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April 30, 2014

Mr. Jack Chamberlain
Chamberlain Group
655 Skyway, Suite #230
San Carlos, CA 94070

Dear Mr. Chamberlain:

SUBJECT: County File Number PLN 2006-00357
Bunker Hill Drive, San Mateo Highlands
APN 041-101-290

On April 27, 2010, Ticonderoga Partners, LLC/Chamberlain Group received approval from the San Mateo County Board of Supervisors for a County-proposed Zoning Text Amendment, a Rezoning, a Lot Line Adjustment, a Major Subdivision, a Resource Management (RM) Permit, and a Grading Permit, for the development of eleven residential lots on APNs 041-101-290 and 041-072-030 in the County unincorporated area of San Mateo Highlands. The approved project includes the creation of a 93.39-acre parcel, which is subject to a recorded conservation easement and is not the subject of the proposed Minor Modification.

On March 9, 2011, the County approved a requested Minor Modification[1] to the approved RM Permit to reduce the home sizes on Lots 1 through 4 on Bunker Hill Drive, as specified below:

2011 Requested Modification to Reduce Home Sizes			
Lot Number	*Approved House Size (sq. ft.)*	*House Size Under Minor Modification (sq. ft.)*	*Total Size Reduction (sq. ft.)*
1	3,727	**2,679**	**-1,048**
2	3,727	**2,679**	**-1,048**
3	3,874	**2,726**	**-1,148**
4	3,874	**2,726**	**-1,148**

The approved Minor Modification also reduced the size of the attached garages from 3-car to 2-car garages.

[1] Public notification of the minor modification was sent on January 25, 2011.

Any adjustment to home size is considered a modification to the approved project. Condition No. 1 of the Board of Supervisors' approval for the Highlands Project reads as follows:

> *This approval applies only to the proposal, documents and plans described in this report and submitted to and approved by the Board of Supervisors on April 27, 2010. Minor revisions or modifications to these projects in compliance with Condition No. 5 may be made subject to the review and approval of the Community Development Director. Revisions or modifications not in compliance with Condition No. 5 shall be deemed a major modification and shall be subject to review and approval by the Planning Commission at a public hearing.*

Condition No. 5, as referenced above, reads:

> *This project will be implemented as proposed, mitigated, conditioned, and approved by the Board of Supervisors, regarding parcel size and configuration,* ***home sizes****, home locations, architectural design, style and color, materials, height and foundation design. Prior to the issuance of a Certificate of Occupancy for any residence, the applicant shall provide photographs to the Current Planning Section staff to demonstrate utilization of the approved colors and materials. Materials and colors shall not be highly reflective.*

Current Request for Minor Modification

On March 25, 2014, the property owner requested a modification to allow a 3,306 sq. ft. home on Lot 3, where 2,726 sq. ft. is currently the maximum floor area size. The downward sloping topography of the parcel necessitates a driveway bridge to the proposed garage, a 3-story structure, and associated floor area, to span the 33-foot vertical distance from the driveway bridge/garage floor to the foundation at the rear of the proposed home. The proposed home includes an upper level floor plan (garage story), a main level floor plan, and a lower level floor plan.

Public notification of the minor modification of this project was sent on April 15, 2014. Comments were due by April 28, 2014. Staff received one general inquiry and a statement from a representative of the Highlands Community Association (HCA) stating no comment regarding this request. No objections were received.

I am able to approve the proposed revision as a "minor modification" because the proposed modification is necessitated by the topography. Additionally, the floor area requested is less than that approved by the Board of Supervisors in 2010.

Aside from the matters addressed by the Minor Modification, the proposed residences will be required to meet all other applicable conditions of approval as adopted by the Board of Supervisors on April 27, 2010, and obtain necessary approvals from County agencies including, but not limited to, the Planning and Building Department, the Department of Public

Works, and the San Mateo County Fire Department. The conditions of approval for this project have been revised to reflect the approved modification.

If you have questions regarding this matter, please feel free to contact me at 650/363-1861.

Sincerely,

Jim Eggemeyer
Community Development Director

JKE:CML:fc – CMLY0365_WFN.DOC

cc: Department of Public Works
Building Inspection Section
Lennie Roberts, Committee for Green Foothills
Margaret Netto, Representative of the Highlands Community Association
Catherine Palter

Attachment A

COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

REVISED
FINDINGS FOR COUNTY-PROPOSED
RESOURCE MANAGEMENT (RM) ZONING DISTRICT TEXT AMENDMENT

Permit File Number: PLN 2006-00357 Board Meeting Date: April 27, 2010

Prepared By: Camille Leung, Project Planner Adopted By: Board of Supervisors

FINDINGS

Regarding the Environmental Review, Found:

1. That the re-circulated Draft Environmental Impact Report (EIR) and Final EIR, as clarified by the Planning Commission at its meeting of February 10, 2010, are complete, correct and adequate, and prepared in accordance with the California Environmental Quality Act and applicable State and County Guidelines. The public review period for the Draft EIR was September 14, 2009 to November 9, 2009. The public review period for the Final EIR was January 4, 2010 to January 14, 2010..

2. That, on the basis of the Draft and Final EIR, no substantial evidence exists that the project, as proposed, mitigated, and conditioned, will have a significant effect on the environment. The prepared Draft and Final EIR reveal that the project may only result in impacts considered "less than significant."

3. That no mitigation measures were included in the Draft and Final EIR for the Zoning Text Amendment, as the proposed amendment would not have a significant effect on the environment.

4. That the Draft and Final EIR reflects the independent judgment of San Mateo County.

Regarding the Zoning Text Amendment to the Resource Management (RM) District Regulations, Found:

5. That the Board of Supervisors has reviewed and considered the information contained in the Draft and Final EIR prior to approving the project.

6. That the amendment is required by public necessity, convenience, and general welfare, and that the amendment has followed the procedure specified in Chapter 27 (*Amendments*) of the San Mateo County Zoning Regulations. The proposed amendment would allow setback reductions in other urban RM-zoned properties, in order to promote the preservation of open space, reduce associated land disturbance and

grading, and allow the location of homes in a manner conforming to the existing pattern of development within an urban residential neighborhood.

Regarding the Zoning Text Amendment to the Resource Management (RM) District Regulations:

7. Adopted the ordinance included as Attachment X of the staff report amending the RM District Regulations by adding a provision that would allow a reduction in existing setbacks and accessory building setbacks for properties that meet specific criteria for preservation of open space, project conformance to existing development, minimization of grading, and compliance with development standards.

Attachment B

COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

REVISED
FINDINGS AND CONDITIONS OF APPROVAL
FOR THE HIGHLANDS ESTATES PROJECT

Permit File Number: PLN 2006-00357 Board Meeting Date: April 27, 2010

Prepared By: Camille Leung, Project Planner Adopted By: Board of Supervisors

FINDINGS

Regarding the Environmental Review, Found:

1. That the re-circulated Draft Environmental Impact Report (EIR) and Final EIR, as clarified by the Planning Commission at its meeting of February 10, 2010, are complete, correct and adequate, and prepared in accordance with the California Environmental Quality Act and applicable State and County Guidelines. The public review period for the Final EIR was January 4, 2010 to January 14, 2010.

2. That, on the basis of the Draft and Final EIR, no substantial evidence exists that the project, as proposed, mitigated, and conditioned, will have a significant effect on the environment. The prepared Draft and Final EIR reveal that the project, as mitigated, would only result in impacts considered "less than significant."

3. That the Mitigation Monitoring and Reporting Program incorporated within the Final EIR, which monitors compliance with mitigation measures intended to avoid or substantially lessen environmental effects that would be significant absent such mitigation, has been adopted. Compliance with the conditions of approval listed below shall be monitored and confirmed according to implementation deadlines as specified within each condition.

4. That the Draft and Final EIR reflects the independent judgment of San Mateo County.

Regarding the Major Subdivision and Lot Line Adjustment, Found:

5. That, in accordance with Section 7013.3.b of the County Subdivision Regulations, this tentative map, together with the provisions for its design and improvement, is consistent with the San Mateo County General Plan, specifically, Policies 8.14 (*Land Use Compatibility*) and 8.35 (*Uses*), requiring consistency of proposed parcels with surrounding residential land uses, and Policy 8.29 (*Infilling*) which encourages the infilling of urban areas where infrastructure and services are available. As proposed and conditioned, the Lot Line Adjustment and Subdivision would result in home sites

compatible with surrounding home sites which are zoned R-1/S-8 (minimum parcel size of 7,500 sq. ft.). Also, each of the eleven proposed residential lots would adjoin existing homes and be served by existing roads and utilities.

6. That the site is physically suitable for the type, and proposed density of, development. As described in Sections A.1 and A.2 of the staff report, the project complies with both the General Plan land use density designation and the Resource Management (RM) Zoning District Maximum Density of Development. As discussed in the re-circulated Draft EIR and Final EIR, the project, as proposed and mitigated, would not result in any significant impacts to the environment.

7. That the design of the subdivision and the proposed improvements are not likely to cause serious public health problems, substantial environmental damage, or substantially and avoidably injure fish or wildlife or their habitat. Implementation of mitigation measures in the re-circulated Draft EIR and Final EIR would reduce project environmental impacts to less than significant levels.

8. That the design of the subdivision and the proposed improvements will not conflict with easements acquired by the public at large for access through or use of property within the proposed subdivision. Existing easements include an access easement along Bunker Hill Drive to benefit an adjacent parcel (not owned by the applicant), water line easements from the two California Water Service Company parcels surrounded by the larger project parcel, storm drain easements from Yorktown Road and New Brunswick Drive, and a 120-foot sanitary sewer easement from Ticonderoga Drive. The project would not change the boundaries of or impede access to these existing easements.

9. That future development on the parcels could make use of passive heating and cooling to the extent practicable because parcels have unobstructed solar access to the southwest, thereby allowing morning sun to passively or actively (using rooftop solar panels) heat the proposed houses.

10. That, subject to the mitigation measures contained in the DEIR and FEIR, the discharge of waste from the proposed subdivision into an existing community sewer system would not result in violation of existing requirements prescribed by a State Regional Water Quality Control Board pursuant to Division 7 (commencing with Section 13000) of the State Water Code. Sanitary sewer service would be provided to the project site by the Crystal Springs County Sanitation District (District).

11. That the land is not subject to a contract entered into pursuant to the California Land Conservation Act of 1965 ("the Williamson Act") nor does the property currently contain any agricultural land uses.

12. That, pursuant to Section 7005 of the San Mateo County Subdivision Regulations, the proposed subdivision would not result in a significant negative effect on the housing needs of the region. The project would result in the construction of eleven (11) new single-family residences where only vacant land currently exists.

Regarding the Rezoning Map Amendments, Found:

13. That the Board of Supervisors has reviewed and considered the information contained in the Draft and Final EIR prior to approving the project.

14. That the amendments are required by public necessity, convenience, and general welfare, and that the amendments have followed the procedure specified in Chapter 27 (*Amendments*) of the San Mateo County Zoning Regulations. The proposed amendments would facilitate the preservation of an urban-zoned parcel which should be reserved for open space use due to on-site sensitive habitat (APN 041-072-030) and the development of an RM-zoned area (portion of APN 041-101-290) that is adjacent to urban residential uses and does not contain any sensitive habitat. The proposed action would result in increased preservation of on-site sensitive habitat and in uses that are more compatible with the surrounding environment.

Regarding the Rezoning Map Amendments:

15. Adopted the ordinance included as Attachment V to the staff report to rezone a portion of APN 041-101-290, shown within the boundaries on the map identified as Exhibit "A" to Attachment V from "Resource Management (RM)" to an "R-1/S-81" zoning designation.

16. Adopted the ordinance included as Attachment W to the staff report, to rezone a 2,178 sq. ft. area (formerly APN 041-072-030) shown within the boundaries on the map identified as Exhibit "A" to Attachment W from "R-1/S-8" to "Resource Management (RM)."

Regarding the Resource Management (RM) Permit, Found:

17. That this project has been reviewed under, and found to comply with, zoning regulations applicable to the Resource Management (RM) District, including Chapter 20.A (*Resource Management District*), Section 6324 (*General Review Criteria for RM District*), and Section 6451.3 of Chapter 23 (*Development Review Procedure*). Specifically, as proposed, mitigated, and conditioned, the project complies with the maximum density credits (plus requested bonus credits), requirement for a conservation easement over the remainder parcel, as well as applicable Environmental Quality Criteria and Site Design Criteria requiring minimization of grading and an RM Permit for tree removal.

Regarding the Grading Permit, Found:

18. That the project will not have a significant adverse effect on the environment. The proposed grading has the potential to result in air quality impacts, substantial soil erosion and impacts to special-status plants and wildlife species. However, as discussed in the re-circulated Draft EIR and Final EIR, implementation of proposed mitigation measures would reduce these project impacts to less than significant levels.

19. That the project conforms to the criteria of Chapter 8, Division VII, San Mateo County Ordinance Code (*Grading Regulations*), including the grading standards referenced in Section 8605. The applicant has submitted Grading and Detention Plans as well as Erosion Control Plans for the eleven (11) residential lots. As discussed in Section 4.3 of the re-circulated Draft EIR (Geology and Soils), the EIR geotechnical consultant has concluded that the proposed development is feasible with the implementation of proposed mitigation measures. These include (1) the stabilization of existing landslides on the project site, (2) the use of appropriate foundations, (3) compliance with the State's National Pollution Discharge Elimination System (NPDES) General Permit, including preparation of a Stormwater Pollution Prevention Plan (SWPPP), and (4) implementation of the Bay Area Air Quality Management District's (BAAQMD) Particulate Matter (PM) reduction practices during grading and construction. In addition, staff is recommending a condition of approval that prohibits grading within the wet season (October 15 through April 15) unless approved by the Community Development Director.

20. That the project is consistent with the General Plan. As proposed, mitigated, and conditioned, the project complies with the policies of the Soil Resources Chapter of the General Plan, including policies requiring the minimization of erosion.

CONDITIONS OF APPROVAL

A. PLANNING AND BUILDING DEPARTMENT

1. This approval applies only to the proposal, documents and plans described in this report and submitted to and approved by the Board of Supervisors on April 27, 2010. Minor revisions or modifications to these projects in compliance with Condition No. 5 may be made subject to the review and approval of the Community Development Director. The Community Development Director determined that request to reduce the home sizes on Lots 1 through 4 by approximately 1,000 sq. ft. to 2,679 sq. ft. for Lots 1 and 2 and 2,726 sq. ft. for Lots 3 and 4 is a minor modification and approved the request on February 18, 2011. Additionally, the Community Development Director determined that the request to increase the size of the home on Lot 3 from 2,726 sq. ft. to 3,306 sq. ft., where the floor area requested is less than that approved by the Board of Supervisors in 2010, is a minor modification and approved the request on April 30, 2014. Revisions or modifications not in compliance with Condition No. 5 shall be deemed a major modification and shall be subject to review and approval by the Planning Commission at a public hearing.

2. This subdivision approval is valid for two years, during which time a Final Map shall be filed and recorded. An extension to this time period in accordance with Section 7013.5.c of the Subdivision Regulations may be issued by the Planning and Building Department upon written request and payment of any applicable extension fees (if required).

3. The Final Map shall be recorded pursuant to the plans approved by the Board of Supervisors; any deviation from the approved plans shall be reviewed and approved by

the Community Development Director. Revisions or modifications not in compliance with parcel size and configuration as approved by the Board of Supervisors and applicable conditions of approval (including but not limited to) Condition Nos. 8, 9 and 11 shall be deemed a major modification and shall be subject to review and approval by the Planning Commission at a public hearing.

4. The property owner shall comply with all mitigation measures as revised and listed below (based on the Mitigation Monitoring and Reporting Program (MMRP) incorporated within the Final EIR and made available to the public on January 4, 2010). When timing has not been specified below, then mitigation timing and monitoring shall be as specified in the MMRP. The applicant shall enter into a contract with the San Mateo County Planning and Building Department for all mitigation monitoring for this project prior to the issuance of any grading permit "hard card" for the project. The fee shall be staff's cost, plus 10 percent, as required in the current Planning Service Fee Schedule. Planning staff may, at their discretion, contract these services to an independent contractor at cost, plus an additional 10 percent for contract administration.

   a. **Improvement Measure AES-1a:** The Project Applicant shall provide "finished floor verification" to certify that the structures are actually constructed at the height shown on the approved plans. The Project Applicant shall have a licensed land surveyor or engineer establish a baseline elevation datum point in the vicinity of the construction site. Prior to the below floor framing inspection or the pouring of concrete slab for the lowest floors, the land surveyor shall certify that the lowest floor height as constructed is equal to the elevation of that floor specified by the approved plans. Similarly, certifications of the garage slab and the topmost elevation of the roof are required. The applicant shall provide the certification letter from the licensed land surveyor to the Building Inspection Section.

   b. **Improvement Measure AES-1b:** The Project Applicant shall plant a total of eight (8) native trees (minimum 24-gallon each), two directly in front of each home on Lots 5 through 8 to soften and screen views of the new homes from off-site locations. These trees will be in addition to the fourteen (14) required replacement trees (15-gallon size). Of the 14 replacement trees, three (3) trees shall be planted at the back of each of the homes on Cowpens Way and Cobblehill Place (three homes, nine (9) trees total). The applicant shall plant the remaining five (5) trees in the right side yard of Lot 8 in order to provide screening of this residence and other residences on Ticonderoga Drive as viewed from Lakewood Circle. All trees or replacement trees required by this condition shall be maintained in perpetuity by the respective property owner in order to maintain screening of the project.

   c. **Improvement Measure AES-2:** Construction contractors shall minimize the use of on-site storage and when necessary store building materials and equipment away from public view and shall keep activity within the project site and construction equipment laydown areas.

d. **Mitigation Measure BIO-2a:** No earlier than 30 days prior to the commencement of construction activities, a survey shall be conducted to determine if active woodrat nests (stickhouses) with young are present within the disturbance zone or within 100 feet of the disturbance zone. If active woodrat nests (stickhouses) with young are identified, a fence shall be erected around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of a qualified biologist and based on consultation with the CDFG. At the discretion of the monitoring biologist, clearing and construction within the fenced area would be postponed or halted until young have left the nest. The biologist shall serve as a construction monitor during those periods when disturbance activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur.

   If woodrats are observed within the disturbance footprint outside of the breeding period, individuals shall be relocated to a suitable location within the open space by a qualified biologist in possession of a scientific collecting permit. This will be accomplished by dismantling woodrat nests (outside of the breeding period), to allow individuals to relocate to suitable habitat within the adjacent open space.

e. **Mitigation Measure BIO-2b:** No earlier than two weeks prior to commencement of construction activities that would occur during the nesting/breeding season of native bird species potentially nesting/roosting on the site (typically February through August in the project region), a survey for nesting birds shall be conducted by a qualified biologist experienced with the nesting behavior of bird species of the region. The intent of the survey would be to determine if active nests of special-status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 500 feet of the construction zone. The surveys shall be timed such that the last survey is concluded no more than two weeks prior to initiation of construction or tree removal work. If ground disturbance activities are delayed, then an additional pre-construction survey shall be conducted such that no more than two weeks will have elapsed between the last survey and the commencement of ground disturbance activities.

   If active nests are found in areas that could be directly affected or subject to prolonged construction-related noise, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them will be determined through consultation with the CDFG, taking into account factors such as the following:

   - Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;

- Distance and amount of vegetation or other screening between the construction site and the nest; and

- Sensitivity of individual nesting species and behaviors of the nesting birds.

Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas. A qualified biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas of special-status bird species and all birds covered by the Migratory Bird Act to ensure that no impacts on these nests occur.

f. **Mitigation Measure BIO-2c:** Prior to the commencement of construction activities during the breeding season of native bat species in California (generally occurs from April 1 through August 31), a focused survey shall be conducted by a qualified bat biologist to determine if active maternity roosts of special-status bats are present within any of the trees proposed for removal. Should an active maternity roost of a special-status bat species be identified, the roost shall not be disturbed until the roost is vacated and juveniles have fledged, as determined by the biologist. Once all young have fledged, then the tree may be removed. Species-appropriate replacement roosting habitat (e.g., bat boxes) shall be provided should the project require the removal of a tree actively used as a maternity roost. The replacement roosting habitat shall be subject to the approval of the CDFG.

g. **Mitigation Measure BIO-2d:** Immediately preceding initial ground disturbance activities on Lot 11, a pre-construction clearance survey shall be conducted by a qualified biologist for California red-legged frogs. The survey shall be conducted to determine whether individual California red-legged frogs are present within the disturbance boundary. Should a California red-legged frog be observed during the clearance survey, all construction activities on Lot 11 shall be immediately halted and the USFWS shall be immediately contacted. Under no circumstances shall a California red-legged frog be collected or relocated, unless USFWS personnel or their agents implement the measure. Construction-related activities may resume once the frog has naturally left the lot or has been relocated by a permitted biologist (authorized by the USFWS).

h. **Mitigation Measure BIO-3:** Tree replacement shall occur at a minimum 2:1 ratio for all protected trees removed with a circumference of or exceeding 55 inches (17.5 inches diameter at breast height). Therefore, the seven (7) trees proposed for removal shall be replaced with fourteen (14) trees. The replacement of indigenous trees shall be in kind (i.e., live oaks removed shall be replaced by live oaks) and exotic trees to be removed shall be replaced with an appropriate native species on the tree list maintained by the County of San Mateo Planning Department. Replacement trees shall also be maintained for a minimum of three years.

To facilitate the successful replacement of trees, a tree replacement plan shall be prepared and shall meet the following standards:

- Where possible, the plan shall identify suitable areas for tree replacement to occur such that the existing native woodlands in the open space are enhanced and/or expanded.

- The plan shall specify, at a minimum, the following:

  - The location of planting sites;
  - Site preparation and planting procedures;
  - A schedule and action plan to maintain and monitor the tree replacement sites;
  - A list of criteria and performance standards by which to measure success of the tree replacement; and
  - Contingency measures in the event that tree replacement efforts are not successful.

i. **Mitigation Measure BIO-5a:** Prior to the commencement of construction activities on Lot 11, the outer edge of the willow scrub habitat (facing Lot 11) shall be delineated by a qualified biologist. Temporary fencing shall be installed that clearly identifies the outer edge of the willow habitat and that identifies the willow scrub as an "Environmentally Sensitive Area." Signs shall be installed indicating that the fenced area is "restricted" and that all construction activities, personnel, and operational disturbances are prohibited.

j. **Mitigation Measure BIO-5b:** Prior to the issuance of a grading permit, the Project Applicant shall develop an erosion control plan. The plan shall include measures such as silt fencing to prevent project-related erosion and sedimentation from adversely affecting the creek zone and other habitats on and near Lots 1-11. The erosion control plan shall be subject to approval by the County of San Mateo Planning Department.

k. **Mitigation Measure BIO-5c:** Prior to the issuance of the first building permit for any of the eleven (11) homes, the Project Applicant shall develop a lighting plan. The lighting plan shall require that all lighting be directed and shielded as to minimize light spillage into nearby willow scrub habitat, as well as adjacent oak woodland habitats. The lighting plan shall be subject to approval by the County of San Mateo Planning Department.

l. **Mitigation Measure BIO-6:** Prior to the commencement of construction on Lot 8, the occurrence of purple needlegrass shall be mapped, including all stands on the lot with 20 percent or greater cover of native grasses and having a diameter greater than 10 feet. The area of purple needlegrass to be lost due to development of the lot shall then be calculated.

As part of the proposed project, approximately 92 acres of open space would be maintained as open space under a conservation easement. This open space contains a serpentine grassland (on the slope west of the water tanks) that is dominated by native grasses (including purple needlegrass) and other native plant species. These native grasses, including purple needlegrass, would be permanently protected by the conservation easement. In addition, non-native plant areas adjacent to the serpentine grassland shall be restored to support native grasses over an area twice the acreage (2:1) of the stands of purple needlegrass to be lost on Lot 8.

m. **Mitigation Measure GEO-1:** A design-level geotechnical investigation of the site shall be performed prior to any project grading including static and seismic slope stability analysis of the areas of the project site to be graded and developed. The specific mitigation measures to be utilized in order to stabilize existing landslides and areas of potential seismically induced landslides shall be presented in the report. The specific mitigation measures shall include some of the following measures or measures comparable to these:

- Landslide debris on Lots 7 and 8 shall be excavated and replaced with a fully drained conventional buttress fill that is founded in the underlying Franciscan mélange, as recommended by the project geotechnical engineer. (Lots 7-8)

- Retaining walls shall be designed to withstand high lateral earth pressure from adjoining natural materials and/or backfill shall be installed at the rear of Lots 5 through 8. In addition, retaining walls shall be built in the front of Lots 5 and 6 to aid in maintaining the slopes behind the lots and the more extensive cut required for Lots 5 and 6. (Lots 5-8)

- A surface drainage system shall be installed for each lot to mitigate new landslides developing within the thin veneer of soil mantling the bedrock on the slope below Lots 1 through 4. (Lots 1-4)

- Subsurface drainage galleries may be installed to control the flow of groundwater and reduce the potential for slope instabilities from occurring in the future. (All lots)

- Over-steepening of slopes shall be avoided. Horizontal benches shall be constructed on all reconstructed slopes at an interval of 25 to 30 feet. New fill shall be compacted to at least 90 percent relative compaction (as determined by ASTM test method D1557). (All lots)

- Drilled piers and grade-beam foundations shall be used to support foundations in accordance with recommendations of the project geotechnical engineer. (All lots)

n. **Mitigation Measure GEO-2a:** Materials used to construct the buttress fill should have effective strength parameters equal to or better than the parameters used in the Treadwell and Rollo 2009 study. (Lots 7 and 8)

o. **Mitigation Measure GEO-2b:** The following mitigation measures shall be implemented to ensure the stability of proposed structures that are located on deep fill soils:

- A site-specific, design-level geotechnical investigation shall be completed during the design phase of the proposed project, and prior to approval of new building construction within the site for specific foundation design, slope configuration, and drainage design. (All lots)

- The geotechnical investigation shall provide recommendations to prevent water from ponding in pavement areas and adjacent to the foundation of the proposed residences, and to prevent collected water from being discharged freely onto the ground surface adjacent to the residences, site retaining walls, or artificial slopes. The project geotechnical engineer shall identify on site areas downslope of the homes where the collected water may be discharged utilizing properly designed energy dissipaters. (All lots)

- Fills used at the project site shall be properly placed with keyways and subsurface drainage, and adequately compacted following the recommendations of the final geotechnical report and Geotechnical Engineer, in order to significantly reduce fill settlement. (All lots)

- Underground utilities shall be designed and constructed using flexible connection points to allow for differential settlement. (All lots)

- Foundation plans shall be submitted to the County for review prior to issuance of a building permit. All foundation excavations shall be observed during construction by the project Geotechnical Engineer to insure that subsurface conditions encountered are as anticipated. As-built documentation shall be submitted to the County. (All lots)

- Drilled pier and grade-beam foundations or other appropriate foundations per the recommendations of the design-level geotechnical investigation shall be developed for lots that are determined to likely experience soil creep. (All lots)

All work shall be completed in accordance with requirements of the 2007 California Building Code and the San Mateo County Building Code. (All lots)

p. **Improvement Measure GEO-3:** In compliance with the NPDES regulations, the Project Applicant shall file a Notice of Intent with the State Water Resources Control Board (SWRCB) prior to the start of grading and prepare a SWPPP.

The SWPPP shall include specific best management practices to reduce soil erosion. The SWPPP shall include locations and specifications of recommended soil stabilization techniques, such as placement of straw wattles, silt fence, berms, and storm drain inlet protection. The SWPPP shall also depict staging and mobilization areas with access routes to and from the site for heavy equipment. The SWPPP shall include temporary measures to reduce erosion to be implemented during construction, as well as permanent measures.

County staff and/or representatives shall review the SWPPP to ensure adequate compliance with State and County standards.

County staff and/or representatives shall visit the site during grading and construction to ensure compliance with the SWPPP, as well as note any violations, which shall be corrected immediately. A final inspection shall be completed prior to occupancy.

q. **Mitigation Measure GEO-4:** The Project Applicant shall be required to use the seismic design criteria listed below to design structures and foundations to withstand expected seismic sources in accordance with the California Building Code (2007) as adopted by the County of San Mateo.

Site Class: C
Soil Profile Name: Very Dense Soil and Soft Rock
Occupancy Category: II
Seismic Design Category: E
Mapped Spectral Response for Short Periods- 0.2 Sec (S_s): 2.226 g
Mapped Spectral Response for Long Periods- 1 Sec (S1): 1.273 g
Site Coefficient - Fa, based on the mapped spectral response for short periods: 1.0
Site Coefficient - Fv, based on the mapped spectral response for long periods: 1.3
Adjusted Maximum Considered EQ Spectral Response for Short Periods (SMS): 2.226
Adjusted Maximum Considered EQ Spectral Response for Long Periods (SM1): 1.655
Design (5-percent damped) Spectral Response Acceleration Parameters at short periods (SDS): 1.484
Design (5-percent damped) Spectral Response Acceleration Parameters at long periods (SD1): 1.103

r. **Mitigation Measure GEO-5:** During site grading, soils in each lot shall be observed and tested by the project Geotechnical Engineer to determine if expansive soils are exposed. Should expansive soils be encountered in planned building or pavement locations, the following measures shall be implemented under the direction of the Geotechnical Engineer in order to mitigate the impact of expansive soils:

- Expansive soils in foundation areas shall be excavated and replaced with non-expansive fill to the specifications of the geotechnical engineer.

- A layer of non-expansive fill soils 12 to 24 inches in thickness shall be placed over the expansive materials and prior to the placement of pavements or foundations.

- Moisture conditioning of expansive soil shall be applied to a degree that is several percent above the optimum moisture content or lime treating of the expansive soil.

- Foundations shall be constructed to be below the zone of seasonal moisture fluctuation or to be capable of withstanding the effects of seasonal moisture fluctuations.

- Specific control of surface drainage and subsurface drainage measures shall be provided.

- Low water demand landscaping shall be used.

s. **Mitigation Measure AQ-1:** The Project Applicant shall require that the following BAAQMD recommended and additional PM_{10} reduction practices be implemented by including them in the contractor construction documents:

The first phase of construction shall require 30 percent of construction equipment to meet Tier 1 EPA certification standards for clean technology. The remainder of construction equipment (70 percent), which would consist of older technologies, shall be required to use emulsified fuels.

- The second phase of construction shall require 30 percent of construction equipment to meet Tier 2 EPA certification standards for clean technology and 50 percent to meet Tier 1 EPA certification standards. The remaining 20 percent of construction equipment, which would consist of older technologies, shall use emulsified fuels.

- For all larger vehicles, including cement mixers or other devices that must be delivered by large trucks, vehicles shall be equipped with CARB level three verified control devices.

- Water all active construction areas at least twice daily.

- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.

- Pave, apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas at the construction sites.

- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at the construction sites.
- Sweep public streets adjacent to construction sites daily (with water sweepers) if visible soil material is carried onto the streets.
- Hydroseed or apply non-toxic soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.). Limit traffic speeds on unpaved roads to 15 miles per hour.
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as soon as possible.
- Install wheel washers for all exiting trucks or wash off the tires or tracks of all trucks and equipment leaving the construction site.
- Install wind breaks at the windward sides of the construction areas.
- Suspend excavation and grading activities when wind (as instantaneous gusts) exceeds 25 miles per hour.

t. **Mitigation Measure NOI-1:** The Project Applicant shall require that the following noise reduction practices be implemented by including them in the contractor construction documents:

- Equipment and trucks used for project grading and construction would utilize the best available noise control techniques (e.g., improved exhaust mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds) in order to minimize construction noise impacts.
- Equipment used for project grading and construction would be hydraulically or electrically powered impact tools (e.g., jack hammers and pavement breakers) wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. Compressed air exhaust silencers would be used on other equipment. Other quieter procedures would be used such as drilling rather than impact equipment whenever feasible.

- The grading and construction activity would be kept to the hours of 7:00 AM to 7:00 PM, Monday through Friday. Saturday hours (8:00 AM to 5:00 PM) are permitted upon the discretion of County approval based on input from nearby residents and businesses. Saturday construction (8:00 AM to 5:00 PM) would be allowed once the buildings are fully enclosed. Noise generating grading and construction activities shall not occur at any time on Sundays, Thanksgiving and Christmas.

- Residential property owners within 200 feet of planned construction areas shall be notified of the construction schedule in writing, prior to construction; the project sponsor shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints regarding construction noise; the coordinator (who may be an employee of the developer or general contractor) shall determine the cause of the complaint and shall require that reasonable measures warranted to correct the problem be implemented; a telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site fence and on the notification sent to neighbors adjacent to the site.

u. **Mitigation Measures HAZMAT-2:** As required by the San Mateo County Fire Protection Ordinance, Section 3.84.100, individual property owners for Lots 1-4 and 9, 10, and 11 shall be responsible for maintaining a fuel break by removing all hazardous flammable materials or growth from the ground around each home for a distance of up to 100 feet from its exterior circumference, for the life of the project. Property owners of lots listed above shall arrange with the property owner of the open space parcel to obtain legal access to the open space parcel for the purpose of vegetation clearance. This would not include the authorization of tree removal for trees protected by the RM zoning regulations or "major removal" of vegetation requiring an RM Permit. For the twelve parcels that constitute the project site, the removal of trees or other vegetation providing screening of the eleven residences such that the residences are made significantly more visible from public viewing location(s) shall constitute a "major removal" requiring an RM Permit. This requirement shall be recorded as a deed restriction on Lots 1 through 4, and 9, 10, and 11 when the lots are sold.

v. **Mitigation Measure HAZMAT-3:** During the design level geotechnical investigation, representative soil samples shall be obtained for each lot proposed on an area underlain or potentially underlain by serpentine bedrock. These samples shall be tested for the presence of naturally occurring asbestos by a state certified testing laboratory in accordance with requirements of the CARB and the BAAQMD and the results shall be provided to the County Planning Department.

If naturally occurring asbestos is identified at the site, a site health and safety (H&S) plan including methods for control of airborne dust shall be prepared. This plan shall be reviewed and approved by the County of San Mateo prior to grading in areas underlain by serpentine-bearing soils or bedrock and naturally occurring asbestos. The H&S plan shall strictly control dust-generating excavation and

compaction of material containing naturally occurring asbestos. The plan shall also identify site-monitoring activities deemed necessary during construction (e.g., air monitoring). Worker monitoring shall also be performed as appropriate. The plan shall define personal protection methods to be used by construction workers. All worker protection and monitoring shall comply with provisions of the Mining Safety and Health Administration (MSHA) Guidelines, California Division of Occupational Safety and Health (DOSH), and the Federal Occupational Safety and Health Administration (OSHA).

If naturally occurring asbestos is found at the site, a Soil Management Plan shall be developed and approved by the County Planning Department to provide detailed descriptions of the control and disposition of soils containing naturally occurring asbestos. Serpentine material placed as fill shall be sufficiently buried in order to prevent erosion by wind or surface water runoff, or exposure to future human activities, such as landscaping or shallow trenches. Additionally, the BAAQMD shall be notified prior to the start of any excavation in areas containing naturally occurring asbestos.

w. **Improvement Measure TRANS-1:** The Project Applicant shall prepare and submit a Construction Management Plan that will, among other things, require that all truck movement associated with project construction occur outside the commute peak hours.

x. **Mitigation Measure TRANS-2:** The Project Applicant shall be required to pay for the installation of advisory traffic signs on Ticonderoga Drive in the vicinity of the proposed homes if determined necessary by the County of San Mateo Department of Public Works.

y. **Mitigation Measure UTIL-1:** The Project Applicant shall mitigate the project-generated increase in sewer flow such that there is a "zero net increase" in flow during wet weather events, by reducing the amount of existing Inflow and Infiltration (INI) into the Crystal Springs County Sanitation District (District) sewer system. This shall be achieved through the construction of improvements to impacted areas of the sewer system, with construction plans subject to District approval. Construction of improvements, as approved by the District, shall be completed prior to the start of the construction of the residences. In addition, as project sewage will be treated by the City of San Mateo's Wastewater Treatment Plant, the Project Applicant shall submit payment of the City of San Mateo Wastewater Treatment Plant Expansion development impact fee to the City of San Mateo. This fee is based on the number of bedrooms in each residential unit and is calculated at the time of the final plans, using the City's fee schedule in effect at the time of the building permit application.

The following conditions of approval document points of discussion among the County, the applicant and neighborhood groups:

5. This project will be implemented as proposed, mitigated, conditioned, and approved by the Board of Supervisors, regarding parcel size and configuration, home sizes, home locations, architectural design, style and color, materials, height and foundation design. Prior to the issuance of a Certificate of Occupancy for any residence, the applicant shall provide photographs to the Current Planning Section staff to demonstrate utilization of the approved colors and materials. Materials and colors shall not be highly reflective.

6. Colors and Materials: The following language shall be recorded as a deed restriction on the applicable parcels when they are sold:

   a. Lots 1 through 11: Development shall employ colors and materials which blend in with, rather than contrast with, the surrounding soil and vegetative cover of the open space parcel. All exterior construction materials shall be of deep earth hues such as dark browns, greens, and rusts. The applicant shall utilize roof materials that perform as a "cool roof." Roof colors shall be of a medium tone, subject to the approval of the Community Development Director. Exterior lighting shall be minimized and earth-tone colors of lights used.

   b. Lots 1, 2, 3, 4 and 11: Homes shall be no more than one-story high on the front curbside. Home design will be compatible with the area's contemporary, mid-20th century modern style. Rear facades of homes on Lots 9 through 11 shall have details to reduce the massing of the structure, specifically architectural articulation to break up the vertical facade, color variation, and brick or stone treatment for retaining walls supporting the residences.

7. Grading and Construction Staging Limits: Grading and construction activities shall be limited to the grading and staging limits presented in the approved Clearing, Construction, and Grading Limits Plan. The property owner shall maintain non-conflicting vegetation in the side and rear yard areas adjoining 2285 Bunker Hill Dr. until the foundation is installed. The construction drawings associated with the subdivision improvement plans and the individual site development plans for Lots 1 through 11 shall include a Clearing, Construction and Grading Limits Plan (Limits Plan). The Limits Plan and all associated documents must utilize **current topographic data (2009)** for all parcels, as mapped by Chris Hundemer at Treadwell and Rollo. The Limits Plan shall depict the fencing and protection of the adjacent open space parcel in conformance with the approved Vesting Tentative Map. This plan shall be subject to review and approval of the County Planning and Building Department and the Department of Public Works. The applicant shall install orange fencing, staked securely at intervals, along all staging limits prior to the issuance of any Grading Permit "hard card."

8. Development Restriction Over Lot 8: Only a portion of Lot 8 is developable. The rest of the parcel (shown as hatched on Attachment L) is in a "No-Build Zone." The "No-Build Zone" shall be shown on the Final Map for the subdivision. All setbacks shall be measured from the limits of the buildable portion of the parcel (i.e., excluding any "No-Build" areas on the Final Map). For the purpose of calculating the Maximum Building Site Coverage Ratio of 40%, the Building Site Area shall exclude any "No-Build" areas as shown on the Final Map for the subject property.

9. Development Restriction Over Lot 11: All areas of Lot 11 are developable as allowed by the County Zoning Regulations, with the exception of a "No-Build Zone" on the right side of the parcel, as illustrated in the approved Clearing, Construction, and Grading Limits Plan. The "No-Build Zone" shall be shown on the Final Map for the subdivision. All setbacks shall be measured from the limits of the buildable portion of the parcel (i.e., excluding any "No-Build" areas on the Final Map). For the purpose of calculating the Maximum Building Site Coverage Ratio of 40%, the Building Site Area shall exclude any "No-Build" areas as shown on the Final Map for the subject property.

10. Storm Drainage Plan: Project implementation shall comply with the approved Storm Drainage Plan.

11. Conservation Easement: Lot 12, the open-space parcel, will be subject to a conservation easement in perpetuity, and to a deed restriction, each in forms to be approved by County Counsel and the County Board of Supervisors. The easement will be noted on the Vesting Tentative Map and on the Final Map. Recordation of the Final Map and conservation easement shall be handled by the Department of Public Works (DPW) working cooperatively with Planning staff to ensure the proper order and timing of the recordation of both documents. DPW and Planning staff shall ensure that the Final Map is recorded and ensure recordation of the approved conservation easement immediately following (allowing no other documents to be recorded on the project parcels between the recordings of the Final Map and the conservation easement).

12. The Final Map will include a note stating that "any development of the project parcels must comply with the conditions of approval, as approved by the Board of Supervisors on April 27, 2010."

Conditions of Approval for Certification of Draft and Final EIR

13. Per CEQA Section 15095, the applicant shall provide a copy of the final certified Final EIR to all responsible agencies. **The applicant must complete this requirement within fourteen (14) days of the final approval of this project.**

14. **The applicant shall coordinate with the project planner to record the Notice of Completion and pay an environmental filing fee of $2,792.25 (or current fee), as required under Fish and Game Code Section 711.4(d), plus a $50 recording fee to the San Mateo County within four (4) working days of the final approval date of this project.**

Conditions of Approval for Major Subdivision and Lot Line Adjustment

15. The applicant shall record the conservation easement, as approved by the Board of Supervisors, according to the process described in Condition 11.

16. Prior to the recordation of the Final Map, the property owner shall either produce a deed showing the donation of the land to a park service provider or pay an in-lieu fee, meeting the requirements of Section 7055.3 of the County Subdivision Regulations. A worksheet showing the prescribed calculation appears as Attachment U of the staff report for the January 13, 2010 hearing. As of the date of this report, the in-lieu fee for this subdivision is $236.50. The fee shall be re-calculated at the time of Final Map recording as indicated in the County Subdivision Regulations.

Conditions of Approval for Grading Permit and Tree Removals

17. Twelve (12) separate Grading Permit hard cards are required, one for the subdivision improvements and one for each of the eleven homes. "Hard cards" shall be issued according to the following schedule:

    a. The "hard card" for grading of improvements related to the subdivision (including a sidewalk for Lots 5-8 and all shared access ways) may be issued after the final approval of this project, subject to the approval of the Planning and Building Department's Geotechnical Engineer, Department of Public Works and the Current Planning Section, **and subject to the conditions below**.

    b. The "hard card" for grading of improvements related to the residences (the preparation of building sites and yard areas) can only be issued simultaneously or after the issuance of a building permit for the construction of each new residence, subject to the approval of the Planning and Building Department's Geotechnical Engineer, Department of Public Works and the Current Planning Section.

18. Lots 1-4: Prior to issuance of grading permits, BKF shall prepare cross sections through each lot illustrating existing slopes, proposed final slopes, areas of fill placement and the stepping of houses across the slope. No fill placement will be permitted downslope of proposed residences (with the exception of fill as shown on the grading plans as approved by the Board of Supervisors).

19. Per the mitigation measures in the MMRP, tree removals and grading shall proceed as specified:

    a. Grading Permit hard card cannot be issued until a design-level geotechnical investigation of the site has been performed and submitted to the Planning and Building Department's Geotechnical Section and evidence of completion of Mitigation Measures GEO-3; TRANS-1; BIO-2a through 2d, 5b and 5c; and HAZMAT-3 has been submitted and approved by the project planner.

b. Grading Permit hard card cannot be issued for Lot 8 until evidence of completion of Mitigation Measures BIO-6 has been submitted and approved by the project planner.

c. Grading Permit hard card cannot be issued for Lot 11 until evidence of completion of Mitigation Measures BIO-2d and 5a has been submitted and approved by the project planner.

d. Trees shall not be removed until evidence of implementation of Mitigation Measure BIO-2c has been submitted and approved by the project planner and the Grading Permit hard card has been issued.

20. No grading shall be allowed during the winter season (October 15 to April 15) to avoid potential soil erosion unless approved, in writing, by the Community Development Director. The property owners shall submit a letter to the Current Planning Section, at least two weeks prior to commencement of grading, stating the date when grading will begin.

21. This permit does not authorize the removal of any additional trees with trunk circumference of more than 55 inches beyond those approved by the Board of Supervisors. Such activity would require application for and issuance of a separate Resource Management (RM) Permit. All trees not approved for removal under this permit shall be protected during grading operations. Prior to the issuance of the Grading Permit hard card, the applicant shall implement the following tree protection plan:

    The applicant shall establish and maintain tree protection zones throughout the entire length of the project. Tree protection zones shall be delineated using 4-foot tall orange plastic fencing supported by poles pounded into the ground, located as close to the driplines as possible while still allowing room for construction/grading to safely continue. The applicant shall maintain tree protection zones free of equipment and materials storage and shall not clean any equipment within these areas. Should any large roots or large masses of roots need to be cut, the roots shall be inspected by a certified arborist or registered forester prior to cutting. Any root cutting shall be monitored by an arborist or forester and documented. Roots to be cut should be severed cleanly with a saw or toppers. Normal irrigation shall be maintained, but oaks should not need summer irrigation. The above information shall be on-site at all times.

22. Prior to the issuance of the grading permit "hard card," the applicant shall schedule an erosion control inspection by Current Planning Section staff to demonstrate that the approved erosion control plan has been implemented. The applicant is responsible for ensuring that all contractors minimize the transport and discharge of pollutants from the project site into local drainage systems and water bodies by adhering to the San Mateo Countywide Water Pollution Prevention Program's (SMCWPPP) "General Construction and Site Supervision Guidelines," including:

a. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 15 and April 15. Stabilizing shall include both proactive measures, such as the placement of straw bales or coir netting, and passive measures, such as minimizing vegetation removal and revegetating disturbed areas with vegetation that is compatible with the surrounding environment.

b. Storing, handling, and disposing of construction materials and wastes properly, so as to prevent their contact with stormwater.

c. Controlling and preventing the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.

d. Using sediment controls or filtration to remove sediment when dewatering site and obtaining all necessary permits.

e. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.

f. Delineating with field markers clearing limits, setbacks, and drainage courses, per Condition 6.

g. Protecting adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.

h. Performing clearing and earth-moving activities only during dry weather.

i. Limiting and timing applications of pesticides and fertilizers to prevent polluted runoff.

j. Limiting construction access routes and stabilizing designated access points.

23. While the applicant must adhere to the approved erosion and sediment control plan during grading and construction, it is the responsibility of the civil engineer and/or construction manager to implement the Best Management Practices (BMPs) that are best suited for this project site. If site conditions require additional measures in order to comply with the SMCWPPP and prevent erosion and sediment discharges, said measures shall be installed immediately under the direction of the project engineer. If additional measures are necessary, the erosion and sediment control plan shall be updated to reflect those changes and shall be resubmitted to the Planning and Building Department for review. The County reserves the right to require additional (or entirely different) erosion and sediment control measures during grading and/or construction if the approved plan proves to be inadequate for the unique characteristics of each job site.

24. Prior to the issuance of a Grading Permit "hard card," the applicant shall submit a schedule of grading operations, subject to review and approval by the Department of Public Works and the Current Planning Section. The submitted schedule shall include a schedule for winterizing the area and details of the off-site haul operations, including, but not limited to: export site(s), size of trucks, haul route(s), time and frequency of haul trips, and dust and debris control measures. Per the City of San Mateo Department of Public Works, use of De Anza Boulevard is prohibited, as De Anza Boulevard is not a designated truck route. The submitted schedule shall represent the work in detail and project grading operations through to the landscaping and/or restoration of all disturbed areas. As part of the review of the submitted schedule, the County may place such restrictions on the hauling operation, as it deems necessary. During periods of active grading, the applicant shall submit monthly updates of the schedule to the Department of Public Works and the Current Planning Section.

25. The applicant shall file a Notice of Intent (NOI) with the State Water Resources Board to obtain coverage under the State General Construction Activity NPDES Permit. A copy of the project's NOI and Stormwater Pollution Prevention Plan (SWPPP) shall be submitted to the Current Planning Section, prior to the issuance of any Grading Permit "hard card."

26. Replacement of vegetation removed in areas within the parcels during grading and construction activities:

    a. Vegetation removed in areas outside of building footprints, driveways, and construction access areas shall be replaced with drought-tolerant, non-invasive plants, immediately after grading is complete in that area. Prior to the issuance of any building permits, the applicant shall submit photographs demonstrating compliance with this condition to the Current Planning Section, subject to review and approval by the Community Development Director.

    b. The applicant shall replace all vegetation removed in all areas not covered by construction with drought-tolerant, non-invasive plants, once construction is completed. Prior to the Current Planning Section's final approval of any building permit, the applicant shall submit photographs demonstrating compliance with this condition, subject to review and approval by the Community Development Director.

27. The provision of the San Mateo County Grading Regulations shall govern all grading on and adjacent to this site. Per San Mateo County Ordinance Code Section 8605.5, all equipment used in grading operations shall meet spark arrester and fire-fighting tool requirements, as specified in the California Public Resources Code.

28. Upon the start of grading activities and through to the completion of the project, the applicant shall be responsible for ensuring that the following dust control guidelines are implemented:

a. All graded surfaces and materials, whether filled, excavated, transported or stockpiled, shall be wetted, protected or contained in such a manner as to prevent any significant nuisance from dust, or spillage upon adjoining water body, property, or streets. Equipment and materials on the site shall be used in such a manner as to avoid excessive dust. A dust control plan may be required at any time during the course of the project.

b. A dust palliative shall be applied to the site when required by the County. The type and rate of application shall be recommended by the soils engineer and approved by the Department of Public Works, the Planning and Building Department's Geotechnical Section, and the Regional Water Quality Control Board.

29. Final approval of all Grading Permits is required. For final approval of the Grading Permits, the applicant shall ensure the performance of the following activities within thirty (30) days of the completion of grading at the project site:

a. The engineer shall submit written certification that all grading has been completed in conformance with the approved plans, conditions of approval/ mitigation measures, and the Grading Regulations, to the Department of Public Works and the Planning and Building Department's Geotechnical Section.

b. The geotechnical consultant shall observe and approve all applicable work during construction and sign Section II of the Geotechnical Consultant Approval form, for submittal to the Planning and Building Department's Geotechnical Engineer and Current Planning Section.

Other Planning and Building Department Project Conditions

30. The color and materials of the bio-retention planters for all homes shall match the surrounding native landscaping, such that planters will blend with the surrounding environment.

31. Building plans for each residence shall demonstrate compliance with the California Water Efficient Landscape Ordinance (AB 1881), prior to the Current Planning Section's approval of the building permit application for each residence.

32. The applicant and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains during construction, whether historic or prehistoric. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and the County coroner shall be notified immediately. If the coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.

33. The property owner is responsible for the annexation of the project site to County governed special districts that will provide utility or other service. The project applicant is responsible for application and fees to the San Mateo Local Agency Formation Commission.

34. For Lots 1 through 8 and Lot 11 (lots with the RM Zoning District), all present and future site preparation activity and development shall comply with Section 6319C.2.F (Development Standards) and Section 6319C.2.G (Minimization of Grading). All setbacks shall be measured from the limits of the buildable portion of the parcel (i.e., excluding any "No-Build" areas on the Final Map). For the purpose of calculating the Maximum Building Site Coverage Ratio of 40%, the Building Site Area shall exclude any "No-Build" areas as shown on the Final Map for the subject property. The above statement shall be added as a deed restriction to the respective lots when the lots are sold.

B. PLANNING AND BUILDING DEPARTMENT - GEOTECHNICAL SECTION

35. The grading for this project will require submission of a revised geotechnical report that includes detailed recommendations for grading, erosion control, and foundation design and construction.

36. Building permit applications for Lots 7 and 8 will be required to depict as-built subdrain system alignments for the underlying stabilization buttress on the house foundation plans. The intent is to adjust foundation pier layout (as needed) so that installed subdrain systems are not damaged by foundation construction.

37. Documentation to be submitted for the Lot 10 building permit shall include proposed construction/design measures to provide stable temporary excavations west of the residence so that the stability of an existing fill prism is not adversely impacted during site grading.

38. (All Lots) Prior to issuance of building permits, the Project Geotechnical Consultant shall field inspect (and investigate, as needed) all proposed drainage discharge locations and verify that proposed drainage designs are acceptable from a slope stability/erosion perspective or recommend appropriate modifications.

39. Lots 9 and 10: Future construction in areas outside of the building envelope may require supplemental geotechnical evaluation. Lot 11: Future building construction within the delineated No-Build Zone on the approved Vesting Tentative Map is prohibited. The above statements shall be added as a deed restriction to the respective lots when the lots are sold. Recorded deed restrictions shall be produced prior to the issuance of a Certificate of Occupancy for any residence on these lots.

40. Lot 11: Grading limits, building footprint and building envelope shall be restricted to those boundaries depicted on Lot 11 Exhibit 1 prepared by BKF dated January 27, 2010. These boundaries shall supersede any conflicting boundaries presented on other recently prepared development documents. Construction staging shall not include grading beyond the grading limits.

C. PLANNING AND BUILDING DEPARTMENT - BUILDING INSPECTION SECTION

41. Building permits may be required for all areas of construction. Contact the Building Inspection Section prior to ANY construction for permit requirements.

42. All new residences shall comply with the current Green Building Ordinance, applicable at the time of permit application.

43. Per Section 1404 of the Green Building Ordinance, the applicant is encouraged to incorporate green building features in the construction of the eleven homes, such that the project achieves 75 points or higher or LEED for Homes Certified. Such projects will receive expedited building permit processing.

D. PACIFIC GAS AND ELECTRIC COMPANY

44. Developers will be responsible for the costs associated with the relocation of existing PG&E facilities to accommodate the project.

E. DEPARTMENT OF PUBLIC WORKS

Conditions of Approval for Major Subdivision and Lot Line Adjustment

45. The applicant shall install a sidewalk along the front of Lots 5 through 8 on Ticonderoga Drive, subject to review and approval by the Department of Public Works (DPW) and the issuance of an encroachment permit by DPW.

46. The applicant shall install a crosswalk and ADA ramp at the intersection of Ticonderoga Drive and Allegheny Way prior to recordation of the Final Map.

47. The applicant shall submit a permanent stormwater management plan in compliance with the County's Drainage Policy (including stormwater detention requirements) and applicable NPDES requirements (particularly Provision C.3) for review and approval by the Department of Public Works, prior to the Current Planning Section's approval of any building permit for residences. Individual operation and maintenance agreements for each residence to include all permanent stormwater treatment measures, as approved by the Community Development Director and the Department of Public Works, shall be executed prior to the Current Planning Section's final approval of any building permit for residences.

48. The applicant shall submit a Final Map to the Department of Public Works for review and recording.

49. Prior to recordation of the Final Map, the subdivider shall either construct all improvements required for shared access or enter into a written agreement with the County for future construction of the improvements. Prior to recording the Final Map, the applicant will be required to submit to the Department of Public Works a complete set of improvement plans including all provisions for roadways, driveways, utilities, storm drainage, and stormwater treatment, all in accordance with the County Subdivision Regulations, County Standard Details, County Drainage Policy and NPDES Permit, plus applicable plan review fee.

    Upon the Department of Public Works' approval of the improvement plans, the applicant may be required to execute a Subdivision Improvement Agreement and post securities with the Department of Public Works, if applicable, as follows:

    a. Faithful Performance - 100% on the estimated cost of constructing the improvements;

    b. Labor and Materials - 50% of the estimated cost of constructing the improvements.

Other Department of Public Works Project Conditions

50. The access easement on Lot 8 shall meet the access requirements of the Crystal Springs County Sanitation District, prior to the final approval of the Final Map by the Department of Public Works.

51. For Lots 7 and 8: A maintenance agreement is required for the stairs, subject to San Mateo County Fire Department and Department of Public Works approval.

52. The applicant shall record documents which address future maintenance responsibilities of any private drainage, stormwater treatment or other common facilities which may be constructed. For example, documents would address maintenance of all shared access easements (i.e., Lots 5 through 8, and Lots 9 and 10), as well as shared maintenance of the bio-retention planter on Lot 8 (for the benefit of Lots 7 and 8) and the storm drainage outfall on Lot 9 (for the benefit of Lots 9 and 10). Prior to recording these documents, they shall be submitted to the Department of Public Works for review and prior to the issuance of a Certificate of Occupancy for the applicable parcel (Lots 5 through 10).

53. "As-Built" plans of all construction required by these conditions shall be prepared and signed by the subdivider's engineer upon completion of all work. The "As-Built" plans shall be accompanied by a written certification from the engineer that all private facilities have been completed in conformance with the approved plans.

54. The applicant shall prepare a plan indicating the proposed method of sewering these properties. This plan should be included on the improvement plans and submitted to the Department of Public Works for review. Upon completion of this review, the applicant or his engineer shall have these approved plans signed by the appropriate County Sewer District.

55. The applicant shall submit, to both the Department of Public Works and the Planning Department, written certification from the appropriate Water District stating that their requirements to provide water service connections to the proposed parcels of this subdivision have been met.

56. Any potable water system work required by the appropriate district within the County right-of-way shall not be commenced until County requirements for the issuance of an encroachment permit have been met. Plans for such work shall be reviewed by the Department of Public Works prior to the issuance of the permit.

57. No proposed construction work within the County right-of-way shall begin until County requirements for the issuance of an encroachment permit, including review of the plans, have been met and an encroachment permit issued.

58. Prior to the issuance of any building permit, the applicant will be required to provide payment of "roadway mitigation fees" based on the square footage (assessable space) of the proposed building per Ordinance No. 3277.

59. The applicant shall submit a driveway "Plan and Profile" to the Department of Public Works, showing the driveway access to the parcel (garage slab) complying with County standards for driveway slopes (not to exceed 20 percent) and to County standards for driveways (at the property line) being the same elevation as the center of the access roadway. When appropriate, this plan and profile shall be prepared from elevations and alignment shown on the roadway improvement plans. The driveway plan shall also include and show specific provisions and details for both the existing and the proposed drainage patterns and drainage facilities.

60. Plans, with specific construction details, shall be stamped and signed by the registered civil engineer and submitted to the Department of Public Works for review and approval prior to construction.

F. SAN MATEO COUNTY FIRE DEPARTMENT

61. All dead-end roadways shall be terminated by a turnaround bulb of not less than 96 feet in diameter. For Lots 7, 8, 9, and 10: Lots 9 and 10 shall meet Hammerhead T requirements. The Hammerhead T shall provide a lane that is a minimum width of 20 feet throughout with a minimum inside curve radius of 26 feet and a top of T length of 120 feet minimum. Lots 7 and 8 shall mitigate fire engine access with a higher fire sprinkler flow and coverage and non-combustible exterior siding and decking. Alternate methods and material requests may be applied for at the time of building permit application submittal.

62. The required fire flow shall be available from a County Standard 6" Wet Barrel Fire Hydrant; the configuration of the hydrant shall have a minimum of one each 4 1/2" outlet and one each 2 1/2" outlet located not more than 250 feet from the building, measured by way of approved drivable access to the project site.

63. All new public water systems, extensions from a public water system or replacement of any main or line of an existing public water system shall have a minimum diameter of six inches (6"). If the pipes are not linked in grid or if individual legs are over 600 feet in length, then the minimum diameter shall be eight inches (8").

64. When receiving water service for fire protection (hydrants, fire sprinkler systems) from a public or municipal water purveyor, written certification from the water company that hydrants will be installed or that the existing water system is capable of meeting the project conditions is required to be presented to the San Mateo County Fire Department for verification to show that required upgrades to the system will be installed and that existing fire flows will meet the project requirements.

65. County Fire Department access shall be to within 150 feet of all exterior portions of structures and to all portions of the exterior walls of the first story of buildings, as measured by an approved access route. Should access to a structure exceed the 150 feet criteria, the applicant may have the option of providing exterior fire resistant construction materials to meet this condition, subject to review and approval by the County Fire Department and Planning and Building Department, prior to the issuance of a building permit.

66. This project is located in a wildland urban interface area. Roofing, attic ventilation, exterior walls, windows, exterior doors, decking, floors and under-floor protection shall be installed to meet CBC Chapter 7A requirements. This requirement shall be met at the building permit phase of each residence.

67. A fire flow of 1,000 gpm for two (2) hours with a 20-psi residual operating pressure must be available for a single-family dwelling with up to 3,600 sq. ft. of interior space; 1,300 gpm for a single-family dwelling with up to 4,800 sq. ft.; and 1,500 gpm for a single-family dwelling with up to 6,200 sq. ft. as specified by the 2007 CFC.

State Water Resources Control Board

NOTICE OF INTENT

GENERAL PERMIT TO DISCHARGE STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITY
(WQ ORDER No. 2009-0009-DWQ)

WDID: 2 41C380307 **Risk Level:** Level2

Property Owner Information

Type: Private Business

Name:	Highlands Estates 1 llc	Contact Name:	Fred Hein
Address:	225 Demeter Street	Title:	Project Superintendent
Address 2:		Phone Number:	650-208-1834
City/State/Zip:	East Palo Alto, Ca CA 94303	Email Address:	FredH@nexgenbuilders.com

Contractor/Developer Information

Name:	Highlands Estates 1 llc	Contact Name:	Noel Chamberlain
Address:	225 demeter street	Title:	
Address 2:		Phone Number:	650-444-3089
City/State/Zip:	East Palo Alto CA 94303	Email Address:	noel@nexgenbuilders.com

Construction Site Information

Contact Name:	Fred Hein	Title:	Project Superintendent
Site Name:	Highlands Estates 1 llc		
Address:	2127-2161 Ticonderoga Drive		
City/State/Zip:	San Mateo CA 94401	Site Phone #:	650-208-1834
County:	San Mateo	Email Address:	FredH@nexgenbuilders.com
Latitude:	37.515528	Longitude:	-122.338853
Construction Start:	May 01, 2017		
Total Size of Construction Area:	2.68 Acres	Complete Grading:	September 30, 2017
Total Area to be Disturbed:	1.93 Acres	Final Stabilization:	September 30, 2019

Risk Values

R: 72 K: 0.37 LS: 5.03 Beneficial Uses/303(d): No

Type of Construction:

Receiving Water: San Francisco Bay

Qualified SWPPP Developer: Travis Lutz

RWQCB Jurisdiction: Region 2 - San Francisco Bay

Phone: 510-622-2300 Email: r2_stormwater@waterboards.ca.gov

Certification

Certification #: 00878

Name: Noel Chamberlain Date: June 06, 2017

Title: Project Manager

BKF 100+ YEARS
ENGINEERS . SURVEYORS . PLANNERS

TECHNICAL MEMORANDUM

Date: May 14, 2018

BKF Job Number: 19950158-20

Deliver To: Mr. Steve Monowitz,
Director of Building and Planning
San Mateo County
Planning & Building Department
455 County Center, 2nd Floor
Redwood City, CA 94063

cc: Jack Chamberlain
Dave Byers
Pete Bentley, SMCo. Bldg. & Plng.
Diana Shu, Public Works

From: Roland Haga, PE, PLS, Leed®AP
Vice President, BKF Engineers

Subject: Highland Estates Lots 5-11 Grading Earthwork vs. Recirculated Draft EIR

The purpose of this memorandum is to document and describe the grading earthwork associated with Highland Estates Subdivision in respect to the Plans for lots 5-11 and the Revisions to the Recirculated Draft Environmental Impact Report Section 2.3 Transportation, and Section 3.5 Grading, dated December 2009.

The Recirculated Draft EIR[3] Evaluated the project grading and associated truck trips for import only. One for the 900 CY for the project overall and 2,600 CY one for the import associated with Lots 9 & 10.This made our analysis difficult to compare grading volumes between project areas because in the Recirculated Draft EIR[3] the grading volumes associated with each group of Lots 1-4, 5-8, 9-10 and Lot 11 was discussed on pages 2.0-8 and 2.0-9, items 3.5.2 through 3.5.5, however it was silent regarding trucks trips associated with moving earth material between the lots 1 through 11. In reality the number associated with off-haul of excess material moved around for cut and fill on Lots 5-11 was approximately 6,200 CY with 4,400 fill with a net 1,800 CY export. The EIR only evaluated the net import of earth material for lots 1-11 as 900 CY or 75 truck trips for the entire project and the additional 2,600 CY import versus the 2,200 CY of import required as part of the Recirculated Draft EIR for Lots 9 and 10 based on being constructed independently, Noise and Transportation Sections[3] on Page 2.0-3 to 2.0-4. The truck trips between Lots 9-10 or truck trips associated with import to Lots 9-10 was 217 truck trips (12 X 217=2,600 CY), this was a slight increase for the original Recirculated Draft EIR[3] export by 34 truck trips for off-haul associated with 2,200 CY based on 183 truck trips, however, the small increase in noise and traffic impact along with mitigation measures would still be *less than significant impact*. Referenced in 2.0 Revisions to Recirculated Draft EIR: Noise pages 2.0-3 and 2.0-4; Transportation pages 2.0-4.

BKF analysis on the grading volumes associated with Lots 5 through 11, does not take into account the grading associated Lots 1-4, since Lots 1-4 they have already been constructed as a initial phase over 4 years ago and have no impact to grading volumes related to Lots 5-11 at this time .

The table 1 below is consistent with the information included and is based on our information to date, as well as review of the project Final Environmental Impact Report (EIR)[3], Traffic Report[2], Conditions of Approval[4], and Geotechnical Slope Repair analysis[1], it is BKF's opinion the grading earthwork quantities for Lots 5 through 11 are consistent and in conformance with the project design requirements and approved Vesting Tentative Map.

Table 1 - Lot 5 through 11 Grading Quantities – Approved Vesting Tentative Map dated 2/2/2010

	Lots 1-4 Total	Lots 5-8 Total	Lots 9/10	Lot 11	Lots 5-11 Total
Cut (CY)	500	**4,700**	**300**	**1,200**	**6,200**
Fill (CY)	2,300	**500**	**2,900**	**1,000**	**4,400**
Net (CY)	1,800 Import	**4,200 Export**	**2,600 Import**	**200 Export**	**1,800 Export**

In reviewing this table above, the grading associated with Lots 5-11 is an export situation equal approximately 1,800 CY of export for Lots 5-11 combined, however, it includes moving or truck trips between Lots 5-11 of 6,200 CY of cut and 4,400 CY fill, not including Lots 1-4. Unfortunately the Draft EIR/ Recirculated Draft EIR was silent on export associated with truck trips between Lots 5-11 to Lots 1-4, and silent on the 4,200 CY of export on lots 5-8 for lots 9-11, or 350 equivalent truck trips. In addition, in Recirculated Draft EIR[3] Section 2.3 Environmental Analysis, Aesthics[3] says; "Although the cut and fill quantities provided in the Recirculated Draft EIR have been revised, the base elevations and locations of the home sites and all other subdivision improvements discussed and evaluated in the Recirculated Draft EIR remain unchanged".

Upon further analysis from the Scott Fitinghoff, Cornerstone Earth, Geotechnical Engineer associated with the slope mitigation, Buttress Landslide Repair as required by project Condition of Approval Item No. 4.M[4], the grading earthwork quantities were further refined and calculated based on Geotechnical analysis and recommendations for site stripping, earthwork shrinkage and swelling factors, and estimated unsuitable material off-haul associated with the grading and earthwork required as part of the geotechnical slope repair mitigation. These issues are more site specific than that discussed in the Recirculated Draft EIR. Please see attached Summary of Estimated Soil/Bedrock Earthwork Quantities related to Geotechnical Mitigation[1], Highland Estates (Lots 5 to 8), prepared by Cornerstone Earth Group, dated July 8, 2017. The updated grading earthwork quantities based on Geotechnical information and as on the submitted Improvement Plans dated July 10, 2017 are shown in Table 2 below:

Table 2 – Proposed - Lot 5 - 11 Grading Quantities – Submitted Improvements Plans, 7/10/2017

	Lot 5	Lot 6	Lot 7	Lot 8	5-8 Total	Lot 9	Lot 10	Lot 11	9-11 Total
Cut (CY)	1,220	1,450	1,560	1,000	5,230	140	770	470	1,380
Fill (CY)	0	0	90	230	320	1,800	310	70	2,180
Net (CY)	1,220 Export	1,450 Export	1,470 Export	770 Export	4,910 Export	1,660 Import	460 Export	400 Export	800 Export

The total export proposed from Lots 5 through 11, based on export from Lots 5-8 (4,910 CY) and Lots 9-11, (800 CY), total export of 5,710 CY, this is greater than the 1,800 CY export anticipated in the grading volumes for Lots 5-11 in the Recirculated Draft EIR[3]. However, the EIR assumed that Buttress Landslide repaired and keyed and benched into the underlying bedrock that there would be *no additional import of import or export material needed*. This is inconsistent with the Summary of Estimated Soil/Bedrock Earthwork Quantities Related to Geotechnical Mitigation, Highland Estates (Lots 5 to 8), July 8, 2017, prepared by Cornerstone Earth, were they identified that there is approximately of 4000-5000 CY of suitable material needed to balance the geotechnical earthwork mitigation of approximately 25,000 CY and final design on Lots 5-8, included in table 2 above. Taking into account the export material associated with Lots 5 to 11 or 1,800 CY along with the conservative average export of 4,500 CY earthwork associated Buttress Landslide mitigation on Lots 5-8, total export for Lots 5 through 8 was estimated to be 6,300 CY which is slightly greater than the export of approximately 5,710 CY as described in Table 2 above.

This results in off-haul or export of approximately 3,900 CY (5,700-1,800 CY) and equates to additional 325 truck trips even though there was 6,200 CY of cut material moved around the project which was not included in the truck trips or movement of material around Lots 5-11 . However, we no longer need to include the truck trips to import material for lots 9 & 10 (2,600 CY), which saves 217 trips, therefore, taking in account credit for 217 truck trips, the net increase of 108 trucks trips for off haul of export material slightly more than the truck trips included in the EIR, the additional truck trips would take an additional 1-2 weeks, therefore the number of trucks trips would be spread out over a duration of 4-5 weeks vs 2-3 weeks , which is consistent with the originally envisioned truck trips validated in the Draft EIR. These truck trips will be spread out over time, most likely more than 5-6 weeks period or more depending on construction staging during the construction of lots 5 through 11 and the Buttress Landslide Repair on Lots 5-8. The net increase 108 trucks trips is negligible when compared to project operations traffic volumes (108 daily project operations trips per day[2] vs 5 truck trips per day[3] over 5-6 week period) as noted in the Recirculated Draft EIR[3] Section 2.3 Environmental Analysis, Transportation; "Even with this increase, the project's daily construction traffic truck trips would be *substantially less* the daily vehicle trips from the project operations *would not result in a significant traffic impact*. Improvement measure TRANS-1 would still apply to the proposed project such that truck trips would not occur during peak traffic hours and impact to TRANS-1 *would be still less than significant*". Also in the project final EIR Section 3.5[3] Grading, based on the grading quantities, "in summary, the project's impact to the Polhemus Road and Ralston Avenue scenic roadways would *be less than significant.*"

Furthermore, as noted in the project Transportation Impact Assessment[2] for Highland Estates, prepared by Fehr & Peers, dated September 2008, the traffic impact associated with near term construction projects are temporary in nature and have no permanent implications to travel behavior, do not influence traffic patterns, and are not included in long-term forecasted traffic conditions.

Taking all these factors into consideration regarding the project earthwork for the Highland Estates project, it is BKF's opinion that the grading earthwork quantities for Lots 5 through 11 is consistent and in substantial conformance with the design and project conditions of approval with the approved Vesting Tentative Map, and we believe there is no further need to bring this issue back to the San Mateo County Planning Commission for review and re-approval.

Attachments:

[1]Summary of Estimated Soil/Bedrock Earthwork Quantities Related to Geotechnical Mitigation, Highland Estates (Lots 5 to 8), July 8, 2017.

[2]Transportation Impact Assessment for Highland Estates, prepared by Fehr & Peers, dated September 2008

[3] Revisions to the Recirculated Draft Environmental Impact Report Section 2.3 Transportation, and Section 3.5 Grading, dated December 2009, pages 2.0-2 through 2.0-11.

[4]Conditions of Approval Item No. 4.M.

(1)

CORNERSTONE
EARTH GROUP

Date: July 8, 2017
Project No.: 230-1-9

Prepared For: Mr. Jack Chamberlain
TICONDEROGA PARTNERS, LLC
655 Skyway, Suite 230
San Carlos, California 94070

Re: Summary of Estimated Soil/Bedrock Earthwork Quantities Related to Geotechnical Mitigation
Highland Estates (Lots 5 to 8)
Ticonderoga Drive
San Mateo, California

Dear Mr. Chamberlain:

As requested, this letter presents our summary of estimated soil/bedrock earthwork quantities related to geotechnical mitigation for Lots 5 to 8 of the Highland Estates project in the County of San Mateo, California. Our services were performed in accordance with our proposal and agreement, dated July 1, 2017. As you know, our firm prepared a report for this project, titled "Updated Geotechnical Investigation, Highland Estates Lots 5 through 11, Ticonderoga Drive/Cobblehill Place/Cowpens Way, San Mateo, California" dated October 30, 2015. Prior to our 2015 report, over the decades there have been several geotechnical and geologic related investigations and analysis of the soil and bedrock conditions and recommendations made to mitigate the shallow landsliding occurring at Lots 5 to 8 and these documents are summarized in the above report and incorporated into the letter by reference. The project Civil Engineer has prepared design level grading plans for Lots 5 to 8 and these are presented on Sheets C5.3, C6.3, C7.3, and C8.3 of the plan sets for each lot.

Discussion of Earthwork and Estimated Qaunities Related to Geotechical Mitigation

As identified in the previous geotechnical and geologic reports and project EIR, shallow landsliding has been identified as a geologic/geotechnical condition that needs to be addressed during the site development. Cornerstone and other geotechnical engineers and engineering geologists have concluded that development of these lots is feasible and have provided geotechnical recommendations to mitigate the shallow landsliding.

Grading will be performed at Lots 5 to 8 to establish the building pads, retaining walls, driveways, street improvements along Ticonderoga Drive including construction of the retaining wall required by the public works department, and mitigation of shallow landsliding. Grading will be performed at the same time for Lots 5 to 8. In general, the mitigation work will consist of performing earthwork (grading) to excavate or remove the landslide materials down to undisturbed bedrock materials to establish keyways and benches, installation of subsurface

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drains to control ground water, and replacement with suitable excavated soils as compacted fills.

The earthwork related to this geotechnical mitigation is estimated to include up to 25,000 cubic years for excavation below the design grades shown on the project grading plans to excavate the landslide materials and establish keyways and benches in the undisturbed ground. Some of this excavated material will not be suitable for reuse because it will have too much organics or will not meet the target shear strength properties for reuse at the project site. The unsuitable material will be identified during grading by our staff and will be stockpiled for off-haul. Based on our observations at the site and experience on similar projects, we estimate the upper 1 to 2 feet of the graded surface area of the site below the site proposed site grades will be unsuitable for re-use because of high organic content. Based on discussions with BKF, we understand this corresponds to about 1,000 to 2,000 cubic yards. During excavation below the surficial unsuitable material, we anticipate that small pockets of additional unsuitable material will be encountered the either has too much organics and/or does not meet the target soil shear strength properties; the volume of material for this portion of the excavated material is estimated to be on the order of 500 yards corresponding to about ½ of a percent of the 25,000 cubic yards of excavation of the landslide materials. When the suitable excavated material is reused and compacted to backfill the excavation resulting from removal of the landside material, it will "shrink" which means that at least 10 percent or more material will have to be used to restore the grades back to the original ground surface or structural excavation grades for the residences. The earhwork quantity for 'shinkage" is estimated to be on the order of 2,500 yards for this project. In summary, we estimate that 4,000 to 5,000 yards of suitable material will be needed to balance the above items related to geotechnical earthwork mitigation for Lots 5 to 8.

Closure

We hope this provides the information you need at this time. Recommendations presented in this letter have been prepared for the sole use of Ticonderoga Partners, LLC specifically for the Highland Estates Lots 5 to 8 project in San Mateo County, California. Our professional services were performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices at this time and location. No warranties are either expressed or implied. The estimated volumes described above are based on our experience with similar projects with similar geologic conditions but the actual quantities will be determined in the field during grading and we recommend that you carry a contingency in the project budget to cover any variations. The limitations described in our report are incorporated into the letter by reference.

If you have any questions or need any additional information from us, please call and we will be glad to discuss them with you.

Sincerely,

Cornerstone Earth Group, Inc.

(1)

Scott E. Fitinghoff, P.E., G.E.
Senior Principal Engineer

SEF:sef

Addressee (1 by email)

EXECUTIVE SUMMARY

This report presents the findings, conclusions, and recommendations of the transportation impact study conducted by Fehr & Peers for the Highland Estates project, an eleven-unit single family residential development proposed in unincorporated San Mateo County, California. The proposed project would subdivide an approximately 99-acre parcel into eleven lots, with the remaining 92.46-acre parcel to be designated as common open space. The residential units would range in size from 2,800 to 3,600 square feet.

STUDY APPROACH

This study analyzed traffic conditions at three existing intersections, as shown on Figure 3. The intersections, as well as the transit, bicycle, and pedestrian networks were analyzed under four scenarios:

1. Existing Conditions
2. Existing With Project Conditions
3. Cumulative (Year 2030) No Project Conditions
4. Cumulative (Year 2030) with Project Conditions

These scenarios were compared against each other using the significance criteria identified by governing documents to determine project impacts. Near-term conditions were qualitatively discussed to address the influence of the three San Francisco Public Utilities Commission (SFPUC) construction projects in the vicinity of the study area.

SUMMARY OF FINDINGS

The proposed project would generate 108 daily, 13 AM peak hour, and 15 PM peak hour total vehicle trips. This equates to approximately 0.5% of all vehicle trips on local streets in the study area, while it would represent about half of that under Cumulative (Year 2030) conditions.

The project's contribution to projected traffic growth at each study intersection between Existing and Cumulative conditions would be low, representing an average contribution of less than 1% of overall cumulative growth.

According to the significance criteria, the proposed project would have a ***less-than-significant*** impact on the study intersections and surrounding transportation network under Existing and Cumulative conditions.

1.INTRODUCTION

This report presents the findings, conclusions, and recommendations of the transportation impact study conducted for the eleven-unit Highland Estates residential development in unincorporated San Mateo County, California (County). The project site is located along Bunker Hill Drive and Polhemus Road, north of the Interstate 280 (I-280)/State Route 92 (SR92) interchange (see Figure 1).

PROJECT DESCRIPTION

The proposed project is a residential development that would consist of eleven single-family residential dwelling units ranging in size from 2,800 square feet to 3,600 square feet. All of the homes would be multi-leveled and would be built following the existing terrain of their parcels, on lots ranging in size from 0.21 to 1.64 acres. The proposed project would subdivide an approximately 99-acre parcel into eleven lots, with the remaining 92.46-acre parcel to be designated as common open space. Figure 1 shows the project location and study area, while Figure 2 shows the project site plan.

TRAFFIC OPERATIONS ANALYSIS SCENARIOS

This study evaluated transportation conditions for the following scenarios:

Existing Conditions – represents current conditions based on traffic counts and field observations conducted on August 28, 2008 when local schools were in session.

Near Term Conditions – represents conditions resulting from vehicle trips associated with San Francisco Public Utilities Commission (SFPUC) projects in the study area. Three major projects are commencing and may temporarily cause shifts in traffic patterns. Those projects are:

- New Crystal Springs Bypass Tunnel Project
- Lower Crystal Springs Bridge/Dam Improvements
- Crystal Springs Pipeline No.2 Replacement Project

Due to the temporary nature of the construction projects, they were not assumed as background growth. The influence of the projects on traffic patterns was qualitatively discussed, but adjustments were not made to Existing Conditions.

Existing With Project Conditions – represents Existing Conditions with the addition of project traffic.

Cumulative (Year 2030) No Project Conditions – represents long-term forecasted traffic conditions without the proposed project.

Cumulative (Year 2030) with Project Conditions – represents Cumulative No Project Conditions with the addition of project trips.

A set of study locations was identified through collaboration with County and Impact Sciences, Inc. staff. The resulting list of study intersections is presented below:

1. Polhemus Road/DeAnza Boulevard
2. Polhemus Road/SR92 Westbound Ramps
3. Polhemus Road/SR92 Eastbound Ramps

the project under this design has decreased from 2,200 cubic yards to 700 cubic yards (not including 200 cubic yards of drain rock).

None of the other attributes of the project, including project footprint, locations of the home sites, and staging, have changed.

Table 2.0-1
Changes to Proposed Earthwork

Area	Originally Proposed Cut (cy)	Revised Cut (cy)	Change	Originally Proposed Fill (cy)	Revised Fill (cy)	Change
Lots 1–4	500	500	0	200	2,300	+2,100
Lots 5–8	1,000	4,700	+3,700	1,000	700[1]	-300
Lots 9 and 10	900	300	-600	2,900	2,900	0
Lot 11	1,300	1,200	-100	1,300	1,000	-300
TOTAL	*3,700*	*6,700*	*+3,000*	*5,900*	*7,600*	*+1,700*
Import	**2,200**	**900**	**-1,300**			

[1]Includes 200 cubic yards of drain rock.

2.3 ENVIRONMENTAL ANALYSIS

The changes to the proposed development project described above are evaluated below to determine whether they would result in a new significant impact or increase the severity of previously disclosed impacts of the project. As the analysis shows, the changes to the grading quantities would not result in additional significant environmental impacts not addressed in the recirculated draft EIR or increase the severity of previously identified environmental impacts. No new mitigation measures are required.

Aesthetics

Although the cut and fill quantities provided in the recirculated draft EIR have been revised, the base elevations and locations of the home sites and all other subdivision improvements discussed and evaluated in the recirculated draft EIR remain unchanged. Therefore, Impacts AES-1 through AES-4, which are based on home elevations and locations, remain unchanged and the same mitigation and improvement measures apply to the proposed project.

Biological Resources

The changes to the cut and fill quantities do not alter the project footprint as presented in the recirculated draft EIR. Therefore, Impacts BIO-1 through BIO-11 remain unchanged and the same mitigation measures still apply to the proposed project.

Geology and Soils

The analysis of impacts related to geology and soils provided in the recirculated draft EIR focuses on the locations of the proposed homes and subdivision improvements relative to landslides, unstable geologic units, and other potential geologic hazards. As the locations of the proposed homes and subdivision improvements remain unchanged, Impacts GEO-1 through GEO-6 remain unchanged and the same mitigation measures apply to the proposed project.

Other Resource Topics

Global Climate Change

The changes in grading quantities do not affect the project's estimated construction greenhouse gas emissions as the emissions that were estimated using URBEMIS2007 are based on the amount of total disturbed acreage which has not changed. Therefore, Impact GCC-1 remains unchanged.

Air Quality

The changes in grading quantities do not affect the project's estimated construction emissions as the emissions that were estimated using URBEMIS2007 are based on the amount of total disturbed acreage which has not changed. Therefore, Impact AQ-1 remains unchanged.

Noise

If all the proposed homes are constructed concurrently, the change in grading quantities would reduce project noise impacts as less imported fill would be required than previously analyzed (about 1,300 cubic yards less than before of fill would be imported). Approximately 75 truck trips would be involved in the transport of 900 cubic yards of imported fill compared to 183 truck trips for the transport of 2,200 cubic yards of imported fill analyzed in the recirculated draft EIR. Assuming that five truck trips to import fill could be completed daily, the total site import process could be completed within three weeks rather than four to five weeks as previously analyzed. Therefore, the noise impacts from truck traffic associated with site grading would be less than previously analyzed.

If the proposed home sites are constructed one at a time, the homes on lots 9 and 10 would require a net import of 2,600 cubic yards of fill, which exceeds the 2,200 cubic yards previously analyzed in the recirculated draft EIR by approximately 18 percent, and would result in 217 truck trips compared to 183 truck trips analyzed in the recirculated draft EIR. However, this small increase in truck traffic (34 truck trips) would not substantially increase the noise impact because typically it takes a substantial increase in traffic to increase noise levels by a perceptible amount (such as a doubling of traffic volumes for a 3 decibel increase). Furthermore, the additional 34 truck trips would occur over the course of several weeks during grading activities. Mitigation Measure NOI-1 would still apply to the proposed project, which would reduce Impact NOI-1 to a less than significant level with mitigation.

Hazards and Hazardous Materials

The changes in cut and fill quantities do not alter the project footprint as presented in the recirculated draft EIR or increase the risk of exposure to hazardous materials. Therefore, Impacts HAZMAT-1 and HAZMAT-2 remain unchanged and the same mitigation measures apply to the proposed project.

Transportation

If all of the homes are constructed concurrently, the change in grading quantities would reduce construction-related traffic impacts as less imported fill would be required than previously analyzed. Approximately 75 truck trips would be involved in the transport of 900 cubic yards of imported fill compared to 183 truck trips for the transport of 2,200 cubic yards of imported fill. Assuming that five truck trips to import fill could be completed daily, the total site import process could be completed within three weeks rather than four to five weeks as previously analyzed. Therefore, the number of daily truck trips would remain the same but the duration of truck activity would be shorter and the less than significant traffic impacts from truck traffic associated with site grading would be experienced over a shorter period of time than previously analyzed.

If the homes were constructed one at a time, lots 9 and 10 would require a net import of 2,600 cubic yards of fill, which exceeds the 2,200 cubic yards previously analyzed by approximately 18 percent and would result in 217 truck trips compared to 183 truck trips analyzed in the recirculated draft EIR. However, this small increase in truck traffic (34 truck trips) does not present a substantial increase in the traffic impact from what was previously analyzed. Even with this increase, the project's daily construction truck trips would be substantially less than the daily vehicle trips from project operation, and as the analysis in the recirculated draft EIR shows, project operations would not result in a significant traffic impact. Improvement Measure TRANS-1 would still apply to the proposed project such that truck trips would not occur during peak traffic hours and Impact TRANS-1 would still be less than significant.

Utilities and Service Systems

The changes to the cut and fill quantities would not change the project's demand for utilities and service systems. Impacts UTIL-1 through UTIL-3 remain unchanged and the same mitigation measures still apply to the proposed project.

Hydrology and Water Quality

The changes to the cut and fill quantities do not change the grading plans as presented in the recirculated draft EIR nor the locations of undeveloped land that would be converted to impervious surfaces with implementation of the proposed project from what was previously analyzed. Grading activities would still be required to comply with the NPDES permit requirements and the County's Municipal Code requirements that regulate water quality during construction of the proposed project. The project's impacts remain unchanged.

Land Use and Planning

The revised cut and fill quantities do not change the project's consistency with local land use plans, policies, or regulations from what was previously analyzed. The project's impacts remain unchanged.

Public Services

The changes to the cut and fill quantities do not change the project's demand for public services including public transit, schools, parks, police protection, fire services, hospitals, or public utilities. The project's impacts remain unchanged.

Cultural Resources

The locations of areas to be graded as presented in the recirculated draft EIR remain unchanged although cut and fill quantities have changed. Therefore, the project's potential impacts to cultural resources remain unchanged.

Resource Management District Zoning Text Amendment

The changes to the cut and fill quantities do not affect the analysis of the proposed Resource Management District zoning text amendment. The text of the proposed amendment as well as the project's compliance with the proposed amendment remain unchanged.

Growth Inducement

The changes to the cut and fill quantities do not affect the project's potential for growth inducement as the total amount of development and population associated with the project remains unchanged.

Alternatives

The analysis of alternatives to the proposed project is not affected because as explained above, the changes to the cut and fill quantities would not result in new environmental impacts or increase the severity of previously analyzed impacts. Therefore, there is no need for analysis of additional alternatives to the proposed project.

Other CEQA Considerations

The changes to the cut and fill quantities do not change the project's irreversible commitment to resources, irreversible environmental changes, or potential environmental damage from accidents from what was previously analyzed.

2.4 REVISIONS TO THE RECIRCULATED DRAFT EIR

This section contains the revised text of the recirculated draft EIR. Text added to the recirculated draft EIR is shown in underline format, and deleted text is shown in ~~strikethrough~~.

Due to the nature of the text changes that are presented below, the changes are cited individually rather than in a reproduction of the entire recirculated draft EIR. This presentation of revisions to the recirculated draft EIR is consistent with *State* CEQA *Guidelines* Section 15162 detailing required final EIR contents.

Section 1.0, Introduction, page 1.0-4

1.3.4 Individuals and Organizations

Adams Broadwell Joseph & Cardozo
Jay Beard
Jean-Pierre Bernard
Lila Lynn Bilmes
Mark Brennen
Deke and Corrin Brown
Cotton, Shires & Associates, Inc.
Richard Cole
Donald Coyne
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Trudie Huygen
Jack Kundin
Russ Levikew
Pamela Merkadeau
Chris Misner
Suzette Murphy
Sam Naifeh
Pacific Gas & Electric
Regional Open Space
San Mateo Highlands Community Association
Les Schlaegel
Shute, Mihaly & Weinberger
Alex Stanculesan
Melissa Wilson
Mark and Gail Wuotila

Section 3.0, Project Description, page 3.0-23

3.5.1 Grading

Grading activities include cut (earth removal) and fill of earthwork; creation of engineered slopes and stepped foundations; installation of retaining walls, and drilled piers. These activities would prepare the lots for the building pads and provide slope stability for the foundation of future homes on the lots.

The average slope of the areas proposed for development is 40 percent. In total, there would be ~~3,799~~6,700 cubic yards (cy) of cut and ~~5,799~~7,600 cy of fill (including a 10 percent allowance for shrinkage, or settling, of dirt). The Project Applicant would use the cut earthwork material as fill on the project site. However, approximately ~~2,000~~700 additional cy of earth and about 200 cy of drain rock would need to be imported on-site for the project. Piers drilled into the underlying bedrock would be installed for each lot to provide slope stability for the future homes that would be built on each lot. A description of the grading plans for lots 1 through 11 and **Table 3.0-3, Proposed Earthwork**, showing a breakdown of total proposed cut and fill amounts for each lot, are provided below.

Table 3.0-3
Proposed Earthwork

Area	Cut (cy)	Fill (cy)
Lots 1–4	500	~~200~~2,300
Lots 5–8	~~1,000~~4,700	~~1,000~~700[1]
Lots 9 and 10	~~900~~300	2,900
Lot 11	~~1,300~~1,200	~~1,300~~1,000
TOTAL	~~3,700~~6,700	~~5,900~~7,600
Import	~~2,200~~900	

Source: BKF Engineers, ~~2008~~2009. Treadwell &Rollo, Inc, 2009.
[1]Includes 200 cubic yards of drain rock.

3.5.2 Lots 1 through 4

Lots 1 through 4, along Bunker Hill Drive, would require approximately 500 cy of cut and ~~200~~2,300 cy of fill earthwork (see **Figure 3.0-14**). A series of stepped cuts would be created to provide the platform necessary to build the homes. No fill slopes or site retaining walls would be needed for these lots because the dwelling units will be fully supported by drilled pier foundations with integrated day-lighting basement retaining walls.

3.5.3 Lots 5 through 8

Lots 5 through 8, along Ticonderoga Drive, would require ~~1,000~~4,700 cy of cut and ~~800~~500 cy of fill earthwork (see **Figure 3.0-15**). Any previously identified landslide deposits[1] would be removed from this portion of the site to provide stable slopes for construction. After removal of the landslide materials, the slope in Lots 7 and 8 would be rebuilt using a buttress fill landslide repair keyed and benched into the underlying bedrock. Spoils generated from the excavation will be used as fill, and will not require additional import or export of material other than a minor amount of drainrock for the subdrains associated with the repair. Upon implementation of the landslide mitigation, retaining walls, designed to withstand high lateral earth pressure from adjoining natural materials and/or backfill, as well as from any surcharge loads, would be installed in the rear of lots 5 through 8. These retaining walls would be partially underground. Retaining walls would also be installed in the front of lots 5 and 6 to aide in maintaining the slopes behind the house and the more extensive cut required for lots 5 and 6. These retaining walls would be partially underground. The design of the retaining walls has not been finalized

1 See Section 4.3, Geology and Soils for more detailed information on landslide deposits on the project site.

(3)

at this time, but would most likely be a solid masonry wall. Cut slopes at a ratio of approximately 4:1 (horizontal to vertical) would be required for lots 5 and 6.

3.5.4 Lots 9 and 10

Lots 9 and 10, at the eastern end of Cobblehill Place, would require ~~900~~ 300 cy of cut and 2,900 cy of fill earthwork (see **Figure 3.0-16**). This site is relatively level, with the existing topography sloping slightly to the northeast. Minor cuts of up to 5 feet and fills of up to 8 feet would be made to create the building pads and the driveways and to remove and replace existing undocumented fill under buildings or flatwork. Retaining walls up to 8 feet in height would be used along the front of the property to retain the fill in the residence and driveway areas. Pier-supported, stepped foundations would support the dwelling units.

3.5.5 Lot 11

Lot 11, at the northeastern end of Cowpens Way, would require ~~1,300~~1,200 cy of cut and ~~1,300~~1,000 cy of fill earthwork (see **Figure 3.0-17**). This site has an existing slope of approximately 2:1 (horizontal to vertical). The site already contains fill that was placed during grading from the existing subdivision development in the surrounding area. Cuts of up to 10 feet below the existing grade would be made to create a stepped building pad and the driveway area and to remove and replace existing undocumented fill under buildings or flatwork. Retaining walls of up to 10 feet in height would be built through the middle of the house lengthwise, as part of the foundation, to retain the cuts for the proposed residence. Pier-supported stepped foundations would support the dwelling units.

3.5.6 Haul Trucks and Routes

The earth materials would be imported from nearby projects in the San Francisco Peninsula. The County does not have weight restrictions for roads, so the haul routes may differ slightly from what is presented below. To Ticonderoga Drive, the haul routes would likely be from Highway 92 to Polhemus Drive north. To Bunker Hill Drive, the haul routes would likely be from Highway 92 and then west to Skyline Boulevard. Given that a typical haul truck can carry approximately 12 cy of earth materials, approximately ~~183~~ 75 trips would be associated with the import of additional earth materials needed for the proposed project.

Section 4.1, Aesthetics, page 4.1-30

View from Polhemus Road – Facing Southwest

Polhemus Road, located ~~to the~~ northeast of the project site is considered a County Scenic Road, per the County General Plan. Visual Quality policies of the General Plan pertaining to scenic roads and corridors

(3)

apply only to the area of the roadway (right-of way) unlike a designated scenic corridor, where policies would apply to all properties within the area of the corridor. The project would not involve changes that would be visible from viewpoints along Polhemus Road nor would the project involve work within the Polhemus Road right-of-way. As shown in Figure 4.1-13, the proposed homes would not be visible from Polhemus Road near the intersection with Timberlane Way due to topography and intervening vegetation, nor would they be visible along Polhemus Road between Bunker Hill Drive and Tower Road for the same reasons. The rooflines of the proposed homes on ~~Ticonderoga Drive and~~ Cobblehill Place would be partially visible from Ralston Avenue (which becomes Polhemus Road north of Tower Road and is designated as a scenic road within the City of Belmont), but the homes would be adjacent to existing homes that are currently visible from this viewpoint. In summary, the project's impact to ~~this~~ the Polhemus Road and Ralston Avenue scenic roadways would be less than significant.

Section 4.2, Biological Resources, page 4.2-31

Impact BIO-6: **The implementation of the proposed project would result in the loss of stands of purple needlegrass, which is a sensitive plant community. (*Potentially Significant; Less than Significant with Mitigation*)**

As previously discussed, isolated areas with a high percent cover (greater than 50 percent) of purple needlegrass are present on portions of lots 1 and 8. The stand of purple needlegrass on lot 1 is small (approximately 10 feet by 10 feet) and is surrounded by non-native grass species. The stand of purple needlegrass on lot 8 is approximately 0.03 acre in size and is located in the ~~southeastern~~ southwestern portion of the site, between the oak woodland and areas invaded by iceplant. While pockets of native grasses (such as the small area on lot 1) often occur within non-native grasslands, the stand of purple needlegrass on lot 8 is notable as it is relatively large and has a high percent cover of needlegrass. However, the biological function and value of this stand of native grasses is compromised by the fact that the majority of lots 5–8 were disturbed by grading activities that occurred in the 1950s when the Highlands subdivision was built, that the stand of native grasses is generally bordered by disturbed habitats dominated by non-native plant species (excluding the nearby oak woodland), and that iceplant borders portions of the stand of native grasses and may be encroaching. Nonetheless, the loss of this stand of purple needlegrass would be considered a potentially significant impact. Mitigation Measure BIO-6 would reduce this impact to a less-than-significant level.

Section 4.4, Other Resource Topics, page 4.4-31

- Generate noise levels in excess of levels determined appropriate according to the County Noise Ordinance standard.

Construction activities would result in short-term noise impacts that would affect the surrounding area. As discussed in **Section 3.0, Project Description** of the EIR, approximately ~~2,200~~900 cubic yards (cy) of earth materials would need to be imported to the project site. Approximately ~~183~~75 truck trips would be involved in the transport of this material. The haul routes would take large, heavy-duty dump trucks past residential uses, which are considered sensitive receptors. Trucks associated with grading activities occurring on Bunker Hill Drive would travel to the site on I-280 and enter the site from the west and trucks associated with grading activities along Ticonderoga Drive would travel to the site along Polhemus Road and enter the site from the east. It is anticipated that up to five truck trips to import fill could be completed daily. Therefore, the total site import process could be completed within a timeframe of ~~four to five~~three weeks, depending on the construction schedule, weather, and equipment availability. As a result, associated truck trips could generate short-term noise that would be considered a nuisance to the surrounding community or that may temporarily exceed County noise standards.

Section 4.4, Other Resource Topics, page 4.4-37

Project construction would occur over a period of one year. Construction vehicles would be expected to travel to and from the Ticonderoga Drive sites via Polhemus Road and Highway 92, whereas construction vehicles traveling to and from the Bunker Hill sites would use Highway 92 and Skyline Boulevard. Due to the hillside location of the project, preparation of the building sites would involve cut and fill. As discussed in **Subsection 3.5.1**, cut earthwork materials would be used on site as fill and would not have to be off-hauled. However, about ~~2,200~~900 cubic yard (cy) of fill materials would need to be imported. Given that a typical haul truck can carry approximately 12 cy of earth materials, approximately ~~183~~75 truck trips would be associated with the in-haul of fill and drain rock. It is anticipated that up to five truck trips to import fill could be completed daily and the total site import process could be completed within a timeframe of ~~four to five~~three weeks, depending on the construction schedule, weather, and equipment availability. This small number of daily truck trips would not adversely affect the operation of intersections between the worksites and the nearest freeways. Following completion of grading, additional truck movement would be involved with the delivery of construction materials to the project site. However, given the small number of homes proposed, the number of daily truck trips to the site during construction is expected to be small. The impact from construction truck traffic would therefore be less than significant. To further reduce this impact, the following improvement measure is proposed.

Section 4.4, Other Resource Topics, page 4.4-39

The District currently is working toward paying the fee to contribute to the upgrade of the sewer line. ~~Consequently,~~ County Planning staff will inform the Project Applicant that no new connections to the

k. **Mitigation Measure BIO-5c:** Prior to the issuance of the first building permit for any of the eleven (11) homes, the Project Applicant shall develop a lighting plan. The lighting plan shall require that all lighting be directed and shielded as to minimize light spillage into nearby willow scrub habitat, as well as adjacent oak woodland habitats. The lighting plan shall be subject to approval by the County of San Mateo Planning Department.

l. **Mitigation Measure BIO-6:** Prior to the commencement of construction on Lot 8, the occurrence of purple needlegrass shall be mapped, including all stands on the lot with 20 percent or greater cover of native grasses and having a diameter greater than 10 feet. The area of purple needlegrass to be lost due to development of the lot shall then be calculated.

As part of the proposed project, approximately 92 acres of open space would be maintained as open space under a conservation easement. This open space contains a serpentine grassland (on the slope west of the water tanks) that is dominated by native grasses (including purple needlegrass) and other native plant species. These native grasses, including purple needlegrass, would be permanently protected by the conservation easement. In addition, non-native plant areas adjacent to the serpentine grassland shall be restored to support native grasses over an area twice the acreage (2:1) of the stands of purple needlegrass to be lost on Lot 8.

m. **Mitigation Measure GEO-1:** A design-level geotechnical investigation of the site shall be performed prior to any project grading including static and seismic slope stability analysis of the areas of the project site to be graded and developed. The specific mitigation measures to be utilized in order to stabilize existing landslides and areas of potential seismically induced landslides shall be presented in the report. The specific mitigation measures shall include some of the following measures or measures comparable to these:

- Landslide debris on Lots 7 and 8 shall be excavated and replaced with a fully drained conventional buttress fill that is founded in the underlying Franciscan mélange, as recommended by the project geotechnical engineer. (Lots 7-8)

- Retaining walls shall be designed to withstand high lateral earth pressure from adjoining natural materials and/or backfill shall be installed at the rear of Lots 5 through 8. In addition, retaining walls shall be built in the front of Lots 5 and 6 to aid in maintaining the slopes behind the lots and the more extensive cut required for Lots 5 and 6. (Lots 5-8)

- A surface drainage system shall be installed for each lot to mitigate new landslides developing within the thin veneer of soil mantling the bedrock on the slope below Lots 1 through 4. (Lots 1-4)

- Subsurface drainage galleries may be installed to control the flow of groundwater and reduce the potential for slope instabilities from occurring in the future. (All lots)

- Over-steepening of slopes shall be avoided. Horizontal benches shall be constructed on all reconstructed slopes at an interval of 25 to 30 feet. New fill shall be compacted to at least 90 percent relative compaction (as determined by ASTM test method D1557). (All lots)

- Drilled piers and grade-beam foundations shall be used to support foundations in accordance with recommendations of the project geotechnical engineer. (All lots)

n. **Mitigation Measure GEO-2a:** Materials used to construct the buttress fill should have effective strength parameters equal to or better than the parameters used in the Treadwell and Rollo 2009 study. (Lots 7 and 8)

o. **Mitigation Measure GEO-2b:** The following mitigation measures shall be implemented to ensure the stability of proposed structures that are located on deep fill soils:

- A site-specific, design-level geotechnical investigation shall be completed during the design phase of the proposed project, and prior to approval of new building construction within the site for specific foundation design, slope configuration, and drainage design. (All lots)

- The geotechnical investigation shall provide recommendations to prevent water from ponding in pavement areas and adjacent to the foundation of the proposed residences, and to prevent collected water from being discharged freely onto the ground surface adjacent to the residences, site retaining walls, or artificial slopes. The project geotechnical engineer shall identify on site areas downslope of the homes where the collected water may be discharged utilizing properly designed energy dissipaters. (All lots)

- Fills used at the project site shall be properly placed with keyways and subsurface drainage, and adequately compacted following the recommendations of the final geotechnical report and Geotechnical Engineer, in order to significantly reduce fill settlement. (All lots)

- Underground utilities shall be designed and constructed using flexible connection points to allow for differential settlement. (All lots)

M I G

memo san jose

to **Jack Chamberlain, Ralph Osterling**

from **Tay Peterson**

re **Highland Estates Lots 9, 10, 11 Biological Mitigation Compliance**

date **6/5/2018**

This memorandum report summarizes the results of pre-construction surveys completed for the Highland Estates project in the San Mateo Highlands, specifically for lots 9 and 10 at the end of Cobblehill Place and lot 11 at the end of Cowpens. The following measures are included in the Conditions of Approval for the project:

Mitigation Measure BIO-2b: *No earlier than two weeks prior to commencement of construction activities that would occur during the nesting/breeding season of native bird species potentially nesting/roosting on the site (typically February through August in the project region), a survey for nesting birds shall be conducted by a qualified biologist experienced with the nesting behavior of bird species of the region. The intent of the survey would be to determine if active nests of special-status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 500 feet of the construction zone. The surveys shall be timed such that the last survey is concluded no more than two weeks prior to initiation of construction or tree removal work. If ground disturbance activities are delayed, then an additional pre-construction survey shall be conducted such that no more than two weeks will have elapsed between the last survey and the commencement of ground disturbance activities. A report is required.*

Mitigation Measure BIO-2c: *Prior to the commencement of construction activities during the breeding season of native bat species in California (generally occurs from April 1 through August 31), a focused survey shall be conducted by a qualified bat biologist to determine if active maternity roosts of special-status bats are present within any of the trees proposed for removal. Should an active maternity roost of a special-status bat species be identified, the roost shall not be disturbed until the roost is vacated and juveniles have fledged, as determined by the biologist. Once all young have fledged, then the tree may be removed. Species-appropriate replacement roosting habitat (e.g., bat boxes) shall be provided should the project require the removal of a tree actively used as a maternity roost. The replacement roosting habitat shall be subject to the approval of the CDFG.*

Mitigation Measure BIO-2d: *Immediately preceding initial ground disturbance activities on Lot 11, a pre-construction clearance survey shall be conducted by a qualified biologist for*

California red-legged frogs. The survey shall be conducted to determine whether individual California red-legged frogs are present within the disturbance boundary. Should a California red-legged frog be observed during the clearance survey, all construction activities on Lot 11 shall be immediately halted and the USFWS shall be immediately contacted. Under no circumstances shall a California red-legged frog be collected or relocated, unless USFWS personnel or their agents implement the measure. Construction-related activities may resume once the frog has naturally left the lot or has been relocated by a permitted biologist (authorized by the USFWS).

The nesting bird survey for lots 9, 10, and 11 was completed by a MIG biologist on May 29, 2018[h]. No nests, nesting, or breeding behavior was observed. The survey assures compliance with Mitigation Measure BIO-2c, however, if construction activities are delayed past June 12th an additional survey will be required to comply with this measure.

A survey for bat roosts on lots 9, 10, and 11 was completed by a MIG biologist on May 29, 2018. No bat roosts were found. This survey assures project compliance with Mitigation Measure BIO-2c.

Surveys for California red-legged frog on lot 11 were conducted on May 29 and June 4, 2018. No frog species were found in the upland areas of lot 11 that will be impacted by construction activities. Weed control on lot 11 started on June 4, 2018 immediately after the frog survey.

In addition, woodrat houses were relocated from parcels 9, 10, and 11 last year in compliance with Mitigation Measure BIO-2a. In May and June 2018, MIG biologists surveyed parcels 9, 10, and 11 to determine if any new woodrat houses had been built on the lots. No woodrat houses were found in the project footprint. Flagging and fencing delimiting a buffer zone around nearby woodrat houses is still present on the lots. The project remains in compliance with Mitigation Measure BIO-2a. A separate monitoring report for the woodrat relocation activities has already been submitted.

In summary, at this time the project has complied with Mitigation Measures BIO-2a, BIO-2b, BIO-2c, and BIO 2d.

Highlands Estates Condition of Approval and Mitigation Monitoring Contract
Timeline for RFP Process and Next Steps
Date: December 4, 2017; Revised 2/27/18

Next Steps	*Date*	*Responsible*
County Issues Request for Proposals	November 9, 2017	Done
Proposals Due – 5:00 p.m.	November 17, 2017	Done
Notification to Firms Selected for Interview	November 22, 2017	Done
Interviews	November 27-December 1, 2017	Done
Notification to Top Proposer	December 5, 2017	Done
Complete Negotiations with Top Proposer	December 8, 2017	Done - County and SWCA
---- Revise Scope and Budget as necessary	December 7, 2017	Done - SWCA
Contract Completed	**January 17, 2018**	
Consulting Work Begins		

Next Steps	*Date*	*Responsible*
Identification of Conditions of Approval to be Monitored	December 7, 2017	Done - Camille (County)
Coordination Meeting --- Provision of Forms for EC Meetings	February 27, 2018	SWCA and County
Submit Bio Surveys	Partial – June 7, 2018	Developer
Review Bio Surveys		SWCA
Mail 200-feet Construction Notice	To be sent June 11, 2018	Camille (County)
KICK-OFF MEETING ---Signage at sites ---Protocol for Public Complaints/Questions ---Escalation Procedure for Non-Compliance	Week of June 18	Developer, County, SWCA
Winter Grading Exception --- Waiting for Detailed Schedule from Developer	N/A – Permit to be Issued in June 2018	Steve
Joint Site visit for EC Pre-Site	Week of June 18 (Combined with Kick Off)	Camille and Jeremiah (County)
BLD Permits ISSUED		County
Weekly monitoring		SWCA
Monthly Reports		SWCA