II. EXECUTIVE SUMMARY

A. INTRODUCTION

This executive summary provides a brief description of the proposed project and areas of known controversy. The executive summary also identifies which environmental impacts associated the proposed project are significant, what specific mitigation measures have been identified to reduce or avoid each significant impact, and the level of significance of the impact after mitigation. This executive summary is intended as an overview and should be used in conjunction with a thorough reading of the Draft SEIR and the Initial Study, which is included in Appendix A of this Draft SEIR. The text of this Draft SEIR, including figures, tables, and appendices serve as the basis for this executive summary.

B. SUMMARY OF PROPOSED PROJECT

The proposed project requests approval of a Vesting Tentative Subdivision Map for three residential sites and approval of Design Review and Hillside Lot Applications for grading, and retaining wall construction and approvals for a common driveway and utilities to serve the site. The proposed Vesting Tentative Subdivision Map would divide the parcel into three new parcels of 11.89, 11.00, and 13.08 acres each. Driveways would be constructed within each parcel. One road would serve the entire site with driveways provided for each new house. The project proposes to balance the amount of cut and fill on the site. Water and sanitary sewer lines are proposed to be installed beneath the new road and driveways. The sewer lines would connect with an existing sewer main beneath Upper Road. The Upper Road water main would be enlarged from an adjacent property entrance to the project entrance. A new water main would be required to extend under the new common road with lateral lines serving each of the three residences. A more detailed description of the proposed project is contained in Section III (Project Description) of this Draft SEIR.

C. AREAS OF KNOWN CONTROVERSY

Section 15123 of the CEQA Guidelines requires an EIR to identify areas of controversy known to the lead agency, including issues raised by agencies and the public, and issues to be resolved. Environmental concerns raised in letters submitted to the Town of Ross in response to the Notice of Preparation (NOP) and concerns raised through previous environmental documentation:[1]

- Aesthetics
- Biological and forestry resources
- Loss of open space

[1] *Refer to Appendix B of the Draft SEIR for letters submitted in response to the NOP.*

- Emergency evacuation
- Wildfire hazard
- Construction noise and air quality
- Project size and density
- General Plan consistency
- Land use compatibility
- Geology and soils
- Utilities and service systems
- Hydrology and water quality impacts
- Reduced density project alternative
- Alternative building designs
- On-site haul route
- Implementation and monitoring of mitigation measures
- Traffic safety

D. SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table II-1 summarizes the various environmental impacts associated with the proposed project that are analyzed in detail in the Draft SEIR. Table II-1 also includes the mitigation measures recommended to reduce or avoid significant environmental impacts, and identifies the level of impact significance after mitigation.

Table II-1
Summary of Significant Environmental Impacts and Mitigation Measures

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
AESTHETICS		
Impact AES-1: Impacts on Scenic Vistas (Short-Term)		
During the grading of the project site and the removal of trees, the change in the views of the site would be noticeable and from some locations, may appear to be a substantial change from what exists now. However, after the new trees and associated landscaping have matured, the visual changes would not be highly visible and it would appear that the project, as now designed, conforms to the relevant *General Plan* policies related to view preservation and visual quality. Accordingly, it is concluded that the project would have a ***significant*** visual impact from for a short time frame of approximately five – seven years and after that time period; the project would have a ***less-than-significant*** aesthetics impact once the new trees and associated landscaping have matured. No mitigation measures are available to mitigate for the short-term aesthetic impact; therefore, the short-term impact would remain ***significant and unavoidable***.	No mitigation measures are available to mitigate for the short-term aesthetic impact.	***Significant and Unavoidable***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
Impact AES-2: Impacts on Visual Character of the Project Site and Surroundings		
Construction of the project and associated grading and tree removal is described in the Project Description and in Impact AES-1 above. The construction of the project and associated grading and tree removal would likely be viewable from immediately adjacent parcels. The short-term impacts to adjacent private views could be considered a major change and occupants would presumably regard it as a degradation of the site's existing visual setting. The massing and height of the proposed buildings would be similar to other residential structures in the area. The project would have a ***significant*** visual impact for a short-term time frame of approximately five years on the character of the area from public and immediately adjacent private viewpoints, and after that time period, the project would have a ***less-than-significant*** aesthetics impact once the new trees and associated landscaping have matured. No mitigation measures are available to mitigate for the short-term aesthetic impact; therefore, the short-term impact would remain ***significant and unavoidable***.	No mitigation measures are available to mitigate for the short-term aesthetic impact.	***Significant and Unavoidable***
AIR QUALITY		
Impact AIR-1: Construction Phase Sensitive Receptor Impacts – Community Risks	***Mitigation Measure AIR-1***	
Project construction activity would involve demolition of the existing on-site structures and construction of new buildings. Demolition and construction activities would generate dust and diesel exhaust emissions. Most of the dust	AIR-1: Implementation of the measures recommended by the BAAQMD and listed below would reduce the air quality impacts associated with demolition and new construction to a less-than-significant impact. The following conditions shall be printed on the first sheet(s) of plans submitted for the building	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
would be generated during grading activities. If uncontrolled, respirable particulate matter (PM_{10}) levels downwind of actively disturbed areas could possibly exceed State ambient air quality standards. In addition, dust fall on adjacent properties could be a nuisance and result in a significant impact. The amount of dust generated would be highly variable and is dependent on the size of the area disturbed at any given time, amount of activity, soil conditions and meteorological conditions. Nearby land uses, especially those residences located immediately to the south could be adversely affected by dust generated during construction activities. Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known toxic air contaminant. Diesel exhaust poses both a health and nuisance impact to nearby receptors. Approximately one week is anticipated to be required for demolition activities and approximately five weeks would be required for site grading. The remainder of the construction phase (i.e., foundation, drainage, framing, roofs, electrical, finishing, paving and landscaping) is anticipated to require approximately three months. Because these construction activities are expected to occur during a relatively short time the impacts are considered to be less than significant if reasonable available control measures included in Table 8-2 of the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines are applied. The closest existing residences to the project	permit: 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 mph. Speed limit signs shall be posted for construction workers. 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 8. A publicly visible sign shall be posted with the telephone number of the Town's building inspector to contact regarding dust complaints. This person shall respond and require corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
site are residences located to the north and the east of the project boundary. A screening health risk assessment of the project construction activities was conducted that evaluated potential health effects at these nearby sensitive receptors from construction emissions of diesel particulate matter (DPM). The maximum-modeled DPM concentration occurred at a residence adjacent to the northern boundary of the construction area. Increased cancer risks were calculated using the maximum modeled annual DPM concentrations and BAAQMD recommended risk assessment methods that include both child exposures (3rd trimester through two years of age) and adult exposures. Infant and child exposures were assumed to occur at residences throughout the entire construction period. Results of this assessment indicate that the maximum construction residential child cancer risk would be 10.1 in one million and a residential adult cancer risk of 0.5 in one million for the proposed project. The child cancer risks slightly exceed the BAAQMD's threshold used for evaluating cancer risk of 10 excess cancer cases per million. This is considered to be a ***potentially significant*** impact. Note that the predicted cancer risk is based on the assumption that an infant would be present at the location of maximum risk and would be present at that location almost continuously throughout the construction period.	In addition, the project should include the following measure to reduce diesel exhaust emissions during the grading phase of construction: 1. Any diesel-powered construction equipment greater than 50 horsepower in size (including generators and compressors) operated on the site for more than 2 days shall meet U.S. EPA particulate matter emissions standards for Tier 2 engines or equivalent; 2. Minimize the number of hours that equipment will operate including the use of idling restrictions.	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
BIOLOGICAL AND FORESTRY RESOURCES		
Impact BIO-1a: Disturbance to Northern Spotted Owl	***Mitigation Measure BIO-1a***	
During the site visit, NSO was observed, and NSO protocol level surveys conducted in 2013 identified one NSO nest on the project site which produced one young which has fledged off the nest at this time. Based on the findings from the GTE and Point Reyes Bird Observatory (PRBO) survey reports, it appears that the NSO pair has established an activity area that utilizes the habitat within portions of the subject property. Because proposed project improvements are located within a 0.25 mile radius from the NSO nest area, and may modify NSO habitat, any project construction that occurs within the NSO breeding season (February 1 – August 31) could result in an incidental take of NSO (USFWS 2012), unless it has been determined through additional protocol level surveys that the NSO's are not nesting, then no seasonal operational limitations would apply. Project impacts to NSO are ***potentially significant*** and will require consultation with USFWS.	BIO-1a: A pair of breeding NSO is known in the vicinity of the project site; therefore, consultation with USFWS will be required. Consultation with USFWS will provide additional or equivalent mitigation measures to ensure that no take or significant impacts occur to NSO. As a result of a known nesting NSO pair in the vicinity of the project site, such measures shall include but may not be limited to: a) Prior to the start of construction, protocol level surveys (USFWS 2012) shall be performed by a permitted biologist within the project site and surrounding accessible areas up to a distance of 1.3 miles. The survey period for the California Coast Range is March 1 through August 31. These surveys will determine the breeding status of NSO in the vicinity of the project site and assist in determining work windows and exclusion buffers. b) If an active nest is found within or adjacent to the project area, project activities within 0.25 miles of the nest cannot occur without consultation with USFWS. c) Activities that do not modify NSO habitat may occur if at least 0.25 miles from an active NSO nest or Activity Center. An Activity Center is defined by USFWS (2012) as "a location or point representing 'the best of' detections' such as nest stands, stands used by roosting pairs or territorial singles, or concentrated nighttime detections. Activity centers are within the core use area and are represented by this central location." d) No night work shall be permitted during the breeding season. If night work is required outside of the breeding season, the lighting shall be directed downward. e) All workers shall ensure that food scraps, paper wrappers, food containers, cans, bottles, and other trash from the construction area are deposited in covered or closed trash containers. The trash containers shall not be left open and	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	unattended overnight. f) Modification of NSO habitat shall be compensated at a minimum ratio of 1:1 to compensate impacts to foraging, roosting and nesting habitat by project activities. Consultation with USFWS shall determine if an increase in the minimum mitigation ratio is required. Compensation may be accomplished on-site, off-site, or through the purchase of suitable habitat credits from an authorized USFWS conservation bank.	
Impact BIO-1b: Impacts to Other Nesting Birds	***Mitigation Measure BIO-1b***	
The project site may contain or be adjacent to suitable nesting habitat for birds, including non-special-status raptors, protected under the Fish and Game Code and the Migratory Bird Treaty Act. Harm or disruption to nesting birds and/or their eggs or young as a result of project construction would be considered a violation of state and federal law, and therefore, would be considered a ***potentially significant*** impact.	BIO-1b: To avoid impacting nesting birds (including CDFW Species of Special Concern), <u>one</u> of the following measures shall be implemented: (a) Conduct grading and construction activities from September 1st through January 31st, when birds are not likely to be nesting on the site; - OR – (b) Conduct pre-construction surveys for nesting birds if construction is to take place during the nesting season (February 1 through August 31). A qualified wildlife biologist shall conduct a pre-construction nest survey no more than 5 days prior to initiation of grading to provide confirmation of the presence or absence of active nests on or immediately adjacent to the project site. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist and implemented to prevent abandonment of the active nest. At a minimum, grading and tree removal in the vicinity of the nest shall be deferred until the young birds have fledged. A minimum exclusion buffer of 50 feet for non-raptor species and 250 feet for raptor species shall be maintained during construction, depending on the species and location. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel and activities	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	restricted from the area. A survey report by the qualified biologist verifying that (1) no active nests are present, or (2) that the young have fledged, shall be submitted to the Town prior to initiation of grading in the nest-setback zone. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur. If active nests are encountered and mitigation is required, the applicant shall submit a deposit to cover the cost of a Town-retained biologist to periodically monitor the site to ensure the recommended mitigation is followed.	
Impact BIO-1c: Impacts to California Red-legged Frog	***Mitigation Measure BIO-1c***	
Depending on the time of year of proposed construction activities, build-out of the proposed project could have a direct effect on individual CRLF that may disperse in the Ross Creek watershed. The occurrence of CRLF may be rare, suitable dispersal habitat exists along the southern edge of the project site within the vicinity of the proposed retention wall. Construction of the proposed retention wall and associated fill material will modify existing upland habitat. While the modification of habitat is not anticipated to significantly affect CRLF, any direct impact to CRLF dispersing through the project site would be considered a significant impact. Construction related activity including the installation of a temporary access road to the retention wall and associated fill material, and the sediment detention basins in Swan Swale could also impact dispersing	BIO-1C: To minimize disturbance to dispersing or foraging CRLF, all grading activity within upland habitat (within 100 feet of aquatic habitat) shall be conducted during the dry season, generally between May 1 and October 15, or before the onset of the rainy season,[2] whichever occurs first, unless exclusion fencing is utilized. Construction that commences in the dry season may continue into the rainy season if exclusion fencing is placed between the construction site and Ross Creek, a wetland feature, and drainage features to keep the frog from entering the construction area. Additionally the following measures shall be implemented to lessen impacts to CRLF: • Prior to building permit issuance the applicant shall submit evidence to the building department to demonstrate that they have retained a qualified biologist to implement each of the following measures. • Prior to the start of construction, pre-construction surveys for CRLF shall be conducted by a USFWS approved biologist according to USFWS presence/absence survey	***Less Than Significant***

[2] *The rainy season includes periods when a ½-inch of rain or more is predicted within a 24-hour period and is generally between October and April.*

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
CRLF. Construction activity within the northern portion of the project site is not anticipated to impact CRLF or CRLF habitat. Any potential direct effects to this species would be a ***potentially significant*** impact.	protocols for CRLF. The survey protocol consists of two nighttime surveys and one daytime survey and shall cover the project site and aquatic features within 200 feet of the project site. Additionally, for construction activity within 100 feet of Ross Creek, a survey shall be conducted by a qualified biologist each day prior to the start of construction activities to ensure that no CRLF are present in the construction area. If CRLF are observed in the construction area or access areas, all work in the vicinity of the CRLF shall be stopped and the USFWS shall be consulted immediately. The biologist shall submit a summary of their findings to the town planner by email prior to the start of construction. • Exclusion fencing shall be installed around any work area within 100 feet of a drainage, wetland, or Ross Creek, unless construction activity will be completed in one day or less at that location. A USFWS approved biologist shall be present to monitor the installation of the exclusion fence. • Because dusk and dawn are often the times when CRLF are most actively foraging, all construction activities shall cease one half hour before sunset and shall not begin prior to one half hour before sunrise. Construction activities shall not occur during rain events, as CRLF are most likely to disperse during periods of precipitation, unless a survey is conducted by a qualified biologist each day prior to the start of construction activities and one half hour before sunset to ensure that no CRLF are observed in the construction area or access areas. • Any open holes or trenches shall be covered at the end of each working day to prevent CRLF from becoming entrapped. • A Spill Prevention and Control Plan shall be created, and made part of the plans for the building permit application. The plan and materials necessary to implement it shall be accessible on-site. Heavy equipment shall be checked daily for leaks. Equipment with leaks shall not be used	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	until leaks are fixed. Refueling shall occur at designated sites outside of active stream channels or above the OHWM. • Any disturbed ground shall receive appropriate erosion control treatment and native seed mix within seven days following completion of construction or within seven days following a seasonal stoppage of construction. • All workers shall ensure that food scraps, paper wrappers, food containers, cans, bottles, and other trash from the construction area are deposited in covered or closed trash containers. The trash containers shall not be left open and unattended overnight.	
Impact BIO-1d: Impacts to Pacific Pond Turtle	***Mitigation Measure BIO-1d***	
The proposed construction activities and build-out of the proposed project could have a direct effect on PPT occurring in upland habitat in the southern portion of the project site. Construction of the proposed retention wall and associated construction activities within the southern portion of the project site could impact PPT, and will modify existing upland habitat along Ross Creek. While the modification of habitat is not anticipated to significantly affect PPT, any direct impact to PPT utilizing aquatic habitat within Ross Creek would be considered a significant impact. Construction with Swan Swale and within the northern portion of the project site is not anticipated to impact PPT or PPT habitat. Any potential direct effects to this species would be a ***potentially significant*** impact.	BIO-1d: To minimize disturbance to PPT, prior to the start all grading activity or ground disturbance within upland habitat (within 100 feet of aquatic habitat) a qualified biologist will inspect the work area for PPT. Additionally the following measure shall be implemented to lessen impacts to PPT: • Prior to building permit issuance the applicant shall submit evidence to the building department to demonstrate that they have retained a qualified biologist to implement each of the following measures: • Pre-construction surveys for PPT shall be conducted prior to the initial start of construction activities, and each day prior to the start of construction for any habitat within 100 feet of Ross Creek. If PPT are observed in the construction area or access areas, all work in the vicinity of the PPT shall cease and CDFW shall be consulted to determine appropriate relocation measures. • Exclusion fencing will be installed around any work area within 100 feet of habitat within 100 feet of Ross Creek, unless construction activity will be completed in one day or less at that location. Implementation of the above measures, along with those	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	outlined for CRLF in Mitigation Measure BIO-1C, would mitigate impacts to PPT to a less-than-significant level.	
Impact BIO-1e: Impacts to Steelhead Habitat	***Mitigation Measure BIO-1e***	
Development of the proposed project would not have a direct effect on steelhead, as no suitable aquatic habitat would be altered. However, project construction and operation within Swan Swale and along the southern portion of the project site has the potential to indirectly impact the stream habitat through erosion and loss of riparian vegetation. Impacts related to erosion are discussed in Section IV.G (Hydrology and Water Quality). Because of the steep hillside nature of the project site, grading activity within the northern portion of the project site could result in increased sediment runoff and negatively affect downstream steelhead habitat in Ross Creek. Ross Creek is designated critical habitat for steelhead; therefore, the proposed project activities could have a ***potentially significant*** impact.	BIO-1e: Impacts to riparian vegetation along Ross Creek, erosion, and changes in runoff to Ross Creek, could impact steelhead critical habitat. The following measures are required to ensure that no significant impacts occur to steelhead critical habitat. The NMFS may require additional mitigation after consultation. • Prior to the start of construction related ground disturbance, silt fence with wattles on the inside of fencing shall be placed between the construction area and the banks of Ross Creek and any tributary to Ross Creek to minimize potential sediment runoff into the Ross Creek. Written evidence from a qualified engineer that certifies that the silt fences with wattles have been property installed shall be provided to the building department prior to construction related ground disturbance. The silt fences and wattles shall be maintained during construction related ground disturbance and until the ground is adequately stabilized. • No construction activity shall occur within the bed or bank of Ross Creek. Additionally, no construction or construction activity shall occur within 50 feet from the top of bank of Ross Creek. • If there is any potential for sediment to enter Ross Creek or its tributaries, work within 100 feet of Ross Creek, and any tributary to Ross Creek, shall be conducted between June 15 and October 15 when steelhead are least likely to be moving through Ross Creek. • Work within Swan Swale shall be conducted in isolation from flowing water. Prior to the start of channel alteration, the work area shall be isolated, and flowing water shall be diverted around the isolated area. • The project shall follow the appropriate Best Management Practices (BMP's) for construction projects: including, but not limited to the following: (1) a moratorium on grading during a rain event; (2) erosion and sediment control measures shall be installed prior to soil disturbance and maintained at all times, (3)	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	no erosion or sediment control measures will be placed in vegetated areas (4) soil disturbance shall be limited to the minimum area needed to complete the proposed action, (5) delineation and protection of environmentally sensitive areas to prevent construction impacts, (6) installation of fiber rolls and other measures as appropriate to control sediment and erosion, (7) control of spills and litter, (8) control of fuels and other hazardous materials, (9) management of temporary on-site restroom facilities to prevent water quality impacts, and (10) preservation of existing vegetation whenever feasible. • Prior to the start of work within 100 feet of Ross Creek or within Swan Swale, a qualified biologist shall train construction crews regarding habitat sensitivity, identification of listed species, and required best management practices. The training shall cover the general measures being implemented to conserve the species as they relate to the project, penalties for noncompliance, and species ecology with key identifying features. A factsheet or other supporting materials containing this information shall be prepared and distributed to all project staff. The training shall be conducted in languages other than English, as appropriate, for workers who do not speak or understand English. Prior to building permit issuance the applicant shall submit evidence to the building department to demonstrate that they have retained a qualified biologist to implement this measures. A written report shall be provided to the planning department to confirm the training has taken place prior to any applicable work. • At a pre-construction meeting, all workers shall be informed of the importance of preventing accidental spills and the procedure, protocol, and required measures to be followed if an accidental spill or construction site discharge enters waterways, ditches, or other tributaries to waterways. • Regulatory approval shall be obtained for all work within potentially jurisdictional areas, including approval from the Corps, RWQCB, and CDFW. All work within these areas shall conform to any conditions imposed by the regulating agencies. •	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	These measures, in addition to mitigation measures included in Section IV.G, would reduce potential indirect impacts to these species to a less-than-significant level.	
Impact BIO-1f: **Disturbance to Bat Species**	***Mitigation Measure BIO-1f***	
No obvious signs of bats were observed on-site; however, existing riparian habitat may support roost sites for Western red bat. Bat species designated as "High Priority" by the Western Bat Working Group (WBWG) qualify for legal protection under Section 15380(d) of the CEQA Guidelines. Species designated "High Priority" are defined as "imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats" (CDFG, 2011). Additionally, multiple old wooden buildings on-site could support non-special status bat roosts. Construction activities, including the removal of riparian vegetation and the removal of existing structures, could impact roosting bats and available bat roost habitat. Because all bat species are protected from disturbance during maternal roosting and winter hibernation (CFGC Section 86; 2000; 2014; 3007; 4150, along with Title 14 of California Code of Regulations), any impact to roosting bats during this period would be ***potentially significant***.	BIO-1f: Preconstruction surveys for bats shall take place during the maternity roosting season (defined as: April 1 through August 31) within riparian habitat and all old wooden buildings within the project site. Surveys shall be conducted by a qualified biologist approved by the Town of Ross no less than 14 days prior to removal of trees, snags or buildings within the project area. Ultrasonic acoustic surveys and/or other site appropriate survey method may be performed to determine the presence or absence of bats utilizing the project site as roosting or foraging habitat. Additionally the following measures shall be implemented to lessen impacts to bats: a) If special-status bat species are detected during surveys, appropriate, species and roost specific mitigation measures shall be developed by the qualified biologist. Such measures may include postponing removal of trees, snags or structures until the end of the maternity roosting season or construction of species appropriate roosting habitat within, or adjacent to the project site. b) Trees, snags and buildings may be removed outside of the maternity roosting season without performing preconstruction bat surveys. c) Feld trees shall remain on the ground for 24 hours prior to being removed or chipped. d) For all buildings to be demolished internal entrance surveys shall be performed by a qualified bat biologist no less than 14 days prior to demolition to determine if buildings currently or previously support roosting bats. If bats are determined to be present, appropriate methods shall be used to exclude bats from the building. Such methods may include installation of one way "valves" to allow bats to exit, but not allow them to reenter the building.	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	e) If an identified maternity roost location is removed, species and roost appropriate mitigation shall be developed in consultation with CDFW. Mitigation shall include at minimum the replacement of a suitable roost structure within or immediately adjacent to the project site, such that similar structure shape and thermal properties are met with the replacement roost. f) If no active roosts are identified then work may commence as planned. Survey results are valid for 30 days from the survey date. Should work commence later than 30 days from the survey date, surveys should be repeated. No preconstruction bat surveys are required for work conducted between the hibernation season and maternity season (i.e., September 1 through October 31).	
Impact BIO-1g: Disturbance to Special-status Plant Species	***Mitigation Measure BIO-1g***	
No special-status plant species were observed on-site either in September 2012 or the plant surveys conducted in 2003; however, existing grassland, woodland, forest, and riparian habitat may support several special-status plant species. Construction activities including the removal of vegetation and soil cut-and-fill could impact special-status plant species, if they are present, and therefore impacts would be ***potentially significant***.	BIO-1g: A qualified botanist shall conduct a pre-construction focused plant survey within the project site during the blooming or other identifiable season to determine presence/absence of special-status plant species. The surveying botanist shall determine the distribution and population, as well as assess the potential for immediate impact from project activities to special-status plant species. It may be determined that special-status plant species are present within the project site, but impacts to such plants may be generally avoided. These plants shall be clearly demarcated by a qualified botanist, and all construction personnel instructed to avoid these species. Consultation with the USFWS shall occur prior to any impacts to federal listed species (i.e., Santa Cruz tarplant), as well as consultation with the CDFW for impacts to any of the special-status plant. If special-status plant species are present and cannot be avoided by project construction, at a minimum the special-status plant species shall be relocated on-site away from further impacts directly relating to the project. For shrubs species (i.e., western leatherwood, Napa false indigo), either	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	cuttings of living stems shall be taken, or where appropriate, the entire shrub should be removed for relocation. Numbers of cuttings shall be at least ten times that of the number of shrubs to be removed, and an application of rooting hormone applied to the cutting. Cuttings shall then be grown out for one to two years, and all grown-out plants replanted on-site away from future impacts. For perennial herbaceous and moss species (i.e., California bottle-brush grass, minute pocket moss, thin-lobed Horkelia, marsh microseris, North Coast coniferous forest, nodding semaphore grass) both bare root stock and seed shall be collected. Bare root stock relocation consists of removal of the live plant, maintaining a substantial portion of the root's intact native soil, and then immediately relocated to an analogous site. Seed collection consists of collecting whole, live seed, some which shall be immediately grown-out and some shall be stored or scattered for supplementing the bare root stock and grown-out seed. Stored seeds shall be grown-out for one to two years, and all grown-out seeds replanted on-site away from future impacts. For annual herbaceous species (i.e., white seaside tarplant, Santa Cruz tarplant) seeds shall be collected, stored, and scattered in the relocation site. For each species, to increase the survivability potential, relocation site selection shall be analogous to the site characteristics of the existing plant population (e.g., shade, aspect, slope, soil condition). The relocation site shall be prepared prior to relocation of plants/seeds through the removal of invasive species, the installation of irrigation and/or plant protections (e.g., cages), and the application of mulches, weed mats, and/or other materials to retain soil moisture and discourage the emergence of competitive plants. All site preparation, seed/cutting/root collection, grow-out, and plant installation shall be conducted by a qualified landscape	

Significant Environmental Impact	Mitigation Measures		Level of Impact After Mitigation
		company approved by the Town of Ross with experience working on restoration projects and within the habitats present on-site. Following the relocation, the plantings/seedings shall be monitored annually for three to five years by a qualified biologist to determine the success of the relocation, potential threats, and make necessary recommendations (e.g., removal of invasive species, increase/defense irrigation) for the on-site maintenance to the contracted landscaping company. An annual report shall be drafted and submitted to all responsible agencies (e.g., CDFW, USFWS) for their review.	
Impact BIO-2: Direct Impacts to Riparian Habitat	***Mitigation Measure BIO-2***		
Riparian habitat associated with the Swan Swale is present on-site; and portions of the actual channels (i.e., bed and back) occur within the project boundaries. The project proposes to construct storm drain inlets and short pipes to downslope outlets/energy dissipaters to merge with sheet flows of runoff flowing to the existing Swan Swale. Four inlet, pipe and dissipater systems are called for along the driveway system. Two detention basins on Swan Swale would capture uphill drainage in a manner that would result in less post project off-site drainage than existing conditions in compliance with Town Code Section 18.39.090 (i). The Town's 2007-2025 General Plan Policy 6.6, *Creek and Drainageway Setbacks, Maintenance and Restoration*, states that setbacks from creeks shall be maximized to protect riparian areas and to protect residents from flooding and other hazards. The Town encourages restoration of runoff areas, to include but not be limited to such actions as sloping banks, providing native vegetation, protecting habitat,	***BIO-2:***	The CDFW exerts jurisdiction over the bed and banks of rivers, lakes, and streams according to provisions of Section 1601 to 1603 of the Fish and Game Code. The Fish and Game Code requires a Streambed Alteration Agreement for the fill or removal of material within the bed and banks of a watercourse or waterbody and for the removal of riparian vegetation. Prior to the issuance of a grading permit, the applicant shall obtain a Streambed Alteration Agreement from CDFW. The applicant shall adhere to all conditions of approval listed in the agreement obtained from the regulatory agency. In addition to measures listed by CDFW, the applicant shall compensate for impacts to riparian habitat as required by the policies of the Town of Ross General Plan. The first element of compensation for impacts to the riparian system by the proposed project shall be to eradicate the French broom and other non-native invasive species (i.e., Scotch and French broom) along the reach of riparian corridor associated with the construction area under the supervision of a qualified botanist. Once these invasive species are removed, native plants adapted to the local riparian system shall be planted to increase the structural diversity of the system and thus increase the wildlife value for the on-site riparian corridor. Also, the applicant shall, prior to acquiring a	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
etc. Policy 6.7, *Riparian Vegetation*, requires that modification of natural channels is done in a manner that retains and protects creekside vegetation, integrates fish passage and includes habitat restoration in its natural state. The installation of these detention basins would permanently remove riparian vegetation associated with Swan Swale. This is considered a ***potentially significant*** impact.	grading permit, submit to the Town for review and approval a Mitigation and Monitoring Plan that, at a minimum, details the plant mix (native plants consistent with vegetation along Ross Creek adjacent to the project site), planting location, the success criteria, and the monitoring schedule of the enhancement area. The plan shall be reviewed and approved by the Ross Valley Fire Department and Marin Municipal Water District. The enhancement plantings shall be installed prior to the completion of the proposed project and monitored for a period of five years. Drip irrigation shall be installed and maintained as necessary to ensure that the success criteria are met.	
Impact BIO-3: Direct Impacts to Waters that May be Present On-site (Jurisdictional Waters)	***Mitigation Measure BIO-3***	
A significant impact would occur if a project would have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Natural drainage channels and adjacent wetlands may be considered "Waters of the United States" subject to the jurisdiction of the U.S. Army Corps of Engineers. All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the U.S. Army Corps of Engineers. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board issues a certification (or waiver of such certification) that the proposed activity will meet	BIO-3: A formal wetland delineation shall be conducted on-site to determine the extent to which wetlands are present on the site. Any alterations of, or discharges into, waters of the United States, including Section 404 wetlands must be in conformance with the Sections 404 and 401 of the Clean Water Act via certification and permitting prior to any grading or construction that may impact jurisdictional area(s), as applicable. Therefore, securing 404 and 401 permits under the Clean Water Act and compliance with the federal and state "no net loss of wetlands" policy and the Town's wetlands protection policies will be required to result in no net loss of wetlands and waters as a result of the project. Impacts to wetlands and other waters should also be minimized via implementation of a Best Management Practices (BMPs) plan that when implemented will protect preserved waters of the U.S./State from inadvertent fill and or project-related water quality degradation. These practices can include installing orange construction fencing buffers, straw waddles, silt fencing, etc. to keep de minimus fill from entering preserved/avoided wetlands and other waters. During project construction near waters of the U.S. to be preserved on-site, a biological monitor	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
state water quality standards. The California Department of Fish and Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1602 of the California Fish and Game Code. Activities that would disturb these drainages are regulated via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protect the habitat values of the drainage in question. The preliminary waters assessment for the project site was based primarily on the presence of unvegetated, ponded areas or flowing water, or evidence indicating their presence such as a high water mark or a defined drainage course. The construction of the detention ponds within the channel of Swan Swale would be considered temporary impacts under the Clean Water Act and the California Fish and Game Code. Each detention pond will temporarily impact approximately 120 linear feet of waters; however, collection of additional data will be necessary to determine the exact extent of impacts and to prepare a delineation report suitable for submission to the Corps. Therefore, until a formal wetland delineation is conducted to determine the extent to which any wetlands are present on the site, and given the proposed project involves grading portions within drainage features, impacts to wetlands would be ***potentially significant***.	shall be present to monitor the integrity of any preserved wetlands and other waters. Wetland areas that are filled by the proposed project shall be mitigated via implementation of a wetlands compensation plan that is submitted to the Corps and RWQCB in advance of impacts to wetlands and other waters. As approved by the Corps and the RWQCB, the project applicant may: 1. Purchase mitigation credits from an approved wetland conservation bank or an approved in-lieu fee mitigation entity at a minimum 1:1 ratio; 2. As an alternative to the purchase of credits in a mitigation bank, wetlands may be created on-site and, if so, shall have an equal or higher functional value than those wetlands affected by the project (known as in-kind replacement). 3. If wetlands cannot be created in-kind and on-site, and a mitigation bank is not available, other alternatives shall include off-site and/or out-of-kind wetland compensation. In any case, mitigation requirements for wetland areas that are not avoided shall be that all impacted wetlands are replaced at a minimum 1:1 ratio (for each square foot of impact, one square foot of wetland would be restored/created) or at a ratio determined by the RWQCB and Corps at the time regulatory permits are authorized for the proposed project by these agencies. If the applicant will implement its own wetland mitigation program, mitigation requirements shall be based upon the existing conditions of the wetlands that would be impacted. Where practicable, wetland plant/animal populations shall be relocated from the wetlands that would be impacted to any re-created wetlands. If the Applicant were to implement an applicant responsible wetland mitigation project, the Applicant shall establish a five-	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	year program to monitor the progress of the wetland mitigation toward these standards. At the end of each monitoring year, an annual report would be submitted to the Town of Ross, the RWQCB, and the Corps. This report shall document the hydrological and vegetative condition of the mitigation wetlands, the progress of wetland towards meeting pre-established Success Criteria, and shall recommend remedial measures as necessary to correct deficiencies. Also, as part of the proposed project, the applicant shall implement construction and storm water BMPs to contain and minimize surface runoff originating from the development, thereby avoiding and/or reducing adverse impacts to nearby wetlands and other waters" as described in Section IV.G (Hydrology and Water Quality) of this Draft SEIR. Standard sediment and erosion control measures (e.g., use of silt fencing around the perimeter of the construction zone) shall be implemented to protect federal- and state-jurisdictional wetlands and waters during construction. Additionally, runoff produced during and after construction is subject to National Pollution Discharge Elimination System Regulations (NPDES) and local water quality and runoff standards. The proposed project is also required to be in compliance with the Town's 2007-2025 General Plan policies to ensure compliance with state and federal wetlands regulations and mitigation requirements if impacts cannot be avoided.	
Impact BIO-4a: Protection of Trees and Tree Groves	***Mitigation Measure BIO-4a***	
As discussed above, a total of 2,020 (2,187 alive minus 167 dead) trees with trunk diameters of eight inches or more measured at 4.5 feet above grade were identified and mapped within the limits of the survey area in the 2010 inventory. The removal of 433 trees (73 "dead/fallen/hazardous/diseased" trees, 140 non-significant trees and 216 significant trees) would reduce the on-site tree count by	BIO-4a: The project proposes to mitigate for tree removal through the planting of trees on-site. The replanting plan (Figures III-14 through III-16) illustrates that 977 trees are proposed be replanted to completely reforest the site with a greater diversity of native trees. Town Code Section 12.24.080(d) provides for three replacement trees to be planted on a project site for every one removed. Where on-site trees are not feasible, a project sponsor may make an in-lieu payment to the Town for the provision of off-site trees. The applicant shall	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
approximately seven percent. The Town of Ross General Plan Policies 1.1 – 1.3 and Chapter 12.12 of the Town's municipal code are intended to protect trees and tree groves. The scale of tree removal is considered a ***potentially significant*** impact.	mitigate for the loss of trees pursuant to Chapter 12.12 of the municipal code or as determined through consultation with the Town of Ross. In addition, detailed preservation guidelines shall be prepared by a certified arborist to control possible damage to trees to be preserved. The guidelines shall include the following: • Grade changes within 1.5 times the width of the tree dripline shall be avoided and any encroachment closer than one-third the distance from the dripline to the trunk shall be prohibited or monitored by the arborist. Restrictions on the limits of grading, adjustments to the final grade of cut and fill slopes, and use of retaining walls shall all be used to protect individual trees worthy of preservation. • Temporary fencing shall be provided along the outermost edge of the dripline of each tree or group of trees to be retained in the vicinity of grading to avoid compaction of the root zone and mechanical damage to trunks and limbs. • Paving within the tree dripline shall be prohibited or stringently minimized by using porous materials such as gravel, loose boulders, cobbles, wood chips, or bark mulch where hardscape improvements are necessary for access in the vicinity of trees. • Trenching within the tree dripline shall be prohibited, with any required utility line within the dripline installed by boring or drilling through the soil. • The amount of landscape irrigation within the tree dripline shall be minimized by prohibiting turf or any landscaping with high water requirements and limiting permanent irrigation improvements to bubbler, drip, or subterranean systems. • Storage of construction equipment, materials, and stockpiled soils shall be prohibited within the tree dripline. Implementation of mitigation would lessen potentially significant impacts to trees to a less-than-significant level. Over the short	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	term, tree canopy would be reduced. Planting or afforestation prevents long term net loss if: (a) the mitigation ratio is at least one successful new tree for each tree removed; (b) replacement species have similar mature canopy spread; and (c) indigenous tree replanting improves the native ecosystem by creating a healthy understory of replacement trees. Planting non-invasive trees will assist in the natural return of indigenous species. Off-site tree planting is a viable mitigation option if there is not enough area on-site to accommodate a 3 to 1 tree planting ratio. More opportunities may exist off-site to maintain stands that are large, contiguous with other stands, and relatively undisturbed, thereby maximizing habitat value.	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
Impact BIO-4b: Natural Areas Retention	***Mitigation Measure BIO-4b***	
Policy 1.4 of the Town's General Plan (Natural Areas Retention) requires that projects maximize the amount of land retained in its natural state. Wherever possible, residential development should be designed to preserve, protect and restore native site vegetation and habitat. In addition, where possible and appropriate, invasive vegetation should be removed. The proposed project has been designed based on an opportunities and constraints analysis that demonstrated most of the land above Swan Swale contains unstable soils, mature forests, rock outcroppings, and water courses that constitute significant natural resources meriting protection from insensitive development. The project has been designed such that all three home sites are situated below Swan Swale in the tightest cluster possible under governing R-1:B-10A zoning standards. Several non-native, invasive species occur on the site. Invasive species, particularly fast-growing herbaceous invaders, are often disturbance-adapted, and soil disturbance of the type that would occur during the construction of the proposed project is often followed by an aggressive invasion of the disturbed area by these species. Under existing conditions, there are small populations of many non-native species throughout the project site; however, ground disturbance associated with the project would create new areas suitable for recruitment of	BIO-4b: To reduce the potential establishment or spread of non-native, invasive weed populations as a result of project activities, the following measures shall be implemented: • Within areas subject to grading activities, concentrations of invasive species that could have a severe ecological impact on surrounding habitat (i.e., French broom) shall be removed prior to grading to limit the spread of seed to new areas. • Maintain staging areas free of these weeds and their seeds for the duration of their use during project construction. • If straw is used for road stabilization and erosion control, it shall be certified weed-free	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
these non-native species, many of which form dense, monotypic stands, eliminating any natural habitat that the area previously supported. Expansion of these invasive plant populations on the site would also increase the seed bank on the site allowing spread to natural habitats on the site not impacted by the proposed project. Invasion by these non-native species would degrade the functions and values of preserved natural habitat for native plants and wildlife species and reduce the potential for native species to use the landscaped areas within the new development. This is considered a ***potentially significant***		
Impact BIO-5: Loss or Conversion of Forest Land	***Mitigation Measure BIO-5***	
Forests and forest resources are directly linked to both greenhouse gas (GHG) emissions and efforts to reduce those emissions. For example, conversion of forests to non-forest uses may result in direct emissions of GHG emissions. Such conversion would also remove existing carbon stock (i.e., carbon stored in vegetation), as well as a significant carbon sink (i.e., rather than emitting GHGs, forests remove GHGs from the atmosphere). Changes in forest land or timberland zoning may also ultimately lead to conversions, which could result in GHG emissions, aesthetic impacts, impacts to biological resources and water quality impacts, among others. Therefore, these additions are reasonably necessary to ensure that lead agencies consider the full range of potential impacts in their initial studies. Although the project site is not technically zoned as forest land or timberland by the Town of	BIO-5: Implementation of the Mitigation Measure BIO-4a would mitigate potentially significant impacts related to loss or conversion of forest land to a less-than-significant level. A forest, by definition, is an area with a high density of trees. A typical tree forest is composed of the overstory (canopy or upper tree layer) and the understory. Introducing tree species (replacement trees) into the project site to replace the trees removed is intended to maintain the native biodiversity of the site. The intention is to maintain or improve the native ecosystem (i.e., biodiversity); therefore, growing trees is the same as growing a forest in this instance. To promote the maintenance and growth of native ecosystems, only indigenous trees will be planted. Quantitatively, it appears the amount of forest habitat will be reduced post-project. Qualitatively, it appears that there is a potential to improve the quality of forest habitat post-project. This can be achieved through the introduction of tree species that will improve the native ecosystem, thereby leading to a qualitative improvement in habitat values.	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
Ross, as stated above, the project area would be considered forest land. Therefore, the project would result in the loss or conversion of forest land to non-forest use. This is considered a ***potentially significant*** impact.	The planting of indigenous trees will maintain and/or improve the native ecosystem. Indigenous tree planting can be managed in ways that enhance their biodiversity protection functions (maintaining nutrient capital, protecting watersheds and soil structure as well as storing carbon).	
Impact BIO-6: Disturbance of Movement, Migration Corridors, and Nursery Sites	***Mitigation Measure BIO-6***	
The proposed project would result in a significant impact if it substantially interfered with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. As described above, the proposed project has been designed based on an opportunities and constraints analysis which clusters proposed homes, driveways and the main access road in the northeastern area of the site near existing off-site single-family residences along Upper Road. With the exception of the proposed on-site fill area, no other development is proposed within the 36-acre site. Approximately 72% of the site's boundary adjoins open space and parkland. The large amount of cover within the project site provides many native and resident species, such as black-tailed deer, protection while moving between foraging and resting sites. It may also provide temporary protection, food sources, and roost sites for migratory species including many bird and bat species. Artificial lighting has the potential to affect nocturnal wildlife movements and increase predation risk for some species. In addition, Swan Swale contains perennial portions and has the potential to provide a migration corridor for	BIO-6: The following measures, along with Mitigation Measures BIO-1a, 1c, and 1e, shall be implemented to address potentially significant indirect impacts to movement, migration corridors, and nursery sites: • All temporary fencing installed during construction activities shall be removed immediately following completion of project activities. • The project shall not install artificial night lighting beyond what is necessary for the access road. • Consultation with USFWS on impacts to NSO and its habitat will determine whether habitat mitigation is necessary, and if required, the appropriate amount and location of habitat to be conserved. • Use of any exclusionary fencing shall be restricted along Swan Swale and Frog Swale. Exclusionary fencing is any fencing designed to exclude wildlife and contains one or more of the following conditions: lowest horizontal is within 1.5 feet of ground OR highest horizontal is over 6 feet OR top or bottom wire is barbed OR distance between top wires is less than 10 inches.	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
semi-aquatic species such as the CRLF. The gradients of both swales are too steep for passage into the project site by special-status fish species, including salmonids; therefore, project activities within the swales will not affect fish movement. The project design does not contain any permanent fencing along the access road or potential building areas, nor will the project result in changes to passage within Swan Swale or Frog Swale. However, movement will be temporarily disrupted during project construction activities through the installation of temporary construction fencing, grading, and creation of the detention ponds in Swan Swale. The removal of invasive plant species such as French broom may result in a beneficial effect for many resident species. Revegetation with native plant species will result in an improved movement corridor by reducing the vegetation density and increasing ease of movement for wildlife species without reducing protective cover. In addition, revegetation should reestablish a more diverse plant community and provide increased food sources and nest sites for many wildlife species. Although temporary, the proposed project activities could have a ***potentially significant*** impact on wildlife movement through the project site. Removal of trees in the area of the retaining wall may affect nursery sites for breeding bird and bat species, including NSO. The proposed project will plant trees resulting in a net gain in trees to mitigate for the loss of the removed trees, thus most impacts to nursery sites will be temporary. However, the proposed retention		

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
wall location overlaps the NSO occurrence location and opening up this area of the project site by removing trees and constructing a retention wall will change the habitat characteristics in the vicinity. This has the potential to affect NSO use within the project site including the removal of potential satellite roosts during the breeding season. The proposed project activities could have a ***potentially significant*** impact on NSO in the vicinity. Although detailed plans for individual residences have not yet been prepared, additional habitat would be developed with possibly pools, patios, lawns and landscaping. The project description does not indicate any fencing on the property. Given the clustered nature of the three proposed homes and their location near existing off-site homes, exclusionary fencing surrounding the new homes is not anticipated to significantly impact wildlife movement through the site. However, the project could affect wildlife movement (e.g., deer and other larger wildlife) if exclusionary fencing is proposed along either Swan Swale or Frog Swale, as drainage channels tend to serve as important movement corridors for wildlife. This is considered a ***potentially significant*** impact.		

<table>
<tr><th>Significant Environmental Impact</th><th>Mitigation Measures</th><th>Level of Impact After Mitigation</th></tr>
<tr><td colspan="3">GEOLOGY AND SOILS</td></tr>
<tr><td>Impact GEO-1: Strong Seismic Ground Shaking</td><td>Mitigation Measure GEO-1</td><td></td></tr>
<tr><td>All structures and improvements in the Bay Area could potentially be affected by ground shaking in the event of an earthquake on regional active faults. Ground shaking potential is estimated on a worst-case basis by assessing the maximum expected earthquakes and calculating the peak accelerations that may be generated. Due to the proximity of the project site to regional faults (including the San Andreas fault), the project may be subjected to very strong to violent ground shaking during a major earthquake. During the service life of the proposed project, the site is likely to experience at least one moderate to severe earthquake that could produce potentially damaging ground shaking.

Violent ground shaking corresponds to an MMI-IX, and typically some masonry and frame structures would be damaged, unbolted structures shifted off their foundations, and people would have difficulty standing or walking. This level of seismic shaking could cause injuries and/or fatalities and extensive structural and non-structural damage to buildings at the site. This is a potentially significant impact.</td><td>GEO-1: Project design and construction shall be in conformance with current best standards for earthquake resistant construction in accordance with the California Building Code. In addition, project design shall follow the recommendations of a final site-specific geotechnical investigation report and the October 12, 1989 and May 28, 2013 reports prepared by Herzog (Appendix G). All recommendations for seismic and geohazard impact mitigation provided in the October 12, 1989 and May 28, 2013 reports and the final site-specific geotechnical investigation reports shall be adopted by the project design and engineering team and implemented during development and construction of the project. The following mitigation measures are from the October 12, 1989 and May 28, 2013 reports prepared by Herzog:

GEO-1a: Upon completion of the final wall layout, the modular retaining wall design should be finalized based on at least the following minimum factors of safety:

<table>
<tr><th>Failure Mode</th><th>Static</th><th>Seismic[3]</th></tr>
<tr><td>A)Base sliding</td><td>1.5</td><td>1.1</td></tr>
<tr><td>B) Overturning</td><td>1.5</td><td>1.1</td></tr>
<tr><td>C) Bearing Capacity</td><td>2.0</td><td>1.2</td></tr>
<tr><td>D) Tensile Overstress</td><td>1.0</td><td>1.0</td></tr>
<tr><td>E) Pullout</td><td>1.5</td><td>1.1</td></tr>
<tr><td>F) internal Sliding</td><td>1.5</td><td>1.1</td></tr>
<tr><td>G) Shear (bulging)</td><td>1.5</td><td>1.1</td></tr>
<tr><td>H) Connection</td><td>1.5</td><td>1.1</td></tr>
<tr><td>I) Global Instability</td><td>1.5</td><td>1.1</td></tr>
</table>
</td><td>Less Than Significant</td></tr>
</table>

[3] *A seismic coefficient (kh) of at least 0.15 should be used in the design of the modular walls.*

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	Wall facing shall be provided with backdrains. The backdrains will consist of a four-inch diameter, rigid perforated pipe which is located at the base of the wall and which is surrounded by a drainage blanket. The pipe shall be PVC Schedule 40 or ABS with an SDR of 35 or better, and the pipe shall be sloped to drain at least one percent by gravity to an approved outlet. Accessible sub-drain cleanouts shall be provided, and shall be maintained on a routine basis. The drainage blanket shall consist of Caltrans Class 2 "Permeable Material." The drainage blanket shall be at least one foot in width and will extend to within one foot of the surface. The uppermost one foot shall be backfilled with compacted soil to exclude surface water. Compacted fill behind the modular walls shall be founded on level benches excavated into bedrock or approved competent soils. The depth of required benches shall be as recommended by the project engineering geologist during excavation. It will be necessary to provide sub-drains on the benches at least every 15 vertical feet and where evidence of seepage is observed, as recommended by the project engineering geologist. Site excavation, fill compaction and sub-drainage installation shall be performed in accordance with the previous grading recommendations for the project. GEO-1b: Retaining walls shall be designed to resist surcharge pressures imposed by adjacent upslope retaining walls. Where an imaginary 1-1/2:1 (horizontal: vertical) plane projected downward from the base of an upslope retaining wall intersects the downslope wall, that portion of the downslope wall below the intersection shall be designed for an additional horizontal uniform pressure equivalent to the maximum calculated lateral earth pressure at the base of the upslope wall. Wall backfill shall be founded on level benches excavated into competent bedrock. GEO-1c: All utility lines, including power, water, sewer, and gas must be moderately flexible to accommodate potential differential	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	settlement between areas of compacted fill and native soils or rock. Where utilities are located in creeping soils, it will be necessary to provide flexible joints to accommodate creep movement. Lines that extend through engineered fills shall not be subject to significant creep, and these fills are considered as being suitable for utility line construction. If utilities extend through unrepaired slide areas, it will be necessary to extend the utilities into firm rock beneath the potential zone of movement. GEO-1d: Pavement thicknesses shall be computed using Method 301-F of the CalTrans Pavement Design Manual and will be based on a pavement life of 20 years. After utility trenches are properly backfilled, compacted, and tested, pavement subgrade shall be prepared by scarifying to a depth of at least six inches, moisture-conditioning to wet of optimum, and compacting to at least 95 percent relative compaction. Finished subgrade shall be smooth and non-yielding. Aggregate base material shall then be spread, moisture·conditioned as necessary, and compacted to at least 95 percent relative compaction. The aggregate base material shall also be smooth and non-yielding. In areas where concentrated storage and/or wheel loads are anticipated, the slabs and pavements shall be designed to support these loads. Support shall be provided by increasing pavement sections or by providing reinforced concrete slabs. Loading areas for self-loading garbage trucks shall be designed with reinforced concrete slabs of at least six inches thick, and reinforced with #4 bars at 12-inch centers each way. Pavements shall be constructed during the dry season to avoid the saturation of the subgrade and base materials, which often occurs during the wet winter months. Pavements constructed during the dry season generally have a longer service life and require less maintenance than those constructed during the wet season.	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	If pavements are constructed during the winter, unstable areas shall be overexcavated to remove soft soils. The excavations will probably require backfilling with imported crushed rock. The soils engineer shall be consulted for recommendations at the time of construction if this condition is encountered. Where pavements will abut landscaped areas, the pavement baserock layer and subgrade soils shall be protected against saturation from irrigation and rainwater by means of a concrete curb and gutter, redwood header-board, a subdrain, or a thickened asphalt concrete section. The curb and gutter, headerboard, subdrain, or thickened asphalt shall extend to a depth of at least six inches below the bottom of the baserock layer. GEO-1e: Spread Footing Foundations Conventional continuous and isolated spread footing foundations shall be used wherever level excavations expose strong bedrock. Spread footings shall be at least 12 inches wide and extend at least 12 inches into undisturbed rock. The footings shall be stepped as necessary to produce level tops and bottoms. Footings shall be deepened, as necessary, to provide at least seven feet of horizontal confinement between the footing bottoms and the face of the nearest slope. Footings installed shall designed using the allowable bearing pressures of 2,000, 3,000, and 4,000 pounds per square foot (psf), for dead loads, dead plus code live loads, and total loads (including wind and seismic), respectively. The portion of spread footing foundations extending into rock and at least seven horizontal feet from the face of the nearest slope may impose a passive equivalent fluid pressure and a friction factor of 350 pcf and 0.40 respectively, to resist sliding.	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	GEO-1f: Drilled Piers Drilled cast-in-place reinforced concrete piers shall be used to support retaining walls wherever level cuts do not extend through the soil and expose rock. The piers shall be designed by the project structural engineer. All piers shall be reinforced with at least four No.5 bars and be tied together with grade beams. The grade beams shall be designed to span between the piers in accordance with structural requirements. The portion of the piers extending into undisturbed rock may impose an allowable skin friction of 800 pounds per square foot (psf). The portion of the piers in compacted fill or dense/stiff soil beneath the colluvium may impose an allowable skin friction of 600 psf. End bearing shall be neglected because of the difficulty of cleaning out small diameter pier holes, and the uncertainty of mobilizing end bearing and skin friction simultaneously. Lateral loads on piers shall be resisted by passive pressure in the fill and rock. An equivalent fluid pressure of 350 pcf for rock and 250 pcf for compacted fill or stiff soil, acting on two pier diameters, shall be used. The stability of the system shall be calculated using a minimum factor of safety of 1.5. Confinement for passive pressure may be assumed from two feet below the roadway surface if rock is not exposed as a result of the cutting. Where rock is exposed, the confinement for passive pressure shall begin at the roadway grade. If groundwater is encountered, it may be necessary to dewater the holes and/or place the concrete by the tremie method. If caving soils are encountered, it may be necessary to case the holes. Hard drilling may be required to achieve the required penetration. Because of the potential that retaining walls could be used in areas of compacted fill, the subdrain line locations shall be surveyed and staked prior to pier drilling. Drilled piers shall be	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	located so that they do not encroach within five feet of the surveyed line. If drainrock and subdrain lines are encountered during pier drilling, the wall design and layout may need to be modified.	
Impact GEO-2: Expansive Soils	***Mitigation Measure GEO-2***	
Expansive soils swell and shrink as they gain and lose moisture and lightly loaded foundations, slabs and pavements can heave and crack. Deep colluvial soils of stiff sandy silts, sandy clays, and clayey sands are common throughout the site. Generally, these soils appeared well consolidated, only slightly compressible, and non-expansive. However, as part of the geotechnical investigation, soil samples were collected and analyzed. The testing indicated that portions of the on-site soils are moderately expansive. Over time, these soils could undergo shrink/swell cycles that could damage or deform proposed subsurface improvements. This is a ***potentially significant*** impact.	GEO-2a: • In areas where fills will exceed 5 feet in total thickness, compaction of the fill shall be increased to 95 percent relative compaction.[4] • Exaggerate finished grades to ensure that proper surface drainage is maintained after settlement occurs. • Settlement sensitive driveways in areas of deep fills may consist of structural slabs, which span between pier supported retaining walls. GEO-2b: • Expansive soils beneath and within three horizontal feet of pavements or slabs-on-grade shall be removed to a depth of at least 24 inches below planned subgrade, or 24 inches below existing grade, whichever is deeper. The exposed soils shall be scarified at least eight inches deep, thoroughly moisture condition to cause expansion to occur, and re-compacted. The excavated material shall be replaced with non-expansive fill. The non-expansive fill shall consist of approved clean well-graded material with little or no potential for expansion. The non-expansive material shall have a plasticity index of 15 percent or less, and a maximum liquid limit of 40 percent. Expansive on-site soils shall be segregated during excavation and not	***Less Than Significant***

[4] *Relative compaction refers to the in-place dry density of a soil expressed as a percentage of the maximum dry density of the same material, as determined by the ASTM DI557 test procedure.*

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	used in non-expansive fill zones. The project engineering geologist shall approve all imported fill prior to it being brought to the site, and all segregated non-expansive fill. • The outer two feet of fill slopes shall consist of non-expansive fill to reduce sloughing due to strength loss associated with the seasonal wetting and drying of expansive soils. Cut slopes in expansive soil shall be inclined no steeper than 3:1 or be fully retained. • Grade beams in expansive soil areas shall be designed to resist expansive soil uplift pressures of 2,000 pounds per square foot. Alternatively, a compressible void form product (Econo-Void or equivalent) shall be provided beneath the grade beams. Expansive soils exert uplift forces on concrete overpours. Grade beams shall be formed above the trench to prevent overpours, and care will be taken to prevent overpours (mushrooming) at the tops of piers. • Structural slabs shall be underlain by an approved void-forming product for protection from expansive soil heave. The void forms should consist of at least a two-inch thick degradable and compressible paper product (SureVoid®, or equivalent). • In order to reduce expansive soil heave against retaining walls, the zone located above a 1:1 plane projected up from the base of the wall shall consist of approved non-expansive backfill.	
Impact GEO-3: Landslides and Slope Stability	***Mitigation Measure GEO-3***	
The presence of extensive landslide deposits and thick colluvium deposits on the property indicate a moderate to high potential for future slope instability. Persons occupying proposed residences, and personnel involved in site construction activities, would be exposed to the risk of landslides and mudslides that may occur during construction and/or during the expected life of the development due to the potential	GEO-3a: Construction and grading will expose areas of weak soil/rock which may be sensitive to erosion and/or sloughing. Erosion protection measures shall be utilized during and after construction to reduce the risk of induced instability. Erosion protection measures shall include the use of seeding or hydromulch and the installation of hay bales and/or silt fences to hinder sedimentation. Detailed erosion protection recommendations shall be developed when grading plans are finalized and shall be implemented immediately after	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
instability of existing slopes. During construction, site-grading activities would remove vegetative cover from, disturb and expose soil that could become mobilized by storm waters during construction activities. The runoff from unprotected soil areas could include significant sediment loading that could cause increased turbidity and sedimentation in downstream receiving channels. This is a ***potentially significant*** impact.	construction has been performed. GEO-3b: All site drainage shall be designed by the project civil engineer. Surface runoff shall be directed away from the tops and toes of slopes using swales or berms. Surface drainage benches and ditches shall be provided as required by the Town's Building Code. Outlet pipes for surface drains shall extend down to approved erosion resistant outlets well away from unstable slopes. Drainpipes shall consist of rigid PVC or ABS pipe, which is Schedule 40, SDR 35 or equivalent. Positive drainage shall be provided within five feet of buildings to direct surface runoff towards suitable discharge facilities and away from foundations and slabs. Ponding of surface water shall not be allowed. All roofs shall be provided with gutters and downspouts. All downspouts and drains shall connect into closed conduits, which discharge at approved erosion resistant outlets reviewed by the project's engineering geologist. All conduits shall consist of rigid PVC or ABS pipe, which is Schedule 40, SDR 35 or equivalent. Downspouts, surface drains and subsurface drains shall be checked for blockage and cleared and maintained on a regular basis. Surface drains and downspouts shall be maintained entirely separate from foundation drains and slab underdrains. Provisions shall be made for conducting water out of crawl spaces. Foundation drains shall be installed adjacent to all perimeter foundations. Perimeter retaining wall backdrains may be substituted for foundation drains. The foundation drains shall consist of trenches which extend 18 inches deep, or 12 inches below lowest adjacent interior or crawl space grade, whichever is deeper, and which are sloped to drain at least one percent by gravity. The trenches shall be lined completely with a filter fabric, such as Mirafi 140N, or equivalent. A four-inch diameter rigid perforated PVC or ABS pipe (Schedule 40, SDR 35 or equivalent) shall be placed on an I-inch thick layer of drain rock at the bottom of the trenches with perforations down.	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	Accessible subdrain cleanouts shall be provided, and be maintained on a routine basis. The pipes shall be sloped to drain at least one percent by gravity to a non-perforated pipe (Schedule 40, SDR 35 or equivalent) which discharges at an approved outlet. The trench for the perforated pipe shall be backfilled to within six inches of the ground surface with drain rock. The filter fabric shall be wrapped over the top of the drain rock. The upper six inches of the trenches shall be backfilled with compacted clayey soil to exclude surface water. The trench for the non-perforated outlet pipe shall be completely backfilled with compacted soil. Crawl spaces shall be graded to create a smooth surface, and covered with an approved pre-fabricated drainage material such as Mirafi Miradrain 6000. A four-inch diameter, perforated Schedule 40 or SDR 35 pipe shall be provided in a trench excavated extending across the lowest portion of the crawl space. The trench shall extend 12 inches deep, and be sloped to drain at least one percent by gravity. The trench shall be completely lined with Mirafi 140N filter fabric, or equivalent. The perforated pipe slope shall drain at least one percent to a non-perforated Schedule 40 or SDR 35 pipe, which discharges at an approved outlet. The surface and trench shall be covered with reinforced gunite. *GEO-3c:* Routine maintenance of drains and slopes shall be performed. Erosion that occurs must be repaired promptly before it can enlarge. Surface drains, wall backdrains, and subdrains shall be periodically checked for blockage and cleared as necessary. A homeowner's association maintenance and monitoring program shall be established to ensure maintenance of the drains and to perform maintenance and repairs of slopes, as necessary. *GEO-3d:* Minimum building setbacks shall be established adjacent to the top or toe of new slopes in accordance with the current CBC to reduce the potential for seismic slope deformation, lateral fill	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	extension, and/or slope creep from impacting the structures.	
HAZARDS AND HAZARDOUS MATERIALS		
Impact HAZ-2: Wildland Fires	***Mitigation Measure HAZ-2***	
The proposed project would lead to the construction of three estate homes in a high fire hazard area, where none presently exist. These structures would be at risk of loss in the event of a wildfire, increase the number of residents in the high fire hazard zone area, and hence the risks of human harm, all ***potentially significant*** impacts. The proposed project also includes features that would enhance the ability to suppress wildfires or structure fires on and in the vicinity of the site. These features, which include water storage and improved access, new fire hydrants and a reduction of the existing fuel load. The number of wildfires that have occurred in the Ross Valley is minimal but the threat has risen with increased development and human activities. Therefore, it can be expected that the effect of additional development in this area could further increase the occurrence of wildfires. This effect is ***potentially significant***.	HAZ-2a: The proposed project components shall comply with all applicable Uniform Fire Code (UFC), California Fire Code (CFC), the California Urban-Wildland Interface Code (2003 ed.), and all Town and RVFD ordinance requirements for residential development located in high fire danger areas regarding the following: building construction methods and materials; the ease of site access; the adequacy of water mains, namely of fire-flow pressures and volumes; and the re-vegetation of all manufactured slopes with fire retardant (native) landscaping; and strict and timely adherence to RVFD-mandated fire-safety brush clearance regulations. Fire retardant plant species are detailed in the *Pyrophytic vs. Fire Resistant Plants* guide prepared by the University of California Cooperative Extension and FIRE Safe Marin (UCCE 1998). HAZ-2b: The project sponsor shall develop and implement a Fuel Reduction Plan designed to reduce the downed tree limbs, flammable duff, low shrubs, low tree limbs and other built-up fuels pursuant to PRC 4291 and within a 200-foot wide zone along the access road/common driveway. The Plan shall be approved by a qualified arborist or fire safety consultant. HAZ-2c: The project sponsor shall review and revise the tree replacement component (Preliminary Landscape Plan) of the proposed Vesting Tentative Map, as necessary to ensure that new tree plantings will not compromise the effectiveness of the fuel reduction zone (Measure HAZ-2b, above) as they grow and mature. Proposed trees that would be within the defensible space around individual homes, and tree clusters necessary for visual screening that would be within 30 feet of the common driveway should be relocated, to the extent practicable. HAZ-2d: The Town shall require the landowner to conduct follow-up	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures		Level of Impact After Mitigation
		broom removal as required by the RVFD.	
	HAZ -2e:	Easily visible street signs and house numbers shall be posted at Upper Road and at each driveway.	
	HAZ-2f:	Fire extinguishers shall be maintained at the project site during construction.	
	HAZ-2g:	Flammable construction debris and trash shall be removed as it accumulates, but not less than weekly. No trash shall be burned on-site.	
	HAZ-2H:	No outdoor construction work shall be undertaken on "Red Flag Days."	
HYDROLOGY AND WATER QUALITY			
Impact HYDRO-1: Construction Phase Water Quality Impacts	***Mitigation Measure HYDRO-1:***		
Project construction period activities could generate stormwater runoff that could cause or contribute to a violation of water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade the water quality of Unnamed Creek, Ross Creek, and receiving Corte Madera Creek. In areas of active construction, soil erosion may result in discharges of sediment-laden stormwater runoff directly into Unnamed Creek and Ross Creek, if not properly controlled. Additional sediment input to the creeks from project construction activities could contribute to degradation of downstream water quality and impairment of beneficial uses. Sediment can also be a carrier for other pollutants, such as heavy metals, nutrients, pathogens, oil and	HYDRO-1:	Consistent with the requirements of the statewide Construction General Permit, the project applicant shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce potential adverse impacts to surface water quality through the project construction period. The SWPPP shall be designed to address the following objectives: (1) all pollutants and their sources, including sources of sediment associated with construction, construction site erosion and all other activities associated with construction activity, are controlled; (2) where not otherwise required to be under a Water Board permit, all nonstorm water discharges are identified and either eliminated, controlled, or treated; (3) site Best Management Practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity to the Best Available Technology and Best Conventional Technology (BAT/BCT) standard; (4) calculations and design details as well as BMP controls for site	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
grease, fuels and other petroleum products. In addition to sediment, other pollutants associated with construction activities, such as trash, paint, solvents, and sanitary waste from portable restrooms, can discharge into and impair Unnamed Creek, Ross Creek, and Corte Madera Creek if released during construction. This is a ***potentially significant*** impact.	run-on are complete and correct, and (5) stabilization BMPs installed to reduce or eliminate pollutants after construction are completed. The SWPPP shall prepared by a Qualified SWPPP Developer. The SWPPP shall include the minimum BMPs required in Attachment D for Risk Level 2 dischargers (Appendix J-2), or Attachment E for Risk Level 3 dischargers (Appendix J-2) (as applicable, based on final determination of the project's Risk Level status [to be determined as part of the Notice of Intent for coverage under the Construction General Permit]). The SWPPP shall also include the erosion and sediment control and construction BMPs required by the MCSTOPPP "Stormwater Quality Control Plan Checklist" at page 3-2 in its 2008 document *Guidance for Applicants: Stormwater Quality Manual for Development Projects in Marin County*,[5] as well as guidelines and selected BMP design standards in the MCSTOPP document *Minimum Erosion/Sediment Control Measures for Small Construction Projects.*[6] The SWPPP shall also be consistent with the Town of Ross Municipal Code Section 12.28.090(3) titled *Best Management Practices for New Developments and Redevelopments*.[7] BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association (CASQA) Stormwater Best Management Handbook-Construction[8] or the Caltrans Storm Water Quality Handbook Construction Site BMPs Manual.[9] If the project's building and grading permit applications and tentative map submittals are not submitted to the Town and	

[5] *http://www.marincounty.org/depts/pw/divisions/mcstoppp/development/~/media/Files/Departments/PW/mcstoppp/GuidanceforApplicantsv_2508.pdf*

[6] *http://www.marincounty.org/depts/pw/divisions/mcstoppp/development/~/media/Files/Departments/PW/mcstoppp/development/MECM_final_2009.pdf*

[7] *http://www.townofross.org/pdf/resource_center/municipal_code/12.28%20Urban%20Runoff%20Pollution%20Prevention.pdf*

[8] *California Stormwater Quality Association, Stormwater Best Management Handbook-Construction, November 2009.*

[9] *Caltrans, Storm Water Quality Handbook Construction Site Best Management Practices (BMPs) Manual, March 2003.*

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	deemed by the Town ready for processing prior to June 30, 2015, then the Mitigation Measure HYDRO-1 shall further require that the SWPPP also comply with the 2013 Phase II Permit requirements, including Section E.10 Construction Site Storm Water Runoff Control Program, and updated versions of the above referenced Guidance and BMP manuals. The SWPPP shall include a construction site monitoring program that identifies requirements for dry weather visual observations of pollutants at all discharge locations, and as appropriate, depending on the project Risk Level, sampling of the site effluent and receiving waters (receiving water monitoring is only required for some Risk Level 3 dischargers). A Qualified SWPPP Practitioner (QSP) shall be responsible for implementing the BMPs at the site. The QSP shall also be responsible for performing all required monitoring, and BMP inspection, maintenance and repair activities. If the project is Risk Level 2 or 3, the project applicant shall also prepare a Rain Event Action Plan as part of the SWPPP. The following are the types of BMPs that shall be implemented for the project and incorporated into the SWPPP, as appropriate. The project construction BMPs are subject to review and approval by the Water Board. <u>Wind Erosion BMPs:</u> Application of water or other dust palliatives to prevent of minimize dust nuisance. <u>Erosion Control BMPs:</u> • Scheduling • Preservation of Existing Vegetation • Hydraulic Mulch • Hydroseeding • Soil Binders • Straw Mulch • Geotextiles & Mats	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	• Wood Mulching • Earth Dikes and Drainage Swales • Velocity Dissipation Devices • Slope Drains • Compost Blankets • Soil Preparation / Roughening • Non-Vegetative Stabilization <u>Temporary Sediment Control BMPs:</u> • Silt Fence • Sediment Basin • Sediment Trap • Check Dam • Fiber Rolls • Gravel Bag Berm • Street Sweeping and Vacuuming • Sandbag Barrier • Straw Bale Barrier • Storm Drain Inlet Protection • Active Treatment Systems • Temporary Silt Dike • Compost Socks and Berms • Biofilter Bags <u>Tracking Control BMPs:</u> • Stabilized Construction Entrance/ Exit • Stabilized Construction Roadway • Entrance/Outlet Tire Wash <u>Non-Stormwater Management BMPs:</u> • Water Conservation Practices • Dewatering Operations • Paving and Grinding Operations • Clear Water Diversion • Illicit Connection/Discharge • Potable Water/Irrigation • Vehicle and Equipment Cleaning • Vehicle and Equipment Fueling	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	• Vehicle and Equipment Maintenance • Concrete Curing • Concrete Finishing • Material and Equipment Use • Demolition Adjacent to Water <u>Waste Management and Materials Pollution Control BMPs:</u> • Material Delivery and Storage • Material Use • Stockpile Management • Spill Prevention and Control • Solid Waste Management • Hazardous Waste Management • Contaminated Soil Management • Concrete Waste Management • Sanitary/ Septic Waste Management • Liquid Waste Management	
Impact HYDRO-2a: Stormwater Runoff Peak Flows	***Mitigation Measure HYDRO-2a***	
The proposed project would increase the impervious area of the approximately 35.97 acre site by approximately 1.10 acres compared to the existing condition, which is primarily unpaved and contains only a few dilapidated structures. The 1.10 acres (approximately 48,000 square feet) of new impervious surfaces include the common access roadway, and project designated driveway and building envelopes for each of the three residential development sites. The increased impervious area has the potential to increase peak stormwater runoff from the site discharging to Ross Creek, unnamed creek, and the Upper Road stormwater drainage network. This is a ***potentially significant*** impact.	HYDRO-2a: In accordance with the MRP, MCSTOPPP, and the Town of Ross's requirements, project applicant shall submit a *Project Applicant Checklist for NPDES Permit Requirements* to the Town during the building permit phase that shows the post-construction BMPs that will be incorporated in the project to maintain hydrologic pre-project conditions. The critical post-construction BMPs for preventing peak flow increases include: <u>Southerly drainage area</u> • Curb drop inlet at unlabeled point approximately 100 feet west of Point F (Sheet H3, Proposed Conditions Hydrology Map – Enlargement) • Upstream Detention Basin on Swan Swale (Sheet H2, Proposed Conditions Hydrology Map) • Downstream Detention Basin on Swan Swale (Sheet H2,	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	Proposed Conditions Hydrology Map) <u>Northerly drainage area</u> • Curb drop inlet at Point F (Sheet H3, Proposed Conditions Hydrology Map – Enlargement) • Curb drop inlet at Point G (Sheet H3, Proposed Conditions Hydrology Map – Enlargement) <u>Southerly drainage area</u>. The detention basins are critical to achieving the no net increase standard because they are necessary to offset the project's otherwise increasing effect on peak flows. The design performance of the basins depends on the basins: • being constructed in the same or better (more conservative) hydraulic configurations as shown on the proposed conditions maps and analyzed in the engineer's report; • capturing runoff from their entire intended (design) drainage areas, as specifically requires performance of the curb inlet at unlabeled point approximately 100 feet west of Point F (Sheet H3, Proposed Conditions Hydrology Map – Enlargement); • not becoming substantially filled with sediment or large woody debris from Swan Swale, adjacent hillslopes, or failure of their constructed banks; and, • not having the inlets of their low-level outlets (42-inch-diameter risers) substantially plugged with debris and sediment. <u>Northerly drainage area</u>. The curb drop inlets at Point F and Point G are critical to achieving the no net increase standard and maintaining appropriate stormwater pathways because they maintain the drainage area divides and subdrainage area divides underpinning the post-project conditions hydrology	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	calculations. The calculated peak flow reductions assume that each of the curb inlets intercepts and convey 100% of the stormwater delivered in the gutter to their locations and conveys that stormwater to the designated outfall location. If a substantial portion of the gutter flow bypasses one or both of the curb inlets, then greater than anticipated peak flows may occur at Point of Concentration #6 (Unnamed Creek) or Point of Concentration #5 (Upper Road stormwater drainage network). The design performance of the curb drop inlets depends on the inlets: • being designed with large enough inlet capacity to intercept 100% of the design peak flow, accounting for inefficiencies caused by steep gutter slopes, if applicable; and, • not being substantially blocked by debris during the design peak flow. • To provide a factor of safety, the curb drop inlets at Point F and Point G shall be designed to convey a discharge equal to or greater than 150% of the calculated post-project conditions peak flow at their location; • The post-project conditions peak flow at Point F shall be calculated assuming 100% bypass of the drop curb inlet at the unlabeled point approximately 100 feet west of Point F (i.e., simulating blockage by debris at unlabeled point); and, • To provide a factor of safety, the detention basin shall be designed to provide live storage volume (portion of volume below the spill elevation) equal to or greater than 125% of the live storage volume required to reduce the peak flow at Point of Concentration #4 to below existing conditions. <u>Post-Construction BMP Operations and Maintenance Plan.</u> The project applicant shall also submit an Post-Construction BMP Operation and Maintenance (O&M) Plan to the Town with the application for the building permit. The O&M Plan shall identify the party responsible for long-term maintenance	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	and repairs of the critical post-construction BMPs (including but not limited to the critical post-construction BMPs identified in Mitigation Measures HYDRO-2A and HYDRO-2B), funding sources, and a maintenance plan including a schedule of activities for the BMPs. The O&M Plan shall directly incorporate or refer to a Maintenance Agreement that the project applicant or property owner shall enter into with the Town. The Maintenance Agreement shall indicate that the project applicant or property owner is responsible for long-term performance evaluation, maintenance, and necessary repairs of the critical post-construction BMPs. The Maintenance Agreement shall stipulate that failed performance of the BMPs caused by under-design, normal wear and tear, local flooding damage, impractical maintenance requirements during individual storms, flooding inundation by Phoenix Dam failure, etc., may require physical modification or replacement of the facilities to meet the original design performance standards documented in the engineer's drainage plan and hydrology report. The Maintenance Agreement shall transfer from the project applicant or property owner to new property owner in the event of sale of the property. The project applicant or property owner shall submit an annual report to the Town documenting the O&M activities for and observed performance of the BMPs. At a minimum, the routine monitoring and maintenance activities documented in each annual report shall include measurement of the total volume and live storage volume of each detention basin on Swan Creek demonstrating that the prior to October 15th of each year: • the live storage volumes of each detention basin (below the spill elevation) required under Mitigation Measure HYDRO 2-A is not less than 90% of the original design live storage volume, and • the live surface storage volume (below the elevation of the outlet) of each bioretention area required under Mitigation	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	Measure HYDRO 2-B shall be documented to be not less than 90% of the original design live storage volume. If the project's building and grading permit applications and tentative map submittals are not submitted to the Town and deemed by the Town ready for processing prior to June 30, 2015, then Mitigation Measure HYDRO-2A shall further require that the development project's Post-Construction BMP's be designed to also comply with the 2013 Phase II Permit requirements, including Operations and Maintenance Requirements contained in Section E.12.h Operation and Management of Storm Water Control Measures. If the project's building and grading permit applications and tentative map submittals are not submitted to the Town and deemed by the Town ready for processing prior to June 30, 2016, then Mitigation Measure HYDRO-2A shall further require that the development project's Post-Construction BMP's be designed to also comply with the 2013 Phase II Permit requirements, including Section E.12.f Hydromodification Management.	
Impact HYDRO-2b: Post-Construction Phase Water Quality Impacts	***Mitigation Measure HYDRO-2b***	
Under existing conditions, the project site is largely unpaved and covered with vegetation, and the only impervious areas are the existing narrow driveway and the failed roofs of the existing dilapidated buildings. Implementation of the completed project would generate runoff from roofs and driveway and access road surfaces which may include typical contaminants (e.g., related to building materials, household activities and maintenance, and vehicle maintenance and traffic, etc., such as sediment; metals; organic compounds such as pesticides, polynuclear aromatic hydrocarbons, and oil and grease; pathogens; nutrients; and trash and debris) that would be deposited on	HYDRO-2b: In accordance with the MRP, MCSTOPPP, and the Town of Ross's requirements, project applicant shall submit a *Project Applicant Checklist for NPDES Permit Requirements* to the Town during the building permit phase that shows the post-construction BMPs that will be incorporated in the project to preserve pre-project storm water quality. The critical post-construction BMPs for stormwater quality protection include: <u>Southerly drainage area</u> • Live storage volume portion of the upstream detention pond on Swan Swale; • Live storage volume portion of the downstream detention	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
impervious surfaces and mobilized in stormwater runoff. The project therefore has the potential to increase the delivery of pollutants (e.g., sediment, metals, and fuels) to Unnamed Creek, Ross Creek, and receiving Corte Madera Creek. Impacts to the quality of surface water and groundwater that could result in a violation of water quality standards or waste discharge requirements are ***potentially significant***.	pond on Swan Swale; and, • Vegetated surface bioretention area between the outlet of the stormwater down-drains originating from Point F and Swan Swale downstream from the detention ponds. <u>Northerly drainage area</u> • Vegetated surface bioretention area between the new access road entrance and the right bank of Unnamed Creek near the inlet of the existing culvert running beneath Upper Road (i.e., immediately upstream from Point of Concentration #6). • Vegetated surface bioretention area within the Town of Ross right-of-way and stormwater drainage system between the new access road entrance and the inlet of the existing culvert running beneath Upper Road (i.e., immediately upstream from Point of Concentration #5). <u>Post-Construction BMP Design Criteria - Water Quality Protection</u>. • The live storage volume portion of the upstream detention pond on Swan Swale shall occupy a surface area not less than 4 percent of the post-construction developed area draining to Swan Swale upstream from the detention pond dam (not including undeveloped, unimproved natural areas); • The live storage volume portion of the downstream detention pond on Swan Swale shall occupy a surface area not less than 4 percent of the post-construction developed area (not including undeveloped, unimproved natural areas) draining to Swan Swale between the upstream and downstream detention pond dams (including total area tributary to curb drop inlet at unlabeled point approximately 100 feet west of Point F); • The bioretention area receiving stormwater discharge from	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	the curb drop inlet at Point F shall have a total surface area below the downstream spill or rim elevation not less than 4 percent of the total post-construction developed area (not including undeveloped, unimproved natural areas) tributary to the curb drop inlet at Point F, Suitable design provisions shall be made to ensure that discharge from the bioretention area does not erode the land surface or creek bank surface between the outlet and Swan Swale; • The bioretention area receiving stormwater discharge from the curb drop inlet at Point G and the remainder of the post-construction developed area tributary to Point of Concentration #5 shall have a total surface area below the downstream spill or rim elevation not less than 4 percent of the total post-construction developed area tributary to Point of Concentration #5 (Area 3) (Sheet H3, Proposed Conditions Hydrology Map – Enlargement); and • The bioretention area receiving stormwater discharge from the post-construction developed area tributary to Point of Concentration #6 shall have a total surface area below the downstream spill or rim elevation not less than 4 percent of the total post-construction developed area tributary to Point of Concentration #6 (Area 4) (Sheet H3, Proposed Conditions Hydrology Map – Enlargement). Post-Construction BMP Operations and Maintenance Plan. These critical post-construction water quality BMPs shall be maintained according to the O&M Plan and Maintenance Agreement described above for Mitigation Measure HYDRO-2A. If the project's building and grading permit applications and tentative map submittals are not submitted to the Town and deemed by the Town ready for processing prior to June 30, 2015, then Mitigation Measure HYDRO-2B shall further require that the development project be designed with site design, source control, Post-Construction BMP's, and Low Impact Development (LID) measures which comply with the 2013	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	Phase II Permit requirements, including Operations and Maintenance Requirements contained in Section E.12.h. Operation and Management of Storm Water Control Measures. If the project's building and grading permit applications and tentative map submittals are not submitted to the Town and deemed by the Town ready for processing prior to June 30, 2016, then Mitigation Measure HYDRO-2B, if applicable, shall further require that the development project's Post-Construction BMP's be designed to also comply with the 2013 Phase II Permit requirements, including Section E.12.f Hydromodification Management.	
Impact HYDRO-3: Substantial Erosion or Siltation through Alteration of Drainage Patterns	***Mitigation Measure HYDRO-3***	
The project would not significantly alter site drainage patterns in so far as site runoff leaving the property boundaries would be contained within the same natural and man-made channels. However, grading to accommodate the access road and the three building envelopes would result in transferring 0.26 acres of drainage area from the northerly to the southerly drainage area. This drainage area transfer has the potential to increase the peak flows in the southerly drainage area which are conveyed within Swan Swale to Ross Creek. This is a ***potentially significant*** impact which can be reduced to a less-than-significant level via implementation of Mitigation Measures HYDRO-1 and HYDRO-2A.	HYDRO-3: See Mitigation Measures HYDRO-1 and HYDRO-2A.	***Less Than Significant***
Impact HYDRO-4: Flooding by Altering Drainage Patterns or Generating Runoff that Exceeds the Capacity of the Stormwater Drainage System	***Mitigation Measure HYRDO-4***	
As discussed above under Impact HYDRO-2A, the project would implement critical post-	HYDRO-4: See Mitigation Measures HYDRO-2A.	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
construction BMPs including detention basins and curb drop inlets to achieve no net increase in stormwater peak flows exiting the site into each of the receiving waterbodies, including the affected portion of the Town's stormwater drainage system on Upper Road. However, without adequate mitigation and implementation of the recommendations included in the hydrology report prepared by the applicant's engineer, and according to the design criteria given in Mitigation Measure HYDRO-2A, the impact for the project to result in flooding that exceeds the capacity of the stormwater drainage system is ***potentially significant***.		
Impact HYDRO-5: Expose Structures to Risk of Damage Due to Flooding as a Result of Phoenix Dam Failure.	***Mitigation Measure HYRDO-5***	
A significant impact, including potential for loss of life, would occur if the project installed structures at locations on the site that could be inundated by flooding, includes flooding due to failure of a levee or dam. There are no levees in the project vicinity. A large part of the project site is located within a dam failure inundation hazard area mapped along Ross Creek downstream from Phoenix Dam. The hazard area is determined by the California Office of Emergency Services and mapped by the Association of Bay Area Governments.[10] The mapped dam failure hazard area covers upland portions of the project site which rise more than 150 feet above the banks of Ross Creek, including the portion of the site where three residential structures are planned. However,	HYDRO-5: Implementation of Mitigation Measure HYDRO-2A, which requires the project to prepare for review and approval by the Town an Operations and Maintenance (O&M) Plan, would reduce the impact to a less-than-significant level. The O&M Plan which would include provisions for repair and maintenance of the project's critical post-construction BMPs, including the bioretention area downslope from Point F, which is the feature most likely to be damaged by dam failure, related flooding inundation.	***Less Than Significant***

[10] *Association of Bay Area Governments, "Bay Area Dam Inundation Hazards," http://www.abag.ca.gov/bayarea/eqmaps/damfailure/damfail.html, Accessed January 19, 2011.*

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
because the hazard area boundaries do not correspond to a gradually reducing elevation profile moving downstream from Phoenix Dam, the boundaries were evidently not determined with a hydraulic model. Rather, the grid-patterned shape of the hazard area suggests that it was mapped at a very low resolution (i.e., large pixels) with general information. Therefore, the boundaries do not correspond to analytically predicted limits of flooding. Phoenix Dam failure induced flooding would be substantially more likely to damage the bioretention area identified in Mitigation Measure HYDRO-2B at the base of the stormwater down-drain conveying from Pt F than the it would the detention ponds on Swan Swale or the residential structures proposed by the project. Damage to the bioretention area is a ***potentially significant*** impact.		
NOISE		
Impact NOISE-3: Construction Noise Impacts	***Mitigation Measure NOISE-3***	
<u>Access Road and Driveways</u> Construction of the access road and driveways would temporarily increase noise levels at nearby noise-sensitive receptors by trucks delivering and recovering materials at the site, grading and paving equipment, saws, hammers, the radios and voices of workers, and other typical provisions necessary to construct the access road, driveways and homes on the three residential lots. Construction of the access road and driveways is estimated to take up to six months with up to two months of this period involving the noisiest	NOISE-3: Noise impacts due to construction activities would be reduced by implementing the restrictions on construction operations in the Town's Municipal Code, which prohibits construction activities between the hours of 5:00 PM and 8:00 AM on weekdays and no work on weekends. Because of the proximity to existing residences, it is recommended that construction activities be further restricted by incorporating the following conditions in related construction contract agreements and on the building permit plans. 1. *Additional Restrictions on Construction Hours.* The following measures are required to limit construction and related activities to the portion of the day when the number of persons in the adjacent residential uses is lowest. A. There shall be no startup of construction related	***Significant and Unavoidable***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
excavation, grading and paving activities. The construction access road and driveways is considered to constitute a ***significant***, ***unavoidable***, short-term noise impact. <u>Home Construction on the Residential Lots</u> The timing of individual home construction at the residential parcels is unknown due to the fact that the individual property owners may have different schedules and goals. While it is possible for all homes to be constructed during the same building season, this is considered unlikely considering the expected size and complexity of the individual building projects and differing timetables and objectives of the parcel owners. This would constitute a ***significant***, unavoidable, short-term noise impact.	machinery or equipment prior to 8:00 AM Monday through Friday. B. The delivery of materials or equipment to the site shall be limited to weekday (Monday through Friday) non-holiday hours between 8:00 AM and 5:00 PM. C. Machinery shall not be cleaned past 5:00 PM or serviced past 5:00 PM Monday through Friday 2. *Posted Construction Hours.* Clearly post construction hours on a sign at the entrance to the construction site. 3. *Construction Equipment Mufflers and Maintenance*. Muffle and maintain all equipment used on-site. All internal combustion engine-driven equipment shall be fitted with mufflers that are in good condition. Good mufflers shall result in non-impact tools generating a maximum noise level of 80 dB when measured at a distance of 50 feet. 4. *Idling Prohibitions.* Prohibit unnecessary idling of internal combustion engines. Equipment shall be turned off when not in use. 5. *Worker Radio Noise.* Prohibit audible construction workers' radios on adjoining properties. 6. *Equipment Location and Shielding.* Locate all stationary noise-generating construction equipment such as air compressors as far as practical from existing nearby residences and other noise-sensitive land uses. Acoustically shield such equipment. 7. *Quiet Equipment Selection.* Select quiet construction equipment, particularly air compressors, whenever possible. (Fit motorized equipment with proper mufflers in good working order and appropriate for the equipment.) 8. *Noise Disturbance Coordinator.* Designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. This individual would most likely be the contractor or a contractor's representative. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would require that reasonable measures warranted to correct the problem be	

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	implemented. Conspicuously post a telephone number for the disturbance coordinator at the entrance to the construction site, provide it to the Town of Ross Police Chief and Town Manager, and include it in the notice sent to neighbors regarding the construction schedule. 9. *Heavy Equipment Storage.* Heavy equipment, such as paving and grading equipment, shall be stored on-site whenever possible to minimize the need for extra heavy truck trips on local streets. 10. *Backup Alarms.* The contractor shall minimize use of vehicle backup alarms. A common approach to minimizing the use of backup alarms is to design the construction site with a circular flow pattern that minimizes backing up of trucks and other heavy equipment. Another approach to reducing the intrusion of backup alarms is to require all equipment on the site to be equipped with ambient sensitive alarms. With this type of alarm, the alarm sound is automatically adjusted based on the ambient noise.	
UTILITIES AND SERVICE SYSTEMS		
Impact UTIL-1 Wastewater Collection Impacts	***Mitigation Measure UTIL-1***	
Water and sanitary sewer lines would be installed beneath the new road and driveways The sewer lines would connect with an existing 6-inch diameter vitrified clay pipe gravity sewer mainline beneath Upper Road. Although the existing 6-inch VCP may be properly sized to accommodate future needs of the project, Ross Valley Water District has indicated that the mainline system downstream to the trunkline may be required to be replaced to accommodate the increased flows. Upgrades to the mainline down to the trunkline would take place within areas either under or immediately adjacent to Upper Road that have previously been disturbed through roadway construction or	UTIL-1 The following measures shall be implemented to address potentially significant wastewater collection impacts: • Prior to the issuance of a building permit, the applicant shall adhere to all requirements pursuant to the PSX permit, such as the responsibility to fund improvements (including, but not limited to, the PSX Permit sewer mainline, the private sewer laterals, the asphalt pavement required by the Town/municipality road encroachment permit, and erosion control measures from the possible California Dept. of Fish and Game Streambed Alteration Agreement, etc.). • The project shall not exceed available distribution capacity of off-site sewer lines as defined in the PSX application and the Sanitary Sewer Hydraulic Evaluation and Capacity Assurance Plan.	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
utility work. Furthermore, any activities related to construction of a new mainline would be required to adhere to Best Management Practices (BMPs), NPDES permitting and other regulations controlling storm water runoff. On March 19, 2013 the applicant filed a public sewer extension application with the district. During this review process of this application it will be determined what improvements to the trunkline, if any, the applicant must adhere by. Therefore, this is a ***potentially significant*** impact.	This measure would ensure that the appropriate upgrades are made to the existing sewer line, if necessary, resulting in a ***less-than-significant*** impact related to wastewater treatment capacity. As previously stated, any necessary physical improvements would take place within the existing right-of-way for the sewer line and therefore not result in significant secondary environmental impacts.	
CULTURAL RESOURCES		
Impact CULT-1: Archaeological Resources	***Mitigation Measure CULT-1***	
No evidence of prehistoric or historic archaeological sites has been identified for the project site. The cultural resources study conducted at the site did not identify any archaeological resources through archival research or field survey. However, construction could result in encountering unanticipated archaeological resources, as prehistoric sites have been identified in the Town near the project site. Therefore, there is a possibility of unanticipated and accidental archaeological discoveries during ground-disturbing project-related activities. Unanticipated and accidental archaeological discoveries during project implementation have the potential to affect significant archaeological resources. Therefore, these impacts are considered to be ***potentially significant***.	CULT-1 The following measure shall be implemented throughout the grading phase of the project: If, during the course of construction, cultural resources (i.e., prehistoric sites, historic sites, exotic rock (non-native), or shell or bone, isolated artifacts or other features) are discovered, work shall be halted immediately within 50 feet of the discovery, the Town of Ross Planning Department shall be notified, and a professional archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to determine the significance of the discovery. Determination of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups). Prior to the commencement of project excavations, all construction personnel shall be informed of the potential to inadvertently uncover cultural resources and human remains and the procedures to follow subsequent to an inadvertent discovery of cultural resources or human remains. In addition, should excavations for site testing or data recovery become necessary, the appropriate Native American representatives shall be informed in order to provide on-site	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	tribal monitors.	
Impact CULT-2: Paleontological Resources	***Mitigation Measure CULT-2***	
There are no known paleontological resources or unique geological features on the proposed project site. Metamorphic influences, in combination with an absence of paleontological discoveries within the Jurassic period near the project site make the likelihood that paleontological resource are present on the project site low. However, there is a potential for the inadvertent discovery of unique archaeological resources during ground disturbing project activities. This is considered a ***potentially significant*** impact.	CULT-2: The following measure shall be implemented throughout the grading phase of the project: A note shall be placed on the grading plans that if paleontological resources are discovered on-site, the applicant shall retain a qualified paleontologist to observe grading activities and salvage fossils as necessary. The paleontologist shall establish procedures for paleontological resource surveillance and shall establish, in cooperation with the project developer, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of fossils. If major paleontological resources are discovered, which require temporarily halting or redirecting of grading, the paleontologist shall report such findings to the project developer, and to the Town of Ross Planning Department. The paleontologist shall determine appropriate actions, in cooperation with the project developer, which ensure proper exploration and/or salvage. Excavated finds shall be offered to a State-designated repository such as Museum of Paleontology, U.C. Berkeley, the California Academy of Sciences, or any other State-designated repository. The paleontologist shall submit a follow-up report to the Department of Museums and Planning Department which shall include the period of inspection, an analysis of the fossils found and present repository of fossils.	***Less Than Significant***

Significant Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
Impact CULT-3: Human Remains	***Mitigation Measure CULT-3***	
Archaeological investigations for the proposed project are adequate to identify known prehistoric and historic resources in the area. No evidence of prehistoric or historic archaeological sites or human remains has been identified for the project site. However, construction could result in encountering human remains, as a prehistoric site has been identified near the project site. Thus, impacts to human remains are considered ***potentially significant***.	CULT-3: The following measure shall be implemented throughout the grading phase of the project: If human remains are discovered, all work shall be halted immediately within 50 feet of the discovery, the Town of Ross Planning Department shall be notified, and the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent would make recommendations regarding the treatment of the remains with appropriate dignity.	***Less Than Significant***