sand						
1									
2	QTsc		Pebble Conglomerate, soft rock, dark red brown, moist, moderately weathered; Clayey sand with gravel, Santa Clara Formation	1.0-2.5	2-1	■	114.9	11.3	15
3									18
4			[Gravel=16%; Sand=53%; Fines=31%]	0.5-3.0	A	○			24
5									23
6				3.5-5.0	2-2	■			38
7									50/4
8	QTsc		Pebble SANDSTONE, soft rock, yellow brown, moist, severely weathered, medium to coarse grained; Clayey sand, Santa Clara Formation						
9									
10			- zone of very dense gravel	8.5-10.0	2-3	■			15
11									27
12	QTsc		SANDSTONE, very soft rock, yellow brown, moist, fine to medium grained, slightly weathered; Clayey sand, Santa Clara Formation						45
13									
14									
15			- zone of very dense gravel	13.5-15.0	2-4	■	106.2	13.9	21
16									40
17									45
18									
19			[Φ =42°, C=872 psf]						
20			- very clayey, fine grained sandstone	18.5-20.0	2-5	■	110.1	17.2	10
21			End of boring at 20.0 feet						28
22			No groundwater encountered						35
23									
24									
25									
26									

LEGEND: ■ 2.5" Mod Cal Sample □ 2.0" Cal Sample








NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.





Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 3
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

DEPTH (feet)	USCS CLASS	SYMBOL	GUTIERREZ RESIDENCE 2245 Liberata Drive Morgan Hill, California	SAMPLE DATA					
			SOIL DESCRIPTION	INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN. POCKET PEN (t.s.f)
0	CH		FAT CLAY, stiff, dark gray brown, moist, Qc						
1									
2									
3	SC		Clayey SAND, medium dense, olive gray, moist, completely decomposed Franciscan Complex Melange						
4									
5									
6			[Gravel=6%; Sand=52%; Fines=42%]	5.0-6.5	3-1				7
7			[LL=40; PL=17; PI=23]						8
8									12
9	KJfm		Franciscan Complex Melange, soft rock, light green, moist, pervasively sheared; Clayey sand						
10									
11				10.0-11.5	3-2				13
12			End of boring at 11.5 feet						16
13			No groundwater encountered						24
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									

LEGEND:  2.5" Mod Cal Sample  2.0" Cal Sample

 SPT  Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.



Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 4
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

DEPTH (feet)	USCS CLASS	SYMBOL	GUTIERREZ RESIDENCE 2245 Liberata Drive Morgan Hill, California	SAMPLE DATA					
			SOIL DESCRIPTION	INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN. POCKET PEN (t.s.f)
0 - 1 - 2 - 3	CL		Lean CLAY with sand, stiff, dark yellow brown, moist, Qc	5.0-6.5	4-1				11 11 15
4 - 5 - 6 - 7 - 8	QTsc		SILTSTONE, stiff, olive yellow brown, slightly moist, completely decomposed to lean clay, trace serpentinite, Santa Clara Formation						
9 - 10 - 11	QTsc		SANDSTONE, soft rock, yellow brown, slightly moist, slightly weathered, traces of pebbles, Santa Clara Formation	10.0-11.5	4-2				16 26 40
12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25 - 26			End of boring at 11.5 feet No groundwater encountered						

LEGEND: 2.5" Mod Cal Sample 2.0" Cal Sample

SPT Bulk Sample





NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.



Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 5
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

GUTIERREZ RESIDENCE 2245 Liberata Drive Morgan Hill, California				SAMPLE DATA						
DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.	POCKET PEN (t.s.f)
0	SC		Clayey SAND, dense, dark yellow brown, slightly moist							
1										
2										
3	QTsc		Pebble Conglomerate, soft rock, dark yellow to red brown, severely weathered; clayey sands with gravel, Santa Clara Formation							
4										
5										
6										
7				5.0-6.5	5-1				11 12 15	
8										
9										
10										
11			-more gravel							
12				10.0-11.5	5-2				10 16 12	
13			End of boring at 11.5 feet No groundwater encountered							
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										

LEGEND: 2.5" Mod Cal Sample 2.0" Cal Sample

SPT

Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.



Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 6
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

DEPTH (feet)	USCS CLASS	SYMBOL	GUTIERREZ RESIDENCE 2245 Liberata Drive Morgan Hill, California	SAMPLE DATA					
			SOIL DESCRIPTION	INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN. POCKET PEN (t.s.f)
0	Sp		SERPENTINITE, soft rock, gray green, moist, massive, pulverizes to clayey sand	1.0-2.0	6-1		96.6	10.8	28 50/3
1			- moderately soft rock						
2									
3				3.5-5.0	6-2				18 16 46
4			-thin, red brown clayey sand matrix locally present						
5									
6				8.5-9.5	6-3				40 50/6
7									
8									
9									
10			End of boring at 9.5 feet No groundwater encountered						
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									

LEGEND: 2.5" Mod Cal Sample 2.0" Cal Sample

SPT Bulk Sample





NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.



Earth Systems Pacific

LOGGED BY: Brett Faust
DRILL RIG: Simco 2400SK-1
AUGER TYPE: 6" Solid Stem

Boring No. 7
PAGE 1 OF 1
JOB NO.: SH-12630-SA
DATE: 11/12/14

DATE: 11/12/14													
DEPTH (feet)	USCS CLASS	SYMBOL	GUTIERREZ RESIDENCE 2245 Liberata Drive Morgan Hill, California	SAMPLE DATA									
			SOIL DESCRIPTION	INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN. POCKET PEN (t.s.f)				
0	Sp		SERPENTINITE, moderately soft rock, gray green, pervasively sheared, pulverizes to clayey sand, very moist	1.0-2.0	7-1		93.7	18.7	30 50/4				
1													
2				3.5-4.5	7-2				35 50/5				
3													
4													
5													
6													
7													
8													
9													
10				8.5-10.0	7-3				21 30 46				
11	End of boring at 10.0 feet No groundwater encountered												
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													

LEGEND: 2.5" Mod Cal Sample 2.0" Cal Sample

SPT Bulk Sample

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of the drilling. Subsurface conditions may differ at other locations and times.

APPENDIX B

Laboratory Test Results



Gutierrez Residence

SH-12630-SA

BULK DENSITY TEST RESULTS

ASTM D 2937-10 (modified for ring liners)

January 2015

BORING NO.	DEPTH feet	MOISTURE CONTENT, %	WET DENSITY, pcf	DRY DENSITY, pcf
1	2.0 - 2.5	11.2	130.1	117.0
1	9.0 - 9.5	8.5	130.7	120.4
1	18.5 - 19.0	12.6	104.4	92.7
2	2.0 - 2.5	11.3	127.9	114.9
2	14.0 - 14.5	13.9	121.0	106.2
2	19.5 - 20.0	17.2	129.0	110.1
6	1.5 - 2.0	10.8	107.0	96.6
7	1.5 - 2.0	18.7	111.2	93.7



Gutierrez Residence

SH-12630-SA

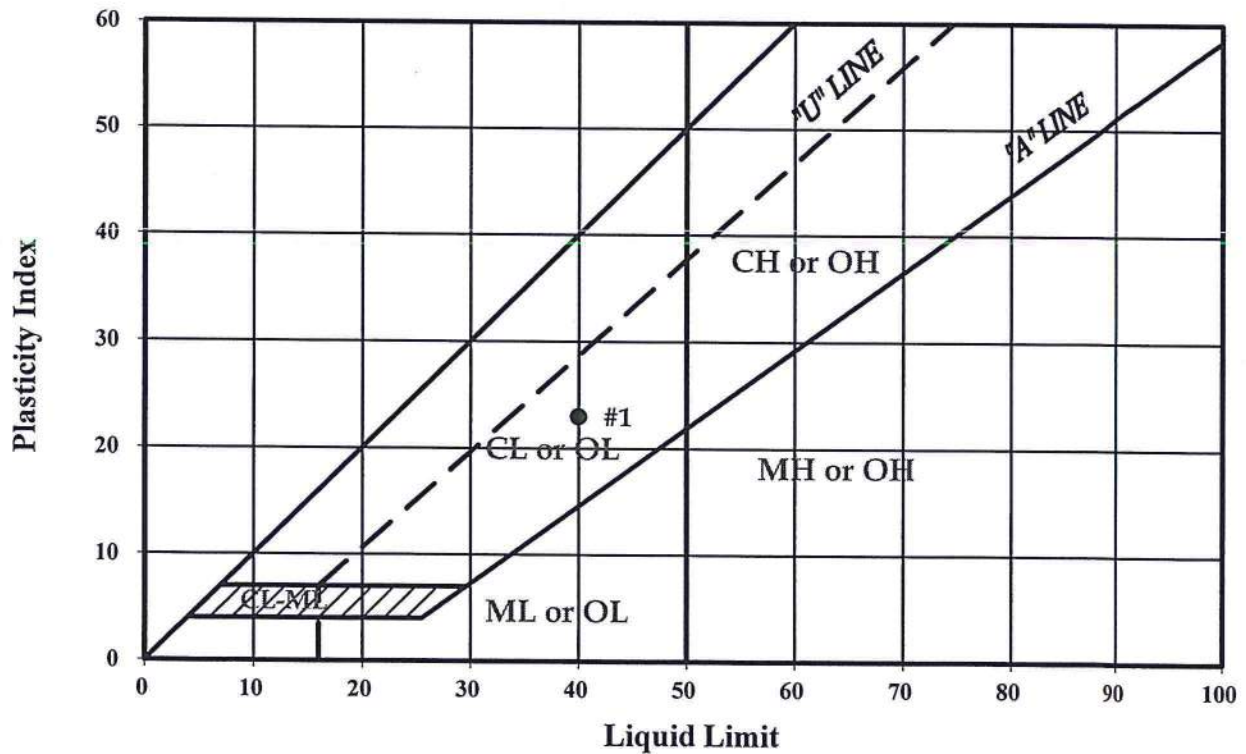
PLASTICITY INDEX

ASTM D 4318-10

January 2015

Test No.:	1	2	3	4	5
Boring No.:	3	7			
Sample Depth:	5.0 - 6.5'	1.5 - 2.0'			
Liquid Limit:	40	NL			
Plastic Limit:	17	NP			
Plasticity Index:	23	NP			

Plasticity Chart





Gutierrez Residence

SH-12630-SA

PARTICLE SIZE ANALYSIS

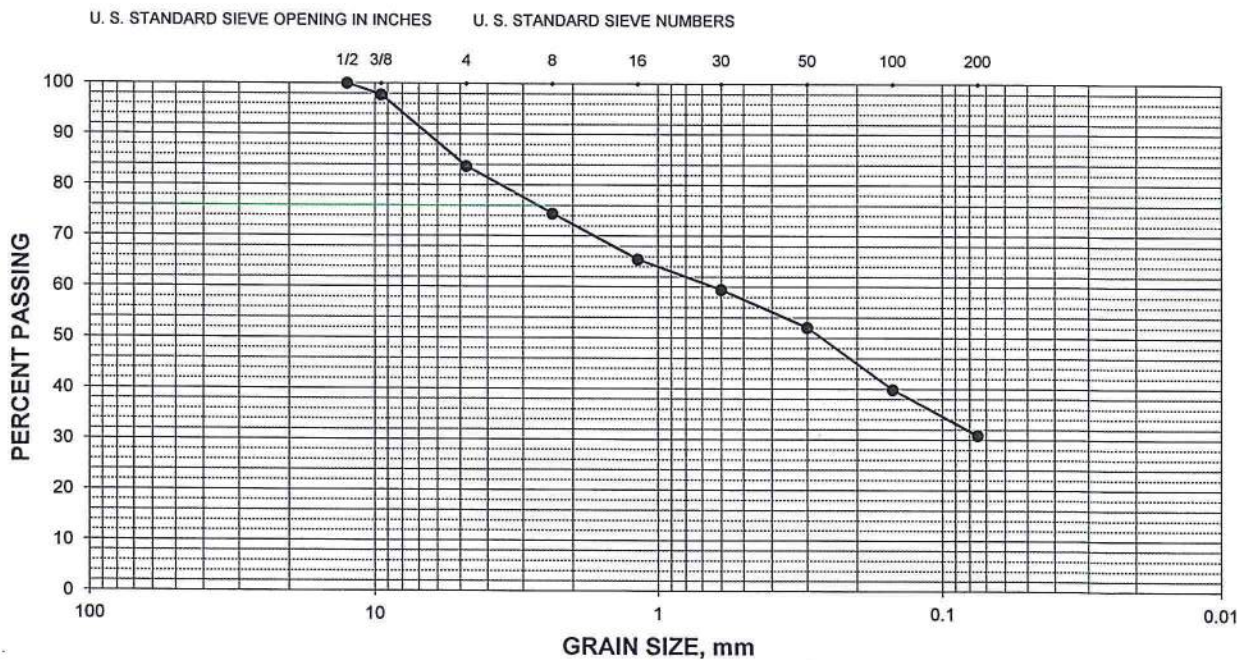
ASTM D 422-63/07; D 1140-00/06

Boring #2 @ 0.0 - 3.0'

January 1, 2015

Clayey Sand with gravel (SC)

Sieve size	% Retained	% Passing
1/2" (12.5-mm)	0	100
3/8" (9.5-mm)	2	98
#4 (4.75-mm)	16	84
#8 (2.36-mm)	26	74
#16 (1.18-mm)	35	65
#30 (600- μ m)	41	59
#50 (300- μ m)	48	52
#100 (150- μ m)	60	40
#200 (75- μ m)	69	31





Gutierrez Residence

SH-12630-SA

PARTICLE SIZE ANALYSIS

ASTM D 422-63/07; D 1140-00/06

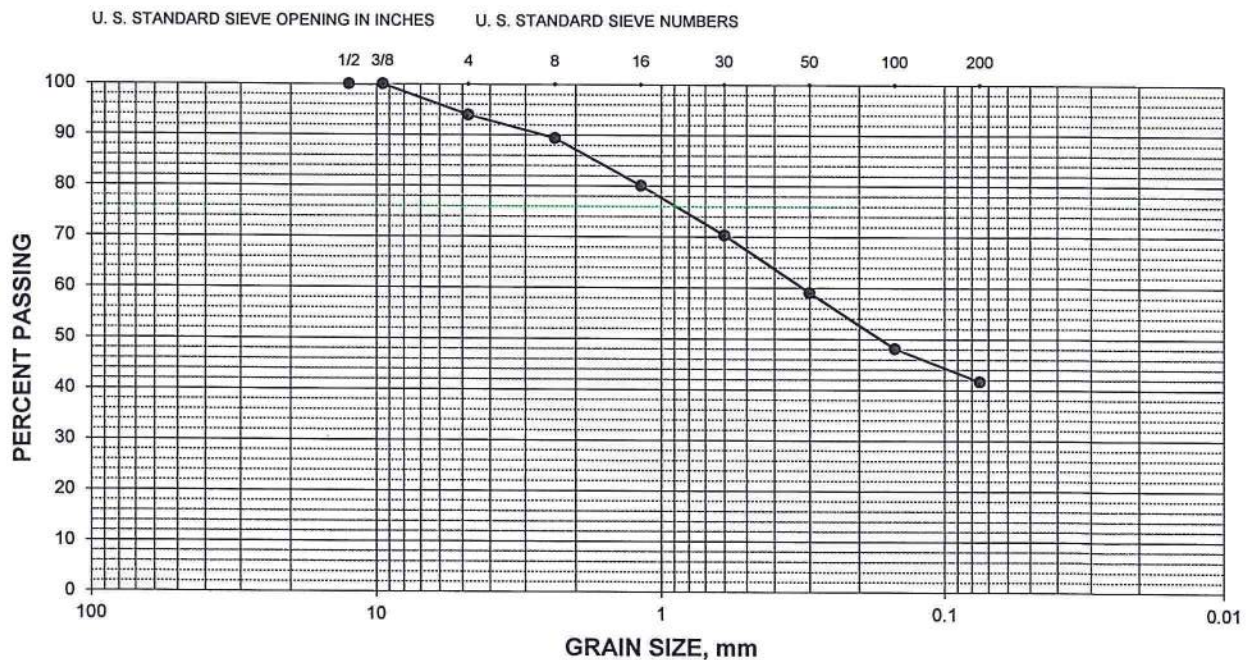
Boring #3 @ 5.0 - 6.5'

January 1, 2015

Clayey Sand (SC)

LL = 40; PL = 17; PI = 23

Sieve size	% Retained	% Passing
1/2" (12.5-mm)	0	100
3/8" (9.5-mm)	0	100
#4 (4.75-mm)	6	94
#8 (2.36-mm)	11	89
#16 (1.18-mm)	20	80
#30 (600- μ m)	30	70
#50 (300- μ m)	41	59
#100 (150- μ m)	52	48
#200 (75- μ m)	58	42





Gutierrez Residence

SH-12630-SA

DIRECT SHEAR

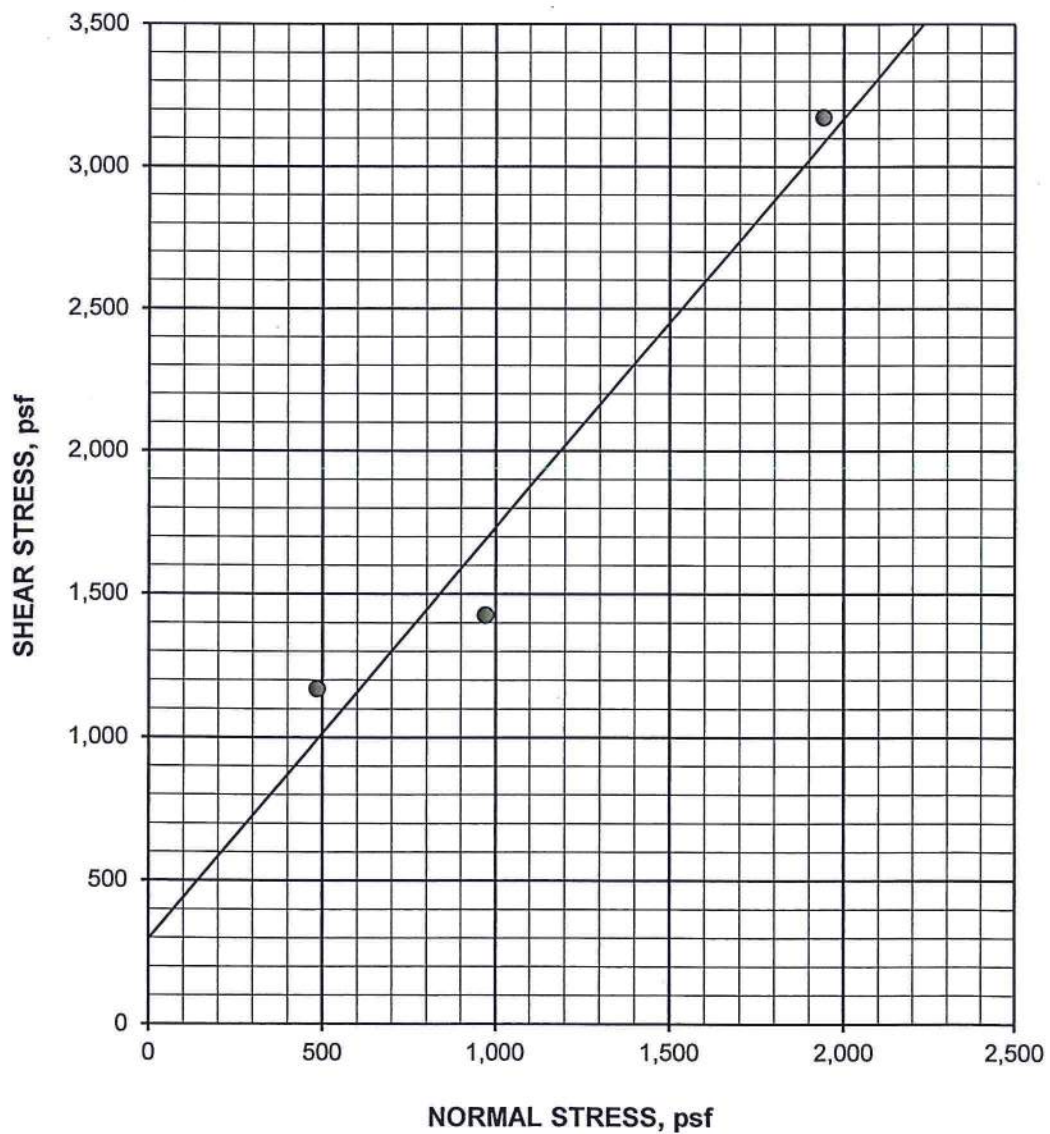
ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

January 2015

Boring #1 @ 9.0 - 9.5'
Conglomerate
Ring sample, saturated

INITIAL DRY DENSITY: 118.6 pcf
INITIAL MOISTURE CONTENT: 8.5 %
PEAK SHEAR ANGLE (ϕ): 55°
COHESION (C): 296 psf

SHEAR vs. NORMAL STRESS





Gutierrez Residence

SH-12630-SA

DIRECT SHEAR continued

ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

Boring #1 @ 9.0 - 9.5'

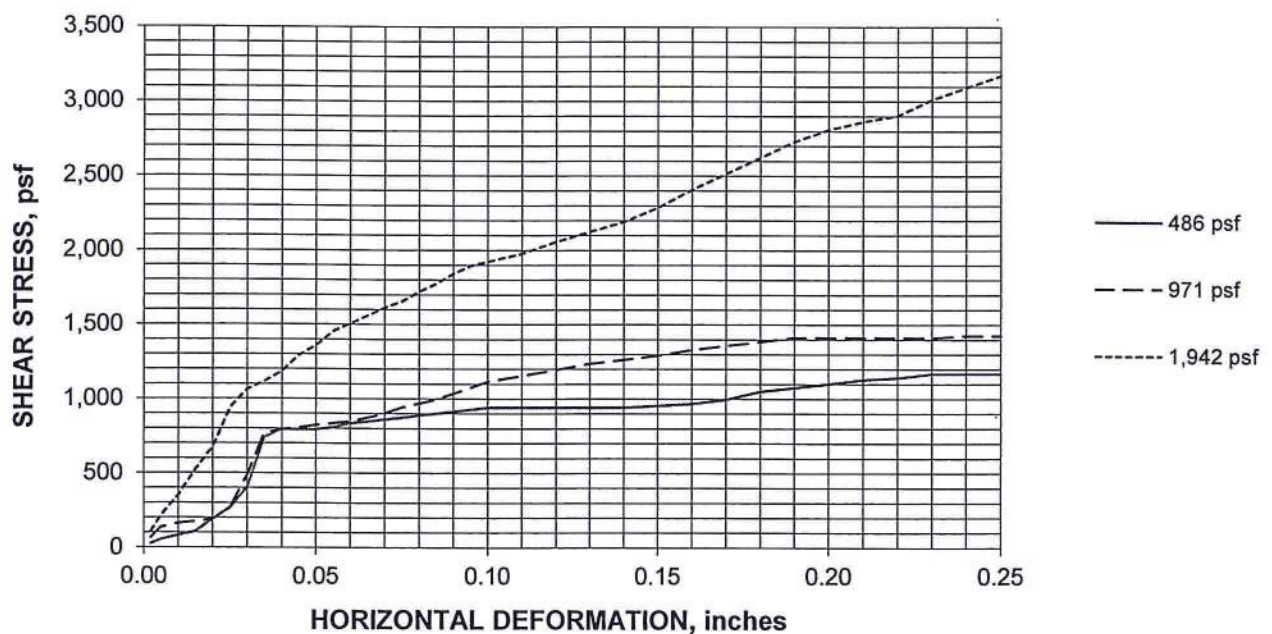
January 2015

Conglomerate

Ring sample, saturated

SPECIFIC GRAVITY: 2.70 (assumed)

SAMPLE NO.:	1	2	3	AVERAGE
INITIAL				
WATER CONTENT, %	8.5	8.5	8.5	8.5
DRY DENSITY, pcf	119.1	118.1	118.5	118.6
SATURATION, %	55.4	53.9	54.3	54.5
VOID RATIO	0.414	0.426	0.422	0.421
DIAMETER, inches	2.410	2.410	2.410	
HEIGHT, inches	1.00	1.00	1.00	
AT TEST				
WATER CONTENT, %	14.9	16.1	18.2	
DRY DENSITY, pcf	120.7	121.3	124.3	
SATURATION, %	100.0	100.0	100.0	
VOID RATIO	0.396	0.389	0.355	
HEIGHT, inches	0.99	0.97	0.95	





Gutierrez Residence

SH-12630-SA

DIRECT SHEAR

ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

January 2015

Boring #2 @ 19.0 - 19.5'

Sandstone

Ring sample, saturated

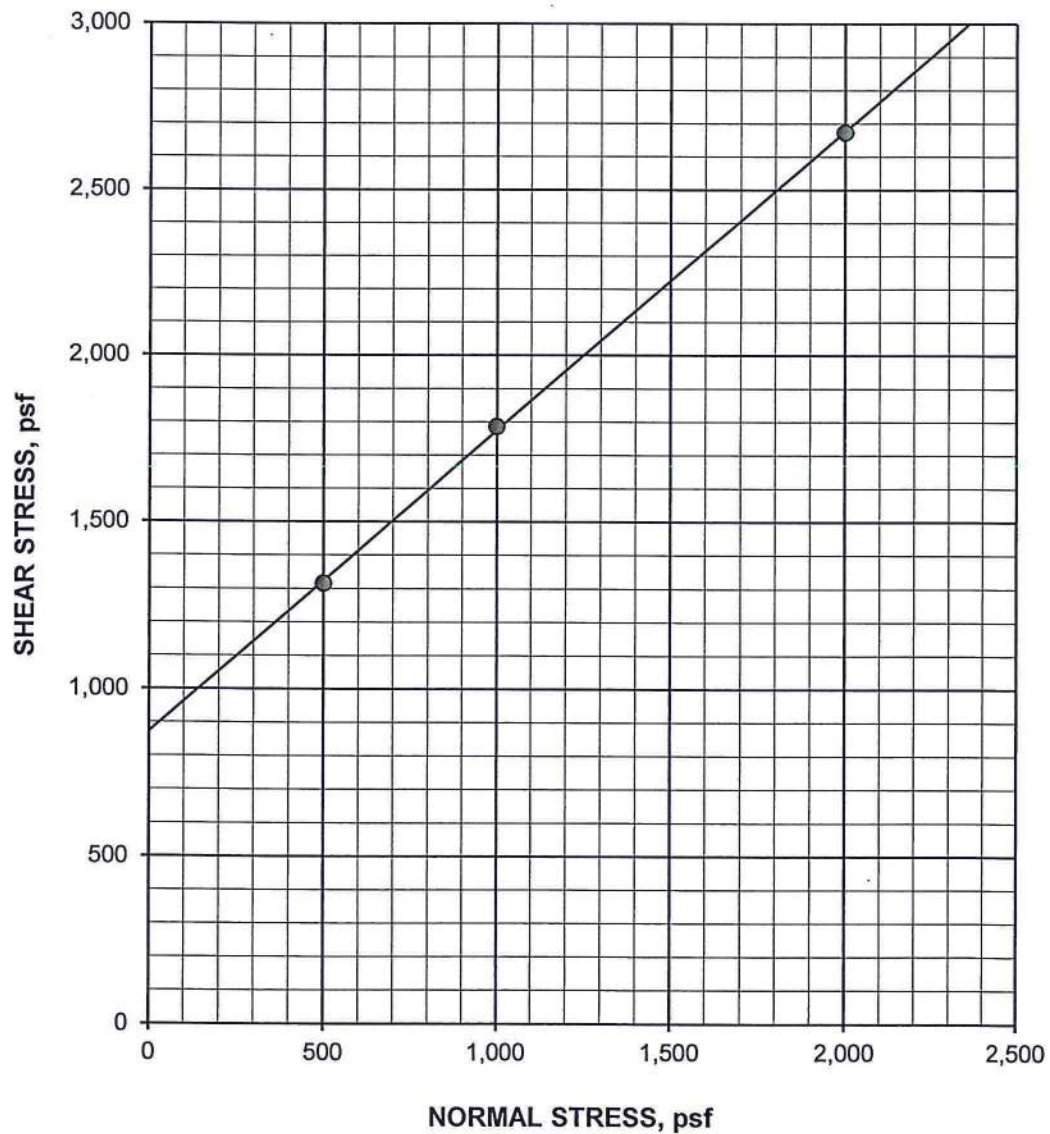
INITIAL DRY DENSITY: 109.6 pcf

INITIAL MOISTURE CONTENT: 17.2 %

PEAK SHEAR ANGLE (ϕ): 42°

COHESION (C): 872 psf

SHEAR vs. NORMAL STRESS





Gutierrez Residence

SH-12630-SA

DIRECT SHEAR continued

ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

Boring #2 @ 19.0 - 19.5'

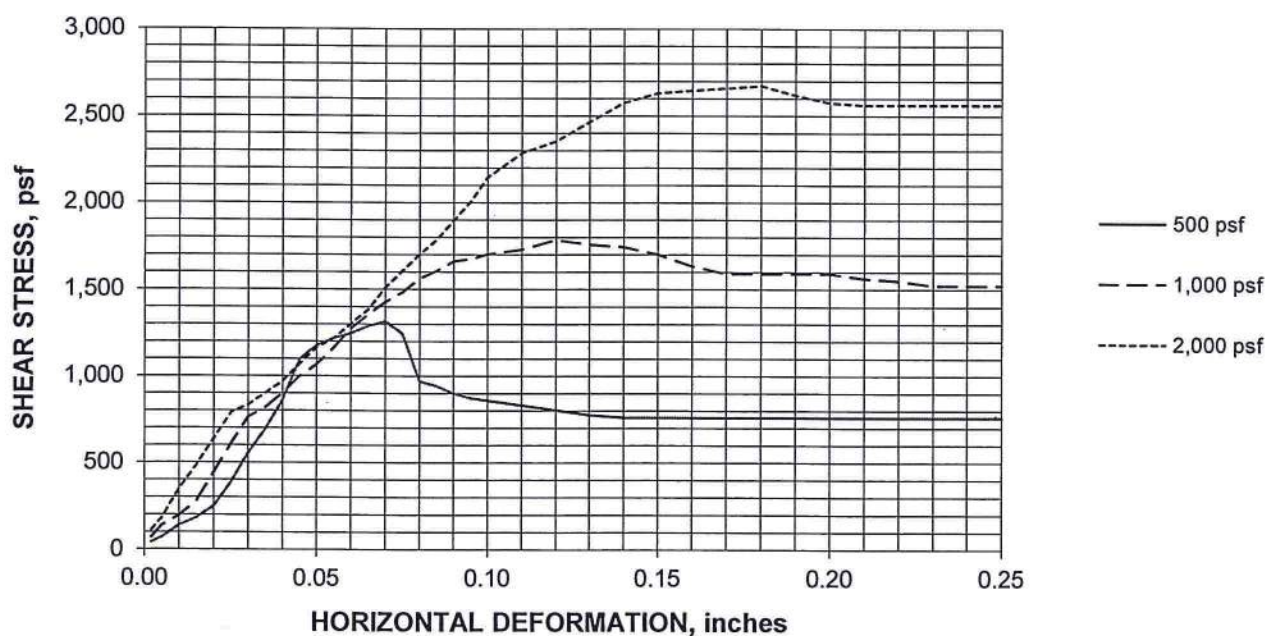
January 2015

Sandstone

Ring sample, saturated

SPECIFIC GRAVITY: 2.65 (assumed)

SAMPLE NO.:	1	2	3	AVERAGE
INITIAL				
WATER CONTENT, %	17.2	17.2	17.2	17.2
DRY DENSITY, pcf	108.2	107.5	113.0	109.6
SATURATION, %	86.3	84.7	98.3	89.8
VOID RATIO	0.528	0.538	0.463	0.510
DIAMETER, inches	2.375	2.375	2.375	
HEIGHT, inches	1.00	1.00	1.00	
AT TEST				
WATER CONTENT, %	24.7	25.4	22.1	
DRY DENSITY, pcf	108.7	108.6	118.7	
SATURATION, %	100.0	100.0	100.0	
VOID RATIO	0.522	0.523	0.393	
HEIGHT, inches	1.00	0.99	0.95	

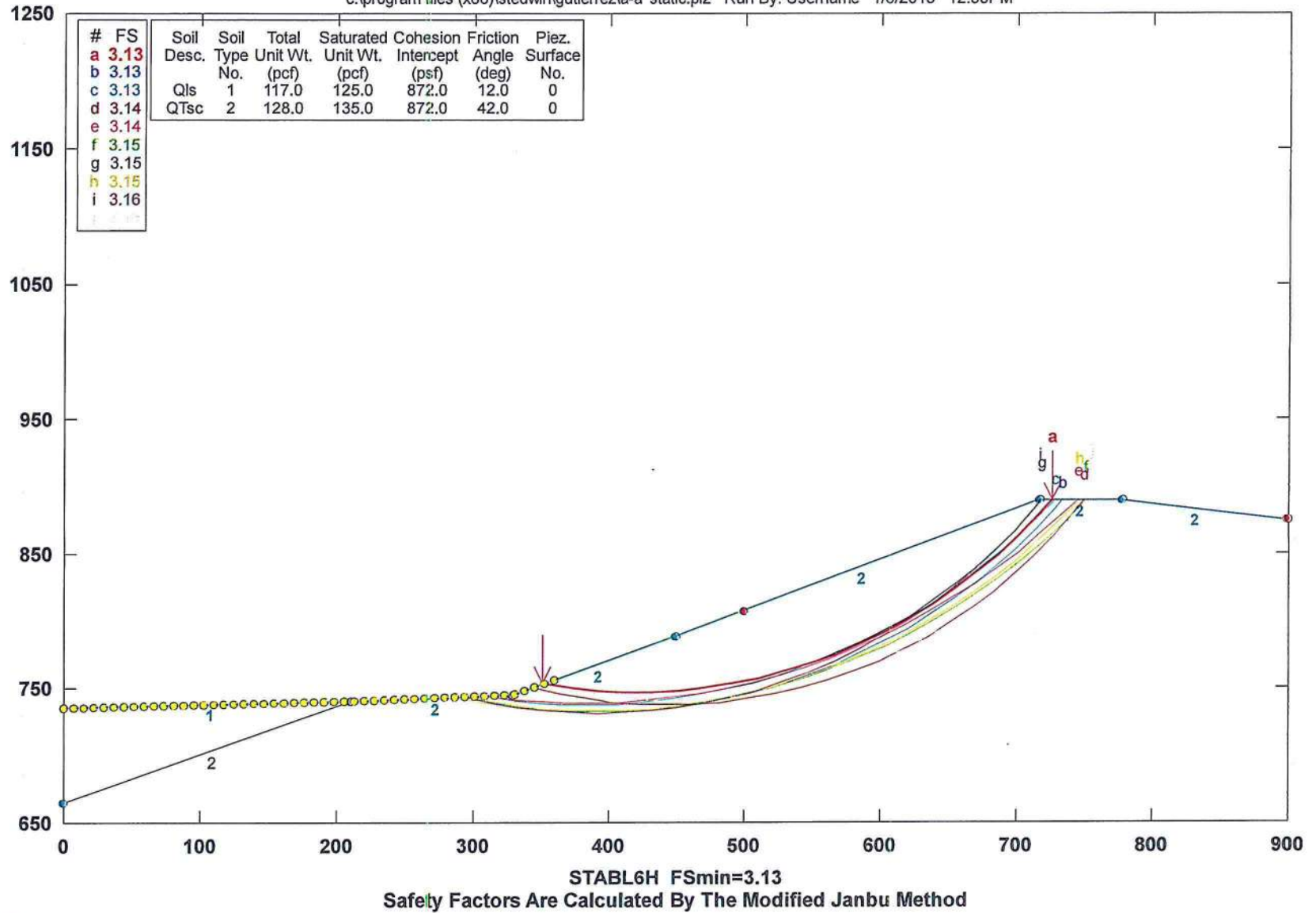


APPENDIX C

Slope Stability Analysis Results

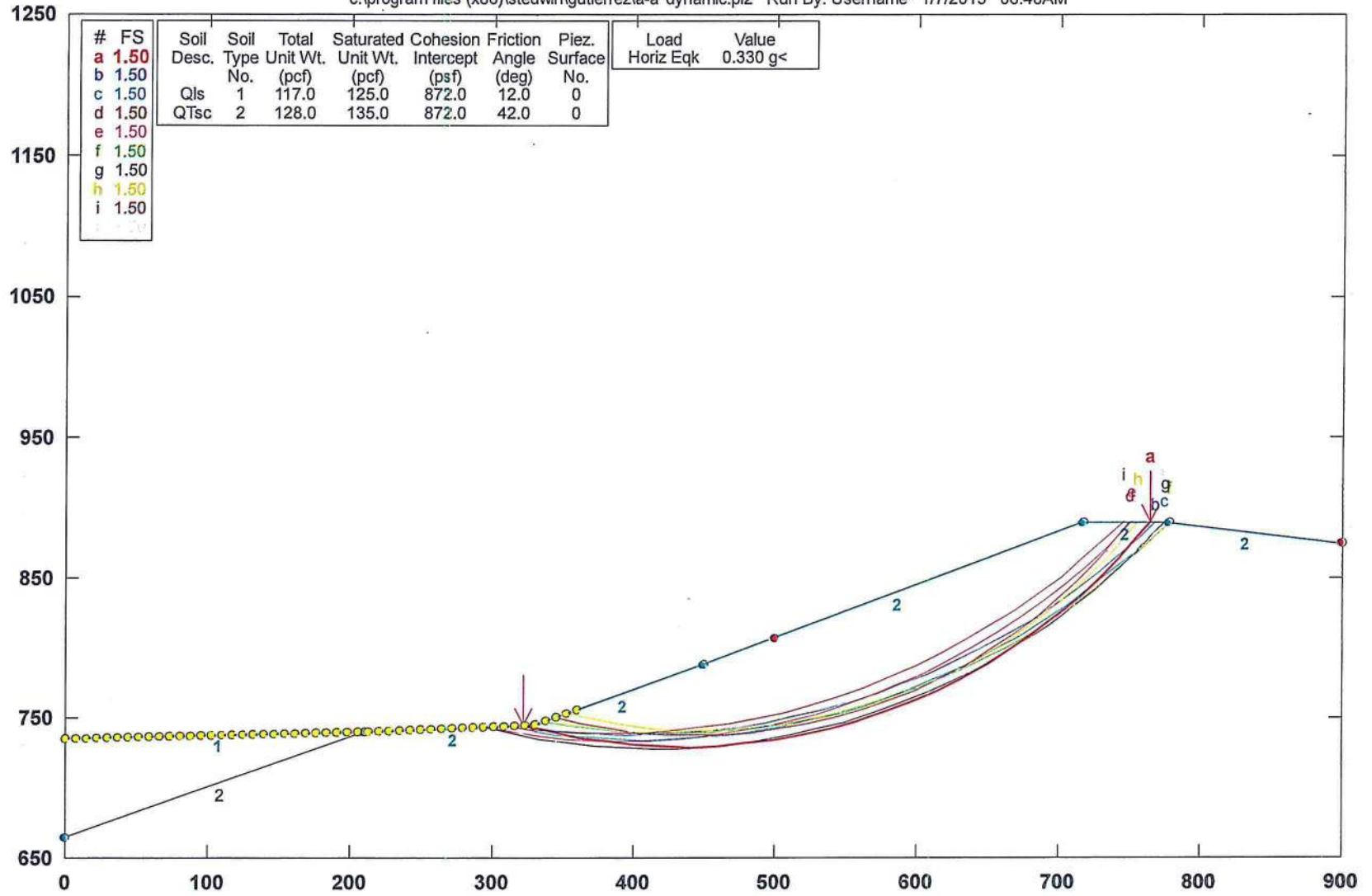
Gutierrez Residence A-A' (static)

c:\program files (x86)\stedwin\gutierrez\la-a' static.pl2 Run By: Username 1/6/2015 12:53PM



Gutierrez Residence A-A' (dynamic)

c:\program files (x86)\stedwin\gutierrez\A-A' dynamic.pl2 Run By: Username 1/7/2015 08:48AM



STABL6H FSmin=1.50

Safety Factors Are Calculated By The Modified Janbu Method

ATTACHMENT G
Biological and Plant Survey Reports from Live Oak Associates, Inc.



LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

October 24, 2019

Mr. Martin Gutierrez
C/o Amanda Musy-Verdel
Hanna and Brunetti
7651 Egleberry Street
Gilroy, CA 95020

RE: Final findings from the focused rare plant surveys and Bay checkerspot butterfly flight surveys conducted on the Lands of Gutierrez project site in Morgan Hill, Santa Clara County, California (PN 2253-02)

Dear Mr. Gutierrez:

This report is to provide you with the final results of both focused rare plant surveys and Bay checkerspot butterfly flight surveys conducted on serpentine areas of the Lands of Gutierrez project site, located in Morgan Hill, Santa Clara County, California.

The area being focused on during the rare plant and butterfly flight surveys was the northernmost portion of the site which was identified by Live Oak Associates, Inc. (LOA) during a Santa Clara Valley Habitat Plan (SCVHP) Land Cover verification site visit to support serpentine grassland habitat having the potential to support rare serpentine plant species. As such, to comply with Condition 13 and Condition 20 of the SCVHP, LOA performed focused surveys for special status plant species on the serpentine areas of the site.

During the same Land Cover verification site visit, the serpentine area of the site was also confirmed to support dwarf plantain (*Plantago erecta*), the larval host plant for the federally endangered Bay checkerspot butterfly (*Euphydryas editha bayensis*) which is also a focal species of the SCVHP. As a result of the latter, Dr. Raymond White, our associate entomologist, performed five flight surveys on the site for the Bay checkerspot butterfly during the period from late March through mid-April to comply with Condition 13 of the SCVHP.

Special Status Plant Survey Methods

Ms. Peterson conducted focused surveys of the serpentine area of the site on March 26, June 17, and September 10, 2019 to cover the blooming periods for all special status plants having potential to occur on the serpentine areas of the site. These surveys were performed so as to provide 100% visual coverage of the area, in conformance with the California Department of Fish and Wildlife's (CDFW) 2018 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, as well as in compliance with Conditions 13, 19 and 20 of the SCVHP.

The March survey was timed to coincide with the early blooming period for fragrant fritillary (*Fritillaria liliacea*) and most beautiful jewelflower (*Streptanthus albidus* ssp. *perameonus*); however, during this survey, LOA was also able to rule out the occurrence of three special status plant species that are perennial and identifiable at any time of year, including Coyote ceanothus (*Ceanothus ferrisiae*), Mount Hamilton thistle (*Cirsium fontinale* var. *campylon*) and Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*). The June 2019 survey was timed to coincide with the blooming period for Tiburon Indian paintbrush (*Castilleja affinis* ssp. *neglecta*), most beautiful jewelflower and Metcalf Canyon jewelflower (*Streptanthus albidus* ssp. *albidus*) and the early part of the blooming season for Loma Prieta hoita (*Hoita strobilina*). The September survey was timed to coincide with the latter part of the blooming period for Loma Prieta hoita and the peak blooming period for smooth lessingia (*Lessingia micradenia* var. *glabrata*).

All plant species encountered during the surveys were identified to the taxonomic level necessary to determine whether it was a special status plant species using The Jepson Manual Second Edition (Baldwin et. al. 2012).

As detailed further in the Findings/Conclusions section below, a population of smooth lessingia was found present on the site during the September 2019 survey, therefore, our methods also included mapping the extent of the population and making estimates of population density and percent cover for this species.

Findings/Conclusions

A list of all vascular plant species encountered during site surveys is provided as Attachment 1.

Only one rare plant was identified on the site and that is smooth lessingia (*Lessingia micradenia* var. *glabrata*) (California Rare and Protected Rating (CRPR) 1B and a focal species of the SCVHP). This occurrence is described in greater detail below. All other potentially-occurring special status plant species were ruled out on the serpentine areas of the site, including Tiburon Indian paintbrush, Coyote ceanothus, Mount Hamilton thistle, Santa Clara Valley dudleya, fragrant fritillary, Loma Prieta hoita, Metcalf Canyon jewelflower and most beautiful jewelflower.

Smooth lessingia was in peak bloom during the September 10, 2019 survey and the extent of the population was mapped via a Trimble Navigation GPS with a sub-meter accuracy. A map of the population is provided as Attachment 2 and we will provide your project civil engineers with the GIS shape files so that it can be determined whether the population will be impacted as a result of your proposed project. The population is healthy and quite dense on the site, with a mean density of about five plants per square foot and mean percent cover of approximately five percent within the limits of the mapped population.

Because of the presence of smooth lessingia on the site, several SCVHP conditions may apply to the project including Condition 13, Condition 19 and Condition 20. Additional information regarding these SCVHP conditions is provided in Attachment 3.

With regard to Bay checkerspot butterfly, findings were negative for this species during the five flight surveys conducted by our associate herpetologist, Dr. Raymond White. A copy of his final report is provided in Attachment 4.

Thank you for allowing LOA to provide you with assistance with this project. If you wish to discuss any of our findings or conclusions, please feel free to contact me at (408) 281-5884 or Rick Hopkins at (408) 281-5885.

Sincerely,



Pamela E. Peterson
Senior Project Manager
Plant and Wetland Ecologist
408-281-5884

Cc: Amanda Musy-Verdel

List of Attachments:

- Attachment 1: Vascular Plants of the Study Area
- Attachment 2: Map of Smooth Lessingia Populations on the Lands of Gutierrez Site
- Attachment 3: SCVHP Conditions that May Apply to the Project
- Attachment 4: Final Bay Checkerspot Butterfly Flight Survey Report

ATTACHMENT 1: VASCULAR PLANTS OF THE STUDY AREA

The plants species listed below were observed on the serpentine habitat areas of the Lands of Gutierrez project site during field surveys conducted by Live Oak Associates on March 26, June 17, and September 10, 2019. The U.S. Army Corps of Engineers' wetland indicator status of each plant is provided following its common name.

OBL - Obligate
FACW - Facultative Wetland
FAC - Facultative
FACU - Facultative Upland
UPL - Upland

AGAVACEAE – Century Plant Family

<i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i>	Soap plant	UPL
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APOCYNACEAE – Dogbane Family

<i>Asclepias fascicularis</i>	Narrow-leaf milkweed	FAC
-------------------------------	----------------------	-----

ASPARAGACEAE – Asparagus Family

<i>Muilla maritima</i>	Muilla	UPL
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ASTERACEAE – Sunflower Family

<i>Achillea millefolium</i>	Yarrow	UPL
<i>Hemizonia congesta</i> ssp. <i>luzuifolia</i>	Hayfield tarweed	UPL
<i>Lactuca saligna</i>	Willowleaf lettuce	UPL
<i>Lessingia micradenia</i> var. <i>glabrata</i>	Smooth lessingia	UPL

APIACEAE – Carrot Family

<i>Sanicula bipinnatifida</i>	Purple sanicle	UPL
-------------------------------	----------------	-----

BRASSICACEAE – Mustard Family

<i>Lepidium nitidum</i>	Shining peppergrass	UPL
<i>Raphanus sativa</i> *	Wild radish	UPL

BORAGINACEAE – Borage Family

<i>Amsinckia intermedia</i>	Common fiddleneck	UPL
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CONVOLVULACEAE – Morning-Glory Family

<i>Calystegia</i> sp.	Morning glory	UPL
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CRASSULACEAE – Stone Crop Family

<i>Crassula connata</i>	Pygmy weed	UPL
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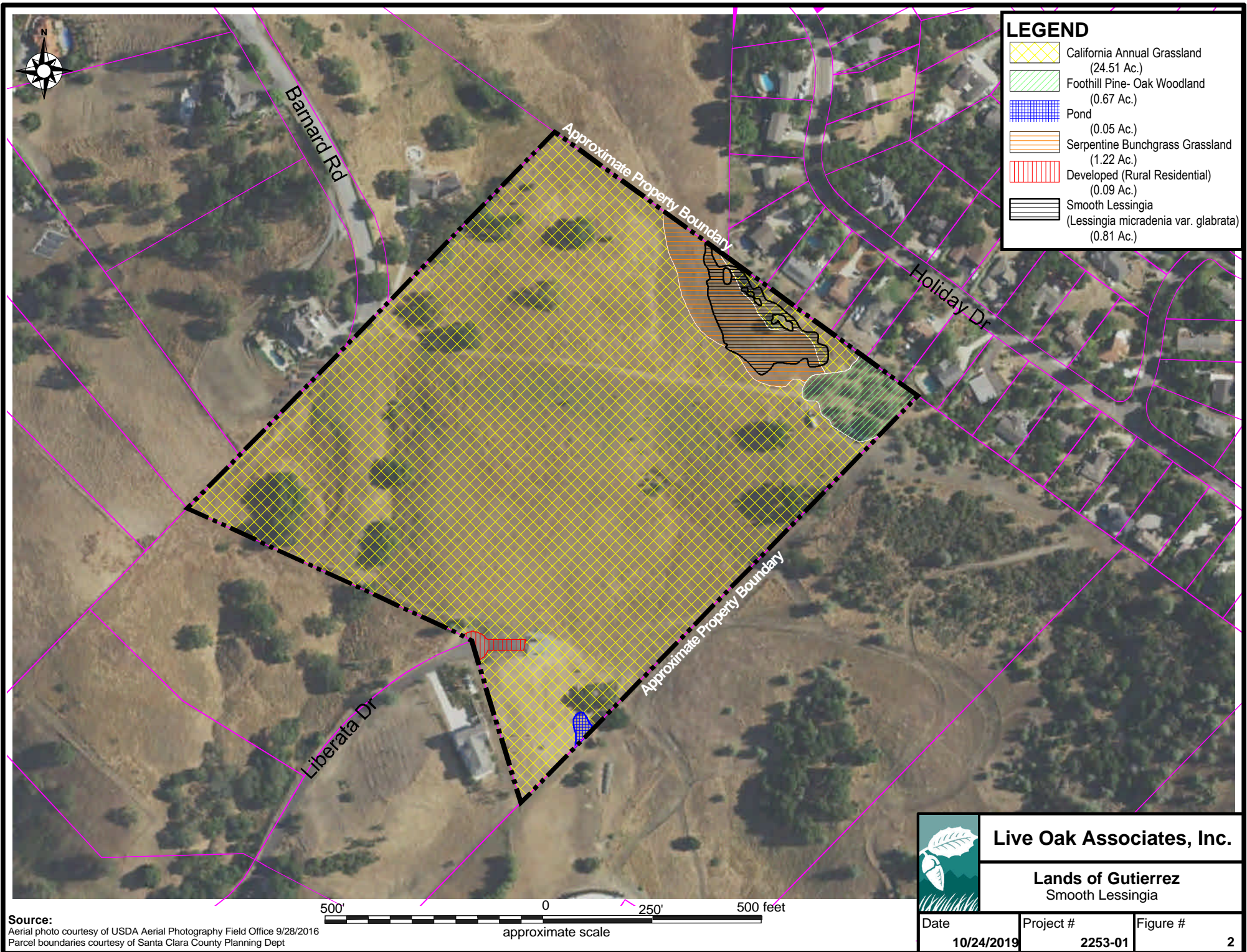
FABACEAE – Legume Family

<i>Acemispion wrangelianus</i>	Chilean trefoil	UPL
<i>Astragalus gambelianus</i>	Gambel's milkvetch	UPL
<i>Lupinus bicolor</i>	Annual lupine	UPL
<i>Medicago polymorpha</i> *	Burclover	FACU

<i>Trifolium</i> sp.	Clover	-
<i>Vicia benghalensis</i> *	Purple Vetch	UPL
<i>Vicia sativa</i> *	Vetch	UPL
IRIDACEAE – Iris Family		
<i>Sisyrinchium bellum</i>	Blue-eyed grass	UPL
GERANIACEAE – Geranium Family		
<i>Geranium dissectum</i> *	Wild geranium	UPL
MONTIACEAE – Miner’s Lettuce Family		
<i>Claytonia perfoliata</i>	Miner’s lettuce	FAC
ONAGRACEAE – Evening Primrose Family		
<i>Clarkia purpurea</i>	Wine Cup Clarkia	UPL
PAPAVERACEAE – Poppy Family		
<i>Eschscholzia californica</i>	California poppy	UPL
<i>Platystemon californicus</i>	Cream cups	UPL
PLANTAGINACEAE – Plantain Family		
<i>Plantago erecta</i>	Dwarf plantain	UPL
POACEAE - Grass Family		
<i>Avena barbata</i> *	Slender wild oats	UPL
<i>Bromus hordeaceus</i> *	Soft chess	FACU
<i>Festuca perennis</i> *	Italian ryegrass	FAC
<i>Hordeum marinum</i> *	Mediterranean barley	FAC
<i>Hordeum murinum</i> *	Foxtail barley	FACU
<i>Nassella pulchra</i>	Purple Needlegrass	UPL
POLEMONIACEAE – Phlox Family		
<i>Leptosiphon liniflorus</i>	Narrowleaf flaxflower	UPL
POLYGONACEAE – Knotweed Family		
<i>Rumex crispus</i> *	Curly dock	FAC
PRIMULACEAE – Primrose Family		
<i>Anagallis arvensis</i> *	Scarlet pimpernel	UPL
RANUNCULACEAE – Buttercup Family		
<i>Ranunculus californicus</i>	California buttercup	FACU
ROSACEAE – Rose Family		
<i>Aphanes occidentalis</i>	Lady’s mantle	UPL

* Introduced non-native species

**ATTACHMENT 2: MAP OF SMOOTH LESSINGIA POPULATIONS ON THE LANDS
OF GUTIERREZ SITE**



ATTACHMENT 3: SCVHP CONDITIONS THAT MAY APPLY TO THE LANDS OF GUTIERREZ PROJECT

Sources: SCVHP Section 6 (ICF International 2012) and the Santa Clara Valley Habitat Plan Implementation Guide (Santa Clara County 2015).

Condition 13. Serpentine and Associated Covered Species Avoidance and Minimization

This condition is intended to minimize the impacts from Covered Projects on serpentine habitat, including minimizing direct impacts on the Bay checkerspot butterfly and serpentine plants that are covered by the Habitat Plan.

What Covered Projects Does This Condition Apply to?

Covered Projects that affect serpentine land covers (serpentine bunchgrass grassland, serpentine rock outcrops, serpentine seeps, and serpentine chaparral).

Applicable Habitat Plan Maps/Geobrowser Maps

Serpentine Fee Zone – shows areas where serpentine land covers may occur. Field verification at the time a Covered Project is proposed is required to verify if Serpentine land covers occur onsite.

Wildlife Survey Areas – shows areas where Bay Checkerspot Butterfly surveys are required

Conditions to Apply during Project Design

Serpentine Avoidance

- In cases where serpentine areas are part of a project site in a developed area, the project will be designed to preserve larger patches of serpentine outside the development area and limit impacts to the smallest patches feasible and to the edges of serpentine patches regardless of their size.
- The length of the edge of the serpentine patch that is directly adjacent to the developed area will be minimized and will include as large a buffer as possible between the serpentine edge and the developed area.
- Landscaping will not be planted on serpentine areas except as needed to reduce fire hazards adjacent to structures consistent with County fire hazard reduction regulations (see also Condition 10). Plantings will not include species that are known or suspected to invade serpentine habitats or cross-pollinate with endemic serpentine plant species or other native plants.
- On undeveloped sites, the project area and construction staging area must be located to avoid or minimize impacts to any serpentine on site. The guidelines described above for developed areas will also be followed for project sites in undeveloped areas.

Projects That Affect Serpentine

- Conduct surveys of the serpentine vegetation to inventory for covered species and evaluate habitat quality for covered species.
- For portions of the development area that are in Bay checkerspot butterfly habitat units identified in Appendix D, survey the site for the presence of larval host plants of Bay

checkerspot butterfly. If larval host plants are found, conduct reconnaissance level surveys for adult butterflies during the peak of the flight period to determine species presence or absence.

- Locate the project footprint as far from the covered species or the highest- quality serpentine habitat as is feasible. Utilize applicable buffers as identified in this chapter.
- If covered plants occur on the site and cannot be avoided, notify the Habitat Agency of the construction schedule so that plant salvage can be considered and potentially implemented (see Condition 19).

Condition 19. Plant Salvage when Impacts are Unavoidable

Requirements of Condition 19 are integrated into the requirements of Condition 20, below.

Condition 20. Avoid and Minimize Impacts to Covered Plant Occurrences

These two conditions are intended to ensure that Covered Projects avoid or minimize impacts to covered plants.

What Covered Projects Does This Condition Apply to?

Covered Projects that may impact any of the nine covered plant species within the mapped potential habitat areas (see Geobrowser Maps below)..

Applicable Habitat Plan Maps/Geobrowser Maps

Plant Survey Area – Shows areas where Plant Surveys may be required.

Process Flow Chart (to conduct at time of project design and construction)

Step 1

Review Geobrowser maps to determine if the proposed project is located within a Plant Survey area.

Step 2

If the proposed project is located in a Plant Survey Area, verify the onsite land cover is suitable to support one of the nine covered plants that require surveys. These land covers and the corresponding plant survey required are shown below:

Serpentine bunchgrass grassland: Survey for smooth lessingia, fragrant fritillary, Metcalf canyon jewelflower, most beautiful jewelflower, Tiburon paintbrush, and Coyote ceanothus.

Serpentine rock outcrop: Survey for Santa Clara Valley dudleya, smooth lessingia, Metcalf canyon jewelflower, most beautiful jewelflower, and Tiburon paintbrush.

Serpentine seep: Survey for Mount Hamilton thistle.

Mixed serpentine chaparral: Survey for Coyote ceanothus and most beautiful jewelflower.

Mixed oak woodland and forest with serpentine soils: Survey for Loma Prieta hoita.

Coast live oak forest and woodland with serpentine soils: Survey for Loma Prieta hoita.

Northern coastal scrub and Diablan sage scrub with serpentine soils: Survey for Coyote ceanothus, Metcalf canyon jewelflower, most beautiful jewelflower, and smooth lessingia.

Step 3

Conduct surveys for the relevant plants if the relevant land cover occurs on site (based on on-site verification) during the survey periods listed below (**Table 6-9** from the Habitat Plan) to determine if plants occur on site. Plant surveys must be conducted in accordance with the Wildlife Agency (CDFW, USFWS) protocols; however no floristic surveys are required.

Table 6-9. **Survey Periods for Covered Plant Species**

Species		Survey Period											
Common Name	Scientific Name	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Covered Species													
Tiburon Indian paintbrush	<i>Castilleja affinis</i> ssp. <i>neglecta</i>				√	√	√	√					
Coyote ceanothus	<i>Ceanothus ferrisiae</i>	√	√	√	√	√							
Mount Hamilton thistle	<i>Cirsium fontinale</i> var. <i>campylon</i>		(√)	(√)	√	√	√	√	√	√	(√)		
Santa Clara Valley dudleya	<i>Dudleya abramsii</i> ssp. <i>setchellii</i>				√	√	√						
Fragrant fritillary	<i>Fritillaria liliacea</i>		√	√	√								
Loma Prieta hoita	<i>Hoita strobilina</i>					(√)	√	√	(√)	(√)	(√)		
Smooth lessingia	<i>Lessingia micradenia</i> var. <i>glabrata</i>							√	√	√	(√)	(√)	
Metcalf Canyon jewelflower	<i>Streptanthus albidus</i> ssp. <i>albidus</i>				√	√	√	√					
Most beautiful jewelflower	<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>			√	√	√	√						

Note: (√) indicates flowering periods which are possible but uncommon for the species.

Step 3

If a plant occurrence is found on the project site, the following analysis/steps are required:

a) *Determine Health of Plant Occurrence*

The local jurisdiction will obtain the opinion of a qualified biologist regarding the projected long-term viability of a covered plant occurrence given the plant occurrence condition, site conditions, and project-level construction details.

b) *Avoidance in Project Design*

- o In order to reduce impacts to covered plants, all covered activities will be confined to the minimum area necessary to complete the activity or construction.

- A setback buffer will be established around covered plant occurrences located on any project site or in an adjacent area that could be affected by construction traffic or activities. The setback buffer will be adequate to prevent or minimize impacts during or after project implementation.
- The plants and buffer area will be protected from encroachment and damage during construction by installing temporary construction fencing. Fencing will be bright-colored and highly visible.
- Fencing will be designed to keep construction equipment away from plants and prevent unnecessary damage to or loss of plants on the project site.
- Fencing will be installed under the supervision of a qualified biologist to ensure proper location and prevent damage to plants during installation. Fencing will be installed before any site preparation or construction work begins and will remain in place for the duration of construction.
- Construction personnel will be prohibited from entering these areas (the exclusion zone) for the duration of project construction.

Step 4

If a proposed project will potentially impact the plant occurrence, follow the following steps:

- *Determine long term viability of plant occurrence* - A qualified biologist will determine if the long-term viability of a covered plant occurrence will be reduced (as described below) by implementation of the covered activity.

Some covered plant occurrences may only be disturbed or partially affected by covered activities, and viability may be maintained. It is important to monitor and, if possible, maintain these occurrences of covered plants where they occur, even if they are not protected within the Reserve System.

- *Projects that may partially impact covered plant occurrences* - If the biologist determines that the covered activity will potentially impact the covered plant species or impact a portion of the plant occurrence found onsite, monitoring during construction will be required as follows.

Covered plant occurrences that are determined to be partially permanently affected by a qualified biologist (i.e., only a portion of the occurrence is impacted) by covered activities will be monitored by the Habitat Agency. The purpose of the monitoring will be 1) to assess whether the impact reduces the long-term viability of the occurrence and whether supplemental management actions are feasible and warranted, and 2) to determine whether the Habitat Agency must protect and enhance or create occurrences in the Reserve System according to **Table 5-16**. If the impact occurs to less than 5% of the total occurrence as measured by the number of individuals at the time of impact, then the impact is assumed not to affect long-term viability and will not require monitoring nor will it count as a permanent impact (**Table 4-6**). This allowance does not apply to Coyote ceanothus.

When determining viability for the purpose of assessing a partial or permanent impact, the Habitat Agency will consider the following factors.

1. Results of monitoring plant occurrences affected by covered activities (e.g., correlation between pre-project observations and actual viability post project).

-
2. Impacts to date to the covered plant species and how close total impacts are to the allowable impact cap in the Habitat Plan (e.g., extra care taken when near cap not to exceed the cap).

Specific monitoring protocols and success criteria will be developed during implementation as appropriate for each covered species, according to the guidelines discussed here. Monitoring protocols can draw on those developed for other HCP/NCCPs. It is possible that only a portion of the occurrence will be located on the covered activity project site. In such instances, the monitoring protocol will address this issue. Three possible approaches include the following.

1. If the landowner agrees, the Habitat Agency will obtain access to the adjacent sites on which the rest of the plant occurrence is located, and surveys will include the entire occurrence.
2. If access to adjacent site(s) is not possible, or if for some other reason it is not feasible to survey the entire occurrence, then an alternative will be developed to estimate the extent and condition of the adjacent portion of the occurrence.
3. If only a small portion of the occurrence is on adjacent properties, then only the portion of the occurrence on the project site will be monitored and assessed for viability. The determination whether this is a full impact will be made based on the results for this portion of the occurrence only.

Population monitoring will be conducted by the Habitat Agency before the covered activity is implemented to document the baseline condition. For annual species, the minimum post-construction monitoring period will be 5 years. If extreme or unusual climate conditions affect the species, then monitoring will be extended 1 or 2 years, as appropriate to assess impacts and success.

Monitoring will include estimates of percent cover and number of individuals. An occurrence will be assumed to retain long-term viability and will not require replacement in the Reserve System if the decline in occurrence size and percent cover from pre-project conditions is less than 25% over the monitoring period, unless site-specific conditions otherwise suggest substantial declines in occurrence viability.

For perennial species, the minimum post-construction monitoring period will be 3 years. Monitoring will include estimates of density (percent cover), recruitment of seedlings if impacts included removing individuals, and measurements of adult plant health (e.g., signs of disease, herbivory, nutrient deficiencies, etc.). An occurrence of a perennial covered species will be assumed to retain long-term viability and will not require replacement in the Reserve System if the decline in seedling recruitment and density from pre-project conditions is less than 25% over the monitoring period, unless site-specific conditions otherwise suggest substantial declines in occurrence viability.

The Habitat Agency will implement conservation actions on the site that would help to maintain or improve the condition of the occurrence, as long as an agreement can be reached with the landowner to conduct these measures. Possible conservation measures are described in Chapter 5 of the Habitat Plan. If plant occurrences are determined to not be viable based on post-project monitoring, the Habitat Agency must assess the loss as a full permanent impact and implement conservation actions accordingly. In these cases, mitigation would occur after the impact. However, the potential for mitigation to occur after impacts is unlikely given that the qualified

biologist and Habitat Agency will make conservative determinations regarding projected impacts on long-term viability.

Step 5

If the project will permanently impact a covered plant occurrence, comply with the following requirements:

For projects that will permanently impact a covered plant occurrence, the loss must be offset by protection, management, and monitoring of covered plant occurrences in the Reserve System prior to impacts (**Table 5-16** of the Habitat Plan). The applicant shall coordinate with the Habitat Agency to ensure that the required protection of the covered plant occurrences occur within the Reserve System prior to construction of the project.

Plant Salvage (Condition 19)

Where impacts on covered plant species cannot be avoided and plants will be removed by approved covered activities, the Habitat Agency has the option of salvaging the covered plants. Salvage of covered plants is conducted in addition to mitigation that may be required for impacts on covered plants.

Plant salvage as mitigation is acknowledged as a technique that rarely succeeds; it is opposed by conservation organizations as a primary mitigation tool (Howald 1996; California Native Plant Society 1998). Therefore, the Habitat Agency must carefully weigh the expected costs and potential benefits of the salvage effort before undertaking it. Salvage guidelines are presented below for all covered plants, for perennial species, and for annual species.

All Covered Plants

All salvage operations will be conducted by the Habitat Agency or a third party contractor approved by the Habitat Agency. Translocation activities will be reviewed and approved by the Wildlife Agencies in advance of translocation activities occurring. Translocated plants should be moved during their dormant season in order to minimize impacts to individuals. To ensure enough time to plan salvage operations, project proponents will notify the Habitat Agency of their schedule for removing the covered plant occurrence.

The Habitat Agency may conduct investigations into the efficacy of salvaging seeds from the soil seed bank for both perennial and annual species. The soil seed bank may add to the genetic variability of the occurrence. Covered species may be separated from the soil through garden/greenhouse germination or other appropriate means. Some topsoil taken from impact sites may also be moved to the transplant site in the reserve to introduce soil microorganisms.

The Habitat Agency will transplant new occurrences such that they constitute separate populations and do not become part of an existing population of the species, as measured by the potential for genetic exchange among individuals through pollen or propagule (e.g., seed, fruit) dispersal. Transplanting or seeding receptor sites (i.e., habitat suitable for establishing a new population) will be carefully selected on the basis of physical, biological, and logistical considerations (Fiedler and Laven 1996); some examples of these are listed below.

- Historic range of the species.
- Soil type.
- Soil moisture.
- Topographic position, including slope and aspect.
- Site hydrology.
- Mycorrhizal associates.
- Presence or absence of typical associated plant species.
- Presence or absence of herbivores or plant competitors.
- Site accessibility for establishment, monitoring, and protection from trampling by cattle or trail users.

Perennial Covered Plants

Salvage methods for perennial species will be tested for whole individuals, cuttings, and seeds. Salvage measures will include the evaluation of techniques for transplanting as well as germinating seed in garden or greenhouse and then transplanting to suitable habitat sites in the field. Techniques will be tested for each species, and appropriate methods will be identified through research and adaptive management. Where plants are transplanted or seeds distributed to the field, they will be located in reserves in suitable habitat to establish new populations. Field trials will be conducted to evaluate the efficacy of different methods and determine the best methods to establish new populations.

Transplanting within the reserves will only minimally disturb existing native vegetation and soils. Supplemental watering may be provided as necessary to increase the chances of successful establishment, but must be removed following initial population establishment. Supplemental watering will include watering throughout first growing season to mimic natural rainfall patterns. During establishment, areas will be fenced off as necessary to prevent trampling or grazing by livestock. These areas will not be selected for controlled burns. Once the population has established itself, as determined by success criteria that may include setting seed, 3-year survival, or other criteria developed in agreement with the Wildlife Agencies, then fencing and irrigation will be removed and the site may be burned for management purposes if that is appropriate for the target plant.

Annual Covered Plants

For annual covered plants, mature seeds will be collected from all individuals for which impacts cannot be avoided (or if the population is large, a representative sample of individuals). If storage is necessary, seed storage studies will be conducted to determine the best storage techniques for each species. A seed storage facility will also be contacted and consulted regarding collecting and storage requirements of the facility. One of the leading seed banks in California is the Rancho Santa Ana Botanic Garden in Claremont, CA (Rancho Santa Ana Botanic Garden 2010). This facility has strict seed collection and storage guidelines available on its website (<http://www.rsabg.org>). If needed, studies will be conducted on seeds germinated and plants grown to maturity in garden or greenhouse to propagate larger numbers of seed. Such studies can be contracted with research institutions such as the Rancho Santa Ana Botanic Garden, or carried out by other qualified biologists. Seed propagation methods will ensure that genetic variation is

not substantially affected by propagation (i.e., selection for plants best adapted to cultivated conditions). Field studies will be conducted under the Adaptive Management Program to determine the efficacy and best approach for dispersal of seed into suitable habitat. Where seeds are distributed to the field, they will be located in reserves in suitable habitat to establish new populations. If seed collection methods fail (e.g., due to excessive seed predation by insects), alternative propagation techniques will be necessary.

**ATTACHMENT 4: FINAL BAY CHECKERSPOT BUTTERFLY FLIGHT SURVEY
REPORT**

Live Oak Associates Project #2253-01
Lands of Gutierrez
For: Pamela Peterson
Amanda Musy-Verdel, and
Martin Gutierrez.

April 22, 2019

Some 1.22 acres of the 27 acre site was identified as serpentine grassland, nearly all (1.22 acres) supported dense stands of *Plantago erecta* (Morris), the primary larval food plant of the Federally Endangered Bay checkerspot butterfly (*Euphydryas editha bayensis*).

In 5 visits (March 23, 31, April 7, 13, and 22, 2019) during the likely flight season of the Bay checkerspot butterfly, no Bay checkerspot butterflies were seen. Approximately an hour was spent traversing and re-traversing through this small area on each visit. The weather was favorable for insect flight on each of the survey days. A summary of observations follows.

The serpentine grassland supports dense stands of *Plantago erecta*, but nectar sources are minimal. Most sites supporting populations of this butterfly can be recognized by the presence of dense carpets of bright goldfields (*Lasthenia californica*) and often tidy tips (*Layia platyglossa*). These are totally absent here. This site has rather modest numbers of common muilla (*Muilla maritima*) and a very few lomatium (*Lomatium sp.*) and serrated onion (*Allium serra*) plants. The low density of nectar is likely to make this site unattractive for the butterfly.

An important secondary plant for larval survival is owl's clover (*Castilleja sp.*) which is present so sparsely that I observed only five specimens.

A diversity of slope exposures and steepnesses is helpful for butterfly survival. Here there is only modest variety in exposures and no steep slopes at all.

The serpentine grassland extends on to the adjacent Anderson Reservoir property, but has no present butterfly habitat value there due to taller bunchgrass vegetation (ungrazed) as well as lack of nectar. There is essentially no *Plantago* on the Anderson side.

I would not expect this site to consistently support the Bay checkerspot butterfly and attest to its current absence.

Raymond R. White, Ph.D.
rrweditha@yahoo.com 650 493-5070
2468 Whitney Drive, Mountain View, CA 94043

Lands of Gutierrez (LOA #2253-01) Bay Checkerspot Butterfly survey
summary.

March 26, 2019

sun, occasional clouds Time 10:15 to 11:30 AM
Flying: 10 *Vanessa*, bees 2 horses onsite

March 31, 2019

fine weather, sunny, no wind Time 12:56 to 2:12 PM
Flying: 1 *Papilio*, 1 buckeye, 1 *Coenonympha*, 44 *Vanessa* (migrating north),
bees.

April 7, 2019

fine weather, warm & sunny Time 1:30 to 2:40 PM
Flying 214 *Vanessa* migrating, bees, 1 *Coenonympha*, 2 sulfurs.

April 13, 2019

slight breeze, warm. Time 1:00 to 2:10 PM
Flying: 16 *Vanessa*, 5 *Coenonympha*, 2 blues, bees, 4 moths
2 horses 16 or more cattle, mostly young.
no new nectar

April 22, 2019

great sun, hot, slight wind Time: 2:35 to 3:25 PM
Flying: 10 *Vanessa*, 5 *Coenonympha*, bumble bees
horses not seen, 6 cattle seen, expect the rest were in shade on lower west
corner.
Some *Plantago* senescent (brown) at this time, maybe 10-15% of total.
No more *Castilleja* or nectar.

ATTACHMENT H
Public Comments (dated January 24, 2021 and January 28, 2021)

From: [REDACTED]
To: [Tran, Lara](#)
Subject: [EXTERNAL] Building Proposal for 2245 Liberata Drive, Morgan Hill
Date: Sunday, January 24, 2021 4:48:02 PM

Hello Lara Tran,

I received notification yesterday for a proposed building permit for the lot next door to my home. I have some real concerns about the massive size and scope of this project (I have previously been impacted by the owner's illegal grading along my fence-line (which got him red-tagged by the county), and his planting of hundreds of trees that would have shaded my solar panels (fortunately, the county made him remove these trees. We still have water/flooding impact in our front yard and fencing (now leaning over, and no longer tall enough to keep the deer out because of the dirt he added so he can drive around the perimeter of his property) because of the illegal grading that he did. Additionally, our road has been repeatedly been damaged by tracked vehicles that have unloaded on the road to access his property.

Concern #1 - why are they building a massive home directly on top of the ridgeline when there are excellent sites below near other homes on Liberata that would require a much much shorter driveway and already has an entrance built. The current site is visible from the whole of Morgan Hill to the south and west, from Rosendin Park to the north (i.e. upper Anderson Lake Park), and over the homes it abuts from Holiday Lake Estates to the east (I have viewed the bright orange tape that is currently up from all sides).

Concern #2 - Has an environmental impact report been done, and what are the findings? I know there were previously protected flora/fauna in Holiday Lake estates, which this home will tower over. The mentioned cuts/fills proposed are massive, particularly if they are done directly on a ridgeline. This is a serious concern given the massive amount of soil that will be moved.

Concern #3 - does the proposed home have a reliable supply of water? The owner had previously contacted our neighborhood water company for access to our water because his new well was not producing sufficiently (we could not give him access because of our bylaws). **For the last two summers, he has had many many large, loud truck loads of water (from Morgan Hill Fire Hydrants) delivered to fill up his water tanks (I'm including a photo of one such load below).** I spoke with the driver and he said he was filling the water tanks because the well wasn't able to do so. I was also approached by someone who kept horses on the property who asked to use our water to 'cool the horses' because there was not sufficient water on the property. I really would prefer to avoid all the noise the trucks make hauling water up to his water tanks.

I have looked online at the links in the notification, and I am unable to find any details or drawings about the plans. I would like to be able to review the materials to understand exactly what is being proposed. My understanding is that this is/was a

Williamson Act property, so I would like to understand exactly what portion of the lot is being improved (note that he has already considerably changed the 'character' of the land with his galvanized fencing, corrals for horses, water tanks, and vehicles strewn about the lower portion of his property - we get to look at this mess from our house, not the pretty site it used to be). What are the requirements for a house like his being built on the ridgeline (and why is he building on the ridgeline when he has excellent building sites near his well on the lower portion of his property). Is this property in Williamson, or is it now encumbered by open space development restrictions? If so I would assume his gate and improvements on the bottom of this lot should count toward this? Is a massive home of nearly 9000 square feet, along with a separate dwelling and garage and a very lengthy driveway really compatible with an open space designation (in addition to the improvements including fenced gate entry, galvanized fencing replacing barbed wire, corrals, well and tank, stacked hay bales, tractors/trucks/vehicles parked) he has already? Have the homeowners in Holiday Lake Estates also been notified about this proposed development?

I have many other concerns, including lighting and headlight impact, (that could impact my astronomical observatory, where I do long exposure astrophotography). Will the primary house access take place from Liberata drive (where he has already built a gated entrance), or from Barnard Road? We have been having regular problems with vehicles blocking our driveway with workers (?) waiting to be granted access to his property (people parking in the middle of the road in front of our house blocking our driveway, like the water truck in the picture below). Please provide me information so I can understand exactly what is being done. I would like to understand how much more severe his impact to our property and the surrounding environment will be. I would like to have sufficient time to review these materials so I'm very concerned about the limited time before the meeting and whether it will be possible to adequately review the materials remotely (because of Covid).

Any help and information you can provide will be greatly appreciated.

My name is [REDACTED], and I live at

[REDACTED]

you can contact me via this email address, or you may also call me on my cell,

[REDACTED]

Do you have a contact number where I can reach you at? I would like to have a conversation with you at your earliest convenience....

Thank you for your help,

[REDACTED]

p.s. One of the many many loads of water that he has had trucked in....



From: [REDACTED]
To: [Tran, Lara](#)
Cc: [Eastwood, Rob](#)
Subject: Re: [EXTERNAL] Building Proposal for 2245 Liberata Drive, Morgan Hill
Date: Thursday, January 28, 2021 5:41:08 PM
Attachments: [image003.png](#)
[image001.png](#)

Hi Lara,

I have some additional questions about the proposed development. I was looking at the GIS information to try to understand the ridgeline terrain at the site, and in the process I noticed that a large number of trees have been razed, all near the area of the proposed development, since 2017. I'm guessing this was done in preparation for building this development. The trees are clearly visible in the 2018 aerial survey (taken Nov-Dec 2017), and they are gone in the 2019 survey (taken December 2018-February 2019). I know in Morgan Hill there are rules about removing trees, and SCC guidelines recommend building near stands of trees on ridgelines, but it looks like most of the trees have already been removed. What used to be a well-treed area is now fairly barren. I'm just wondering if the large number of trees that have already been removed was considered as part of this approval process? It's hard to gauge from the photos, but it appears that 20 to 30 trees were removed from the west corner of the property. Is it acceptable for this many trees to be razed in a ridgeline/open space area before getting building permits? Should any impact reports have been done before he razed all of these trees? On the plans, it seems to say that one tree will be removed (if I understand correctly), but that's because they already removed all of the others.

As I haven't yet received any info on the planning package.

1 - I would like to see copies of any geological or site surveys done. Can you please send me these, or forward links where I can review them?

2 - I would like to see any documents related to the suitability of the well on site, which you stated is the source of water, but I have heard is insufficient. I am interested in the rated production of the well, and any other supporting documents from the Department of Environmental Health. I can't understand how the well is adequate when he has to use water trucks to fill his tanks, and when they want to use my front hose to 'water the horses'. I sent you a picture of one such water load in my original note. I have tried to contact the Department of Environmental Health, but have gotten no replies at this point. Has the well production been verified by the county (I've heard it was 2 GPM, but that is second hand information). Additionally, I have heard 'through the grapevine' that the parcel owner was working at the bottom of the Hill near Main Avenue (I have seen him there myself working on something) working on getting a well working to supply water. I'm not sure why he would be working on another well if his current one was working. My neighbor spoke to the person doing the work, and he said they were getting the well working. I would just like to know if the county actually verified that the well produces a sufficient supply of water. I don't want to have a continuous stream of large water trucks delivering water to the site like they have in the past.

3 - I would like to see a copy of the completed CEQA checklist, and any supporting documentation.

4 - I would like to receive a copy of the complete planning package once it's available today.

5 - I would like to receive verification if my previous request for continuation will be considered, as I'm having so much trouble getting any information.

6 - Does the previous illegal grading done and importation of many transfer loads of dirt (that was red tagged but never mitigated adequately) affect this application? My front yard still floods because of this and the any new driveway here will result in a lot more water in this area that already has serious drainage problems. Should the previously added soil that was never removed be included in the fill amounts? Will the previous impact he has already had on the drainage be considered?

7 - Does the previous planting of a double row of trees around the perimeter of the property (which the county made him remove because of the open space easement) affect this application?

8 - Does the removal of many many trees (as described above and as evidenced in the County's own aerial surveys) affect this application? Are impact reports about the cite valid given the fact that he removed a lot of the trees at the development site, apparently right before the permit application process? Is such tree removal allowed on a ridgeline and on a parcel with Open Space restrictions (it would appear he greatly changed the 'character of the land' by removing them).

9 - I've just gotten the link and glanced at the plans, but it appears that the driveway will be raised directly adjacent to where he previously added transfer loads of dirt. Do the plans take into account the water that flows from Barnard Road and pools because of the previous red-tagged soil addition.

10 - Was any consideration given to the fact that he is taking access from Barnard Road (Public) as opposed to Liberata Road (Private), where he has already built a partial driveway, gated entrance, and well? Barnard Road is in a poor state of repair from the current traffic already, and the construction traffic will be impacting a public road as opposed to the Private Road he already has access to. Has the County Department of Roads and Airports considered this, or been consulted?

11 - I would like understand how it was determined there are no buildable sites on the lower half of this parcel. I would like to see all the soil, geotechnical, or any other reports that were used in making this determination.

12 - I would like the details of why you have determined this site is not on the ridgeline. I am able to view the story poles from both sides the ridge. They are plainly visible as on the ridge for the majority of Morgan Hill. I would like exactly how this determination was made, given how visible it is on the ridgeline.

13 - You stated that two other building sites were considered but were unacceptable. I would like the information about the other two sites that were considered, including their locations. I would like to review any soil, geotechnical or other reports that were used to make this determination.

14 - Is it possible to get contact information for the residents in Holiday Lakes that about this development. I would like to speak to these people, but with Covid I can't really go to their doors to talk. I would like to make sure they are aware of what is being proposed (especially given how hard it is to gather information).

15 - The story poles appear less visible than before, and the orange tape is sagging because of previous winds. Is it possible to restore these so they accurately reflect

the outline of the house? I need to take photos prior to the hearing to show how visible this is (hopefully the weather clears) and I want to ensure the poles accurately portray the actual outline of the proposed structures.

Please let me know ASAP if the hearing will be rescheduled as I requested previously. If it is not, I will likely have to take vacation next week to figure this all out (which I can't really afford to do), and it still won't be enough time. The more I look, the more I realize how much I don't know. A week is not enough time to figure this all out.

I'm sorry for all of the questions, but I'm still trying to understand how this process works and figure out what information is there to review. If possible, it might be easier if you could give me access to all the information that was used by the planning department in recommending this project. I didn't think I would need to do this much work, but at this point the more I look, the more concerned I get.

I'm cc'ing Rob Eastwood, the Planning Manager. Mr. Eastwood, I've left a couple messages for you but haven't heard back.

Thank you again for your time,

[REDACTED]

On Wednesday, January 27, 2021, 06:34:51 PM PST, Tran, Lara <lara.tran@pln.sccgov.org> wrote:

Hello [REDACTED],

Thank you for sending me the picture you took of the current drainage situation.

Warm regards,



LARA TRAN

Associate Planner

Department of Planning and Development

County of Santa Clara