

EXECUTIVE SUMMARY

S.1 INTRODUCTION

The Soldier Field Subdivision (project) is proposed by Soldier Field Partners, LLC (project sponsor). The project would subdivide an 87.9-acre site into eight residential lots and a remainder parcel (Parcel A) and construct eight single-family homes, as well as necessary utility and infrastructure improvements. The project site is located on Burton Ridge in the southeastern section of the City of Lafayette (City), along the boundary between it and the City of Walnut Creek, in Contra Costa County, California. The property is surrounded by single-family residential uses to the west and south and by undeveloped land to the north. To the east is undeveloped land within the Rossmoor Residential Community. The property's land use designation under the City of Lafayette *General Plan (General Plan)* is Rural Residential, and its zoning is Low Density Residential-10 (L-R-10). The property is also within the City's Hillside Overlay District (H-O-D).

The proposed project would require the City's approval of:

- A **Tentative Map** (TR6569) to allow the subdivision of the 87.9-acre project parcel into residential lots ranging in size from 1.5 to 5 acres and a remainder parcel;
- A **Hillside Development Permit** (HDP86-04) pursuant to Chapter 6-20 of the Lafayette Municipal Code (LMC) for the eight housing sites, roads and driveways; and
- **Exceptions** to the Hillside Development Ordinance to allow development on slopes greater than 30 percent, within Class I and II ridgeline setbacks, and above a 15-degree declination from the ridgeline.

In addition, the Local Agency Formation Commission (LAFCO) would need to approve annexation of the site to the East Bay Municipal Utility District's (EBMUD) service area for water service to the proposed project.

The residential lots would total approximately 28.3 acres and would range in size from 1.5 acres to 5 acres each, with an average size of 3.5 acres. The project density would be approximately 0.09 dwelling units per acre, based on the total acreage of the project site. The development would consist of custom homes designed and oriented in a manner that would minimize cut-and-fill operations. Parcel A would consist of 59.6 acres of open space that would include a 0.8-acre site containing an existing telecommunications facility.

The project site currently has access from Lucas Drive and Lucas Circle. Lots 1 through 7 would be located at the southern end of the project site and would be accessible through an extension of Lucas Drive, which currently terminates at the property line of the site. Lucas Ranch Road and Streets A and B (proposed private streets) would serve the seven lots. Lot 8 would have access from the eastern extension of Lucas Circle.

The City has prepared this Environmental Impact Report (EIR) to examine the potential environmental impacts of the proposed project prior to making an informed, discretionary decision on the development proposal. The EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) and the *CEQA Guidelines*. It is not the purpose of this EIR to recommend either approval or denial of a project.

S.2 SUMMARY OF POTENTIAL IMPACTS

To determine the scope of this EIR, the City prepared and distributed an Initial Study and a Notice of Preparation (NOP) for the proposed project. The purpose of the Initial Study is to assist in the preparation of an EIR by focusing the EIR on the effects determined to be potentially significant, and identifying the effects determined not to be significant and explaining the reasons for those determinations. The purpose of the NOP is to solicit comments from public agencies and interested parties, and to identify specific environmental issues that should be considered in the EIR.

The Initial Study and NOP identified a total of ten environmental parameters that were examined to determine whether the proposed project would produce potentially significant environmental impacts.

- Land Use and Planning
- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Noise
- Public Services, Utilities and Service Systems
- Transportation/Traffic

The conclusions of the EIR regarding each of these potentially significant impacts are presented in this Executive Summary. In addition, Table S-1 (at the end of the Executive Summary) summarizes each significant or potentially significant effect and the corresponding mitigation measure(s) proposed to minimize or avoid significant impacts associated with development of the proposed project. The EIR concludes that all project impacts could be mitigated to less than significant levels.

S.2.1 Land Use and Planning

Development of the proposed project would require approval of exceptions to the Hillside Development Ordinance. An evaluation of the proposed project with applicable *General Plan* policies concludes that, with recommended mitigation measures as well as mitigation outlined in the EIR, the potentially significant land use or planning impacts would be reduced to a less than significant level. Therefore, the proposed project would be consistent with the *General Plan* and would not create significant unmitigable land use impacts.

S.2.2 Aesthetics

The project would be situated on an 87.9-acre site that is currently undeveloped and considered a significant visual resource within the community. The EIR has determined that the project could produce potentially significant aesthetic impacts, including the potential to affect a scenic vista and degrade the visual character and quality of the project site and its surroundings.

The EIR specifies mitigation measures designed to address the potential aesthetic impacts. The measures would require single-story homes on Lots 4, 5 and 7 with a height of no more than 15 feet and the project sponsor to submit a Vegetation Maintenance and Monitoring Plan and landscape plans that conform to the outlined performance standards.

The EIR concludes that all potentially significant aesthetic impacts would be mitigated to less than significant levels with implementation of mitigation measures.

S.2.3 Air Quality

Construction of the proposed project would include activities that could increase the release of airborne pollutant emissions. Project construction could generate substantial amounts of dust (PM₁₀ and PM_{2.5}) from sources such as grading and vehicle travel over unpaved surfaces. However, long-term operation of the proposed project would not result in a significant air quality impact. The EIR specifies mitigation measures to reduce emissions from construction activities. The project would be required to implement both the Basic and Enhanced Control Measures recommended by the Bay Area Air Quality Management District (BAAQMD).

The EIR concludes that the potentially significant air quality impacts would be mitigated to less than significant levels with implementation of the specified mitigation measures.

S.2.4 Biological Resources

The proposed project could have potentially significant impacts on special-status species and their habitats. Two special-status plant species occur on the project site (Diablo helianthella and the robust monardella); although these species are located away from the proposed construction areas, they could potentially be affected by construction of the project. In addition, non-native ornamental plant species could invade the habitat areas of the project site. Several special-status animals could occur on the project site. Alameda whipsnakes could potentially travel through the project site but are unlikely to remain on-site for extended periods of time because of the absence of core habitat. California red-legged frogs could potentially occur in the riparian areas and/or seeps of the project site. Neither American badgers nor their characteristic burrows were observed at the project site, but these badgers could potentially colonize the project site prior to construction. The loggerhead shrike and a number of species of raptors could also potentially colonize the project site prior to construction. Yellow warblers could potentially nest in the riparian areas of the project site, although they prefer extensive areas of willows. Bridge's coast range shoulderband snail could occur in the grassland and the adjacent woodland.

The proposed project could also have potentially significant impacts on riparian habitats and federally protected wetlands. The willow riparian habitat and wetland (mesic herbaceous vegetation) areas of the project site are sensitive plant communities because they have experienced a decline due to urban, agricultural, and other types of development. Alteration of the hydrology of these wetland areas is a potentially significant impact because of their proximity to the proposed homes. The proposed arrangement of the residential lots would allow movement of animals through the site; however, fencing the lots would prevent animal movement through the project site. The proposed project could also have a potentially significant impact on protected trees on the site.

The EIR identifies mitigation measures to address the potential impacts on biological resources. These measures would require the project sponsor to develop a management plan to ensure that adequate habitat remains for the Diablo helianthella and robust monardella. The measures also include special precautions

to protect special status species, protected trees and wetland habitat. The EIR concludes that all potentially significant impacts on biological resources would be mitigated to less than significant levels with implementation of the specified mitigation measures.

S.2.5 Cultural Resources

Surveys of the project site were conducted to determine whether there is the potential for historic, archaeological, paleontological, or human remains to be discovered during project construction. No sensitive cultural resources were identified during surveys of the site. The EIR concludes that there would be no effects on known cultural resources and that there is only a minimal possibility of discovering archaeological or paleontological resources during construction of the project. Potential effects would be most likely to occur during ground disturbing activities (grading and excavation).

The EIR identifies mitigation measures to address the potential discovery of unidentified resources to ensure that with protection of such resources and that appropriate procedures are followed if human remains are discovered. The EIR concludes that all potentially significant cultural resource impacts would be mitigated to less than significant levels with implementation of the specified mitigation measures.

S.2.6 Geology and Soils

The project site, as well as most of the San Francisco Bay Area, is in an area of seismic activity, and the development of most land within the region carries with it a certain degree of risk. Building codes and current engineering standards are routinely employed to minimize the risks associated with land development. The EIR identified that the project site's soils exhibit an expansive characteristic, which if not fully analyzed and addressed, could adversely affect the foundation systems of buildings as well as sidewalks, roads and driveways.

The EIR identifies mitigation measures to address these potential impacts. The measures include the City's review and approval of all grading plans prior to the start of construction to ensure their suitability for addressing on-site geologic conditions and the monitoring of on-site earthwork by a geotechnical engineer.

The EIR concludes that all potentially significant geology, soils and seismicity impacts would be mitigated to less than significant levels with implementation of the specified mitigation measures.

S.2.7 Hydrology and Water Quality

The proposed project is in the Grizzly Creek Watershed, and the nearest stream or creek to the project site is Grizzly Creek, which is approximately 1,100 feet west of the development area. Most of the proposed development would occur in the southern portion of the project site, which drains into two natural swales that direct runoff to Grizzly Creek. The remaining portion of the site drains towards Lucas Drive to the west. Runoff from this area is collected in the City's existing storm drain system and discharged into Grizzly Creek.

Construction related erosion problems could result from project implementation, which could increase sedimentation in receiving waters and lead to a reduction in water quality. The EIR identifies mitigation measures to address potential construction water quality impacts, including the preparation of an erosion control plan (ECP), hydroseeding, compliance with the National Pollutant Discharge Elimination System (NPDES) General Construction Activities Storm Water Permit Requirements, and the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The project would also implement best management practices (BMPs) that would further reduce potential water quality impacts.

In addition, while the proposed project is not anticipated to result in a significant increase of runoff, analysis of the City's existing storm drain system has not been performed. Therefore, the EIR includes a mitigation measure requiring preparation of a hydrology and hydraulic analysis. The mitigation measure would require any impacts or deficiencies to be mitigated as part of the subdivision improvements.

The EIR concludes that all potentially significant hydrology and water quality impacts would be mitigated to less than significant levels with the implementation of the specified mitigation measures.

S.2.8 Noise

Project implementation would introduce long-term operational noise from automobiles, heating and cooling systems, pool and spa equipment, human voices, and landscape maintenance. These sources would not increase noise to levels that exceed the City's standards. Impacts would be less than significant and no mitigation would be required, except to place mechanical equipment as far away from sensitive receptors as feasible.

Construction activities associated with the proposed project, including grading and construction of buildings, would introduce short-term noise impacts. The project is relatively small and construction activities would not last for long periods of time. Construction activities would also increase noise along access routes due to movement of equipment and workers to and from the site. The EIR identifies mitigation measures to address the potential noise impacts; these measures would require the project sponsor to reduce short-term impacts from temporary construction noise.

The EIR concludes that all potentially significant noise impacts would be mitigated to less than significant levels with implementation of the specified mitigation measures.

S.2.9 Public Services, Utilities and Service Systems

The proposed project would result in an incremental increase in the demand for public services, including fire and police protection, emergency medical service, parks, schools, wastewater, water, storm drainage and solid waste disposal, due to the small scale of the residential development. However, the Fire Protection District has indicated that site access and the high elevation of the two homes above 670 feet could inhibit their ability to provide service.

Furthermore, although the proposed project is within EBMUD's ultimate service boundary it is currently outside the EBMUD's service area. The project would be required to be annexed into the EBMUD prior to being granted water service. In addition, the upper limit of EBMUD's Bryant Pressure Zone is at elevation 645 feet, and its maximum allowable elevation for a water meter is 670 feet. Therefore, water service to the six lots between 645 and 670 feet (Lots 1, 2, 3, 5, 6 and 8) would require low-pressure service agreements, and water service from EBMUD may not be available to the two lots above 670 feet (Lots 4 and 7).

The implementation of the project would have impacts related to fire protection services and access to sufficient water supplies. The EIR identifies mitigation measures to address these potential impacts, including compliance with the Fire Protection District's service requirements, annexation into the EBMUD, City approval of water pumping facility plans, and implementation of water conservation measures.

The EIR concludes that all potentially significant public services, utilities and service system impacts would be mitigated to less than significant levels with implementation of the specified mitigation measures.

S.2.10 Transportation/Traffic

The proposed project would generate approximately 114 daily trips, which includes approximately 13 a.m. peak hour trips and approximately 11 p.m. peak-hour trips. This increase in trips is not considered to be substantial, and impacts on study intersections would be less than significant. Also, the study intersections are forecast to continue to operate at an acceptable LOS (LOS D or better) during the a.m. and p.m. peak-hours with the addition of project-generated trips in forecast cumulative year. The proposed project would meet the City's requirements for parking and design of private roads. No traffic impacts are identified in the EIR and no mitigation is required.

S.3 CUMULATIVE AND GROWTH-INDUCING IMPACTS

Cumulative and growth-inducing impacts of the proposed project combined with past, present, and reasonably foreseeable future projects are evaluated in Chapter 4 of this EIR. With implementation of the specified mitigation measures, the projects contribution to cumulative or growth-inducing impacts would not be a considerable contribution to a cumulatively significant impact.

S.4 SIGNIFICANT UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

Section 15126.2(b) of the *CEQA Guidelines* requires an EIR to “describe any significant impacts, including those that can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.”

Chapter 3 of this EIR describes the potential environmental impacts of the proposed project and specifies mitigation measures to reduce impacts to a less than significant level, where feasible. With implementation of the specified mitigation measures, no significant unavoidable impacts would occur.

S.5 SUMMARY OF ALTERNATIVES EVALUATED

Chapter 5 of this EIR evaluates alternatives to the proposed project in accordance with the *CEQA Guidelines* Section 15126.6. Three alternatives that were initially considered (No Exemptions, Alternative Sites and the Conservation Alternatives) were eliminated from further analysis because they either were infeasible or would not meet the overall objectives of the proposed project.

Three other alternatives were considered further and are analyzed in this EIR:

Alternative 1: No Project-No Development Alternative

Alternative 2: Neighborhood Extension Alternative

Alternative 3: Revised Site Plan Design Alternative

S.5.1 No Project-No Development Alternative

Section 15126.6(e) of the *CEQA Guidelines* requires an EIR to analyze a No Project Alternative to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project. The No Project-No Development Alternative would result in the project site remaining in its current undeveloped condition.

Under this alternative, the environmental conditions on the proposed project site would not change. All of the environmental impacts associated with the proposed project identified in Chapter 3 would be avoided if this alternative were selected. However, this alternative would not preclude the possibility of

future development on the site. Therefore, while the impacts of the proposed project would be completely avoided in the near term, future impacts could occur if the property is developed with a different project in the future. It is anticipated that the impacts of a future residential project on the site would be similar to these of the currently proposed project. The level of impact of a future project would be based on the number of residential units, the size and location of the units, and the overall design of the project.

S.5.2 Neighborhood Extension Alternative

Similar to the proposed project, the Neighborhood Extension Alternative would develop eight residential lots and homesites on the project site. However, the lots would be smaller (approximately 20,000 square feet) than the lots in the proposed project making them similar in character to adjacent neighborhood lots. The lots would also be clustered together to minimize the amount of hillside grading, to prevent grading and development on and near the ridgelines, and to maximize the amount of open space on the project site. Under this alternative, all of the lots would be located to the west and north of both the Class I and Class II Ridgelines on the property and, therefore, the ridgelines would not be disturbed by site grading for the construction of roads, driveways, and homesites. Six residential lots would be located on a cul-de-sac that would connect to Lucas Drive; the remaining two lots would be located off a private driveway that would connect to Lucas Circle.

The Neighborhood Extension Alternative would still require exceptions to the City's Hillside Development regulations. However, it would be easier for the Planning Commission to grant those exceptions because this alternative would cluster the development in areas that are closer to the base of the hillside and further away from the ridgelines. Therefore, this alternative would reduce the land use and planning impacts of the proposed project. Aesthetic impacts would also be less than those of the proposed project because more of the hillside and ridgeline would be preserved and development would occur at lower elevations. Likewise, impacts to biological resources would be reduced under the Neighborhood Extension Alternative given that most of the wetlands and grassland would be undisturbed. However, geology and soils impacts would be greater because more home sites would be affected by existing landslides and unstable soils. This alternative would produce the same general environmental impacts in other areas as the proposed project, in varying degrees of significance.

S.5.3 Revised Site Plan Alternative

Similar to the proposed project, the Revised Site Plan Design Alternative would develop eight residential lots and homesites on the project site, and would have virtually the same street layout. However, under this alternative, two of the eight homesites would have different locations and lot lines. These home locations would have less visual impact as viewed from the immediate residential neighborhoods to the south and west of the project site. With these home locations, there would be more open space near the southern and western edges of the site, thereby making it look less dense and less developed than the proposed project when viewed from these neighborhoods. Under this alternative, the two relocated homes would be away from the southern and western edges of the site, in a more central location and closer to the Class I Ridgeline on the project site. One home would be southeast of the ridge, which would partially conceal views of the home from areas north and west of the project site; however, this home would be visible to the east. The other home would be west of the ridge, and would be visible from areas to the west and north of the home.

Like the proposed project, the Revised Site Plan Design Alternative would require several exceptions to the City's Hillside Development regulations, including exceptions to Section 6-2023 (Development Restriction on Class I or Class II Ridgelines) but it would be more difficult for the Planning Commission to grant those exceptions because two of the homes would be located closer to the Class I Ridge. In

addition, aesthetic impacts would be greater given that the two relocated homes would be closer to the ridgeline and more visible from off-site public views. This alternative would produce the same general environmental impacts in other areas as the proposed project, in varying degrees of significance.

S.6 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

Pursuant to *CEQA Guidelines* Section 15123, this EIR acknowledges the areas of controversy and issues to be resolved that are known to the City of Lafayette and/or were raised during the EIR scoping process. Issues were identified during both the Notice of Preparation (NOP) review period and public scoping meeting. Several comment letters were received from organizations and agencies in response to the NOP. These NOP comment letters are in Appendix A. No apparent substantial areas of controversy not already being addressed in this EIR were identified in the NOP comment letters or meeting comments.

S.7 MITIGATION AND MONITORING

CEQA requires public agencies to set up monitoring and reporting programs to ensure compliance with those mitigation measures adopted or made as a condition of project approval to mitigate or avoid significant environmental effects identified in an EIR. A mitigation monitoring and reporting program incorporating the mitigation measures set forth in this document will be considered and acted upon by City of Lafayette decision-makers for adoption concurrent with adoption of the findings of this EIR and prior to a determination on whether or not to approve the proposed project.

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Land Use and Planning			
<i>Potential Impact 3.2-1: Would the proposed project physically divide an established community?</i>	No Impact	No mitigation is required.	No Impact
<i>Potential Impact 3.2-2: Would the proposed project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?</i>	Potentially Significant Impact	Mitigation Measure 3.2-2a: Prior to Final Map approval, the project sponsor shall submit for review and approval a master plan and design guidelines for the proposed project consistent with the <i>Lucas Ranch Master Plan and Design Review Guidelines Report (Master Plan and Design Guidelines)</i> prepared by Zimmerman Welschmeyer Architects (December 25, 1999).	Less Than Significant
		Mitigation Measure 3.2-2b: Plans for each new home, including lot grading, architecture, exterior colors and materials, lighting and landscaping shall be subject to review and approval through the City’s Design Review and Hillside Development Permit process.	Less Than Significant
Aesthetics			
<i>Potential Impact 3.3-1: Would the proposed project have a substantial adverse effect on a scenic vista?</i>	Potentially Significant Impact	Mitigation Measure 3.3-1a: Prior to Final Map approval or issuance of grading permits, whichever occurs first, the project sponsor shall submit landscaping and irrigation plans to the Planning Services Division for review and approval by the Planning Commission. The landscape plan shall utilize the following performance standards: a. Native trees shall be used for screening and plant selection shall focus on blending with the existing vegetation. Consideration shall also be given to species with a growth rate such that trees can reach the height of building rooflines as seen from Burton Valley and Buckeye Fields in a ten-year timeframe. b. Non-native ornamental plants shall be limited and screened, and shall be minimally visible from Lucas Drive and Rohrer Drive.	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>c. Where necessary, screening plants (trees and shrubs) shall be provided with protection from deer browse and other wildlife foraging to assist in establishing plants.</p> <p>d. For hillside stabilization areas, vegetative cover or density, and species-richness shall be sufficient to stabilize the surface against effects of long-term erosion and shall be similar to naturally occurring habitats in surrounding areas.</p> <p>e. The species listed in Table 3.5-3 shall be prohibited.</p> <p>f. Incorporate the fire-prevention provisions of Mitigation Measure 3.10-1a.</p>	
		<p>Mitigation Measure 3.3-1b: Prior to Final Map approval or issuance of grading permits, whichever occurs first, the project sponsor shall submit a Vegetation Maintenance and Monitoring Plan to the Planning Services Division for review and approval by the Planning Commission.</p> <p>a. At a minimum, the plan shall be prepared for a ten-year period and require annual reports to the City of Lafayette that include quantitative and qualitative evaluations of plant characteristics relative to their intended functions.</p> <p>b. The need for remedial measures for screening plants shall be based on annual inspection and monitoring reports filed with the City for a ten-year period. Any screening plants greater than three inches in diameter at breast height (4.5 feet) that do not survive shall be replaced at a ratio of two 15-gallon replacement trees for each plant lost.</p> <p>c. Wildlife foraging protection shall be maintained until the end of the plant monitoring period or until the City’s consulting</p>	<p>Less Than Significant</p>

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		landscape architect recommends removal. d. The plan shall include the recommendations contained in Mitigation Measure 3.5-5c. e. Vegetative cover shall be capable of self-regeneration without irrigation, soil amendments, or fertilizer. The need for remedial measures shall be based on annual inspection and monitoring reports filed with the City for a five-year period. The following threshold circumstances shall require corrective treatment: <ol style="list-style-type: none"> 1. Noticeable soil movement or loss; evident topsoil loss, with some plants on pedestals or in hummocks; evident rill marks with poorly dispersed plant litter and bare spots not protected by plant litter. 2. Topsoil remnants with vertical sides and exposed plant roots, root frequently exposed, and litter in relatively small amounts and washed into erosion-protected patches. 3. Advanced erosion; active gullies, steep sidewalls on active gullies. 	
		Mitigation Measure 3.3-1c: Plans submitted for Design Review shall propose single-story homes on Lots 4, 5 and 7 with a height of no more than 15 feet.	Less Than Significant
<i>Potential Impact 3.3-2: Would the proposed project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.3-3: Would the proposed project substantially degrade the existing visual character or quality of the site and its surroundings?</i>	Potentially Significant Impact	Mitigation Measures: 3.3-1a – 3.3-1c	Less Than Significant
<i>Potential Impact 3.3-4: Would the</i>	Less Than Significant	No mitigation is required.	Less Than Significant

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Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<i>proposed project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?</i>	Impact		
Air Quality			
Potential Impact 3.4-1: Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?	No Impact	No mitigation is required.	No Impact
Potential Impact 3.4-2: Would the proposed project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Less Than Significant Impact	No mitigation is required.	Less Than Significant
Potential Impact 3.4-3: Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Less Than Significant Impact With Mitigation	<p>Mitigation Measure 3.4-3: Prior to Final Map approval or issuance of a grading permit, whichever occurs first, the project sponsor shall submit a grading plan to the City's Engineering Services Manager for review and approval. The grading plan shall include measures to reduce emissions from construction equipment and wind blown soils and shall be followed for all construction activities for the project. The following measures shall be incorporated into the grading plan:</p> <ul style="list-style-type: none"> a. Water all active construction areas at least twice daily. b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. c. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. d. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. e. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more). f. Enclose, cover, water twice daily, or apply (non-toxic) soil 	Less Than Significant

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Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		binders to exposed stockpiles (dirt, sand, etc.). g. Limit traffic speeds on unpaved roads up to 15 miles per hour (mph). h. Install sandbags or other erosion control measures to prevent silt runoff onto public roadways. i. Replant vegetation in disturbed areas as quickly as possible.	
<i>Potential Impact 3.4-4: Would the project expose sensitive receptors to substantial pollutant concentrations?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.4-5: Would the proposed project create objectionable odors affecting a substantial number of people?</i>	No Impact	No mitigation is required.	No Impact
Biological Resources			
<i>Potential Impact 3.5-1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFG or USFWS?</i>	Potentially Significant Impact	Mitigation Measure 3.5-1a: Prior to Final Map approval or issuance of a grading permit, whichever occurs first, a management plan prepared by a qualified biologist shall be developed to ensure that habitat remains on the site for the Diablo helianthella and robust monardella. This management plan shall focus on grazing as the management tool to reduce the incursion of oak woodland onto the habitat of these rare plant species and to manage the thatch production of the non-native grasses.	Less Than Significant
		Mitigation Measure 3.5-1b: The management plan prescribed above shall also address weed management in addition to grazing. The grazing prescriptions shall be designed to minimize the amount of invasive weeds. Weed management shall also entail removal of the weeds by other means than grazing such that the weeds are eradicated or nearly eradicated from the site. This weed management shall be an on-going activity throughout project construction and operation	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>Mitigation Measure 3.5-1c: Prior to Final Map approval, Lot 1 shall be reconfigured such that the home and landscaping would be at least 50 feet from the willow riparian and mesic herbaceous (wetland) vegetation located in Lot 1. Reconfiguration of Lot 1 may also require reconfiguration of Lots 2 and 3 to accommodate the required setback on Lot 1. The homes on Lots 5, 6 and 7 are currently proposed such that they would be at least 50 feet from any mesic herbaceous (wetland) or willow riparian area. Grading, homes and associated landscaping shall not be located closer than 50 feet to the wetland areas. This 50-foot buffer will provide sufficient distance to preclude impacts from alteration of hydrology and from the direct effects of construction equipment.</p> <p>A permanent fence shall be located between the homes and the wetlands and willow trees to protect them from humans, but at the same time allow deer and other wildlife access. Although grading, homes and landscaping require a setback of at least 50 feet from the wetland, the permanent fence shall be 10 feet from the wetland providing a 10-foot buffer to exclude humans.</p>	Less Than Significant
		<p>Mitigation Measure 3.5-1d: A preconstruction survey shall be conducted for the California red-legged frog and the Alameda whipsnake of the areas of the project site that would be affected prior to construction. Upon completion of the preconstruction survey, survey results shall be reported to the Planning Services Division. Within a day of completion of the preconstruction survey, a fence designed to exclude Alameda whipsnakes and California red-legged frogs shall be established around the construction area. Construction equipment and construction activity shall remain within the fenced construction area. The construction area, including grading, and the fence shall be at</p>	Less Than Significant

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Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>least 50 feet from any of the wetland seeps and willow riparian areas on the project site. Silt fencing shall be used for the fence to exclude Alameda whipsnakes and California red-legged frogs from the construction area and to prevent harmful sediment from entering the riparian and wetland habitat of the California red-legged frog. This silt fence shall be installed prior to construction and shall be used to prevent heavy equipment within 50 feet of wetland areas.</p>	
		<p>Mitigation Measure 3.5-1e: Prior to Final Map approval, a conservation easement shall be established on the willow riparian and wetland vegetation of Lots 1, 5, 6 and 7. This easement shall protect the vegetation from cutting, removal, or other types of destruction, and ensure the long-term protection of this vegetation.</p>	<p>Less Than Significant</p>
		<p>Mitigation Measure 3.5-1f: A preconstruction survey shall be conducted for American badgers at the same time that the preconstruction survey is being conducted for Alameda whipsnake and California red-legged frogs. Upon completion of the preconstruction survey, survey results shall be reported to the Planning Services Division. Any badgers observed in the construction area shall be relocated by a qualified biologist prior to construction.</p>	<p>Less Than Significant</p>
		<p>Mitigation Measure 3.5-1g: To ensure that Alameda whipsnakes will be able to cross the project site after construction of the homes, the remainder parcel shall be covered by a conservation easement. This conservation easement shall stipulate that no construction, residential development, agricultural development (vineyard, orchard, row crops) or private landscaping is allowed on the remainder parcel. Grazing would be an acceptable land use and may be essential to maintain the grassland. The portions of Lots</p>	<p>Less Than Significant</p>

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		5, 6 and 7 that are south of the southern drainage shall also be included in the conservation easement	
		Mitigation Measure 3.5-1h: The species listed in Table 3.5-3 are particularly invasive ornamental plants, and shall be prohibited from being planted on the project site through landscape agreements between the private property owners and the City.	Less Than Significant
		Mitigation Measure 3.5-1i: A preconstruction survey shall be conducted for nesting raptors and loggerhead shrikes within 250 feet of the construction site within 21 days of construction. A buffer of a radius of at least 250 feet shall be established between any nesting raptor and construction activity. The project sponsor shall submit plans to the Planning Services Division showing the buffer area and protection measures such as fencing or other measure(s) approved by the City. This buffer shall be maintained until the chicks fledge, unless a biologist experienced with raptor nesting behavior determines that the buffer can be reduced without stressing the nesting raptor. The buffer surrounding any loggerhead shrike nest shall be a radius of at least 100 feet and can be reduced if such reduction would not result in the abandonment of the nest or increased stress of the shrike.	Less Than Significant
		Mitigation Measure 3.5-1j: The construction area shall be reduced to as small an area as possible while allowing for efficient construction of the proposed project.	Less Than Significant
Potential Impact 3.5-2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS?	Potentially Significant Impact	Mitigation Measures: 3.5-1c, 3.5-1d and 3.5-1e	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>Potential Impact 3.5-3: <i>Would the project 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 wetlands, etc.) and state protected wetlands through direct removal, filling, hydrological interruption or other means?</i></p>	<p>Potentially Significant Impact</p>	<p>Mitigation Measures: 3.5-1c, 3.5-1d and 3.5-1e</p>	<p>Less Than Significant</p>
<p>Potential Impact 3.5-4: <i>Would the project interfere substantially 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?</i></p>	<p>Potentially Significant Impact</p>	<p>Mitigation Measure 3.5-4: Fenced yards in the homesites shall be restricted to an area encompassing a radius of 50 feet from the homesite. The development plans, including the fence location, would be approved by the City through the Design Review and Hillside Development Permit process. The configuration of any fences shall be such that animals could easily move through the project site. Movement corridors shall be provided between Lot 3 and Lot 4 in a corridor no less than 150 feet wide at its narrowest point; on the lower slopes of Lot 5 in a corridor that averages 150 feet wide but can be 100 feet wide at its narrowest point; and on the eastern portion of Lot 7, in a corridor no smaller than 150 feet wide. An animal shall be able to move from the top of the ridge beside Lot 7 to access the watercourse, travel the length of the watercourse and along the bottom of Lot 5; and then travel between Lots 3 and 4 until the ridgetop is attained. The vegetation of this corridor shall be non-native grassland. The corridor area shall not be landscaped unless native plants are used and the cover remains sparse.</p>	<p>Less Than Significant</p>
<p>Potential Impact 3.5-5: <i>Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</i></p>	<p>Potentially Significant Impact</p>	<p>Mitigation Measure 3.5-5a: Prior to approval of any grading permit or in conjunction with an application for Design Review approval, whichever occurs first, the project sponsor shall submit a tree permit application pursuant to Chapter 6-17 of the Lafayette Municipal Code. Compliance with this chapter will result in the replacement or mitigation of any protected tree</p>	<p>Less Than Significant</p>

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		affected by the project.	
		<p>Mitigation Measure 3.5-5b: The project sponsor shall install protective measures for all trees to remain as identified on the site plan. Protective measures shall be shown on the grading and/or drainage plan as stated above. All tree protection measures shall be approved, installed and inspected by the City before any construction may begin. All existing trees to remain shall be protected with the following measures during construction:</p> <ul style="list-style-type: none"> a. Protective fencing shall be installed prior to any construction activity, including clearing and grubbing, at the project site. Fencing shall be a minimum of one foot beyond the maximum dripline of all trees and may extend well beyond the dripline under certain site conditions. b. Fencing shall be six feet high and shall form a continuous barrier around protected trees. The length, spacing, depth and material of the posts securing the fencing shall be designed to remain solidly in place until the final City inspection is made. Two protection fence detail options are provided in the <i>City's Construction Policies and Guidelines for Tree Preservation and Protection</i> to provide direction for this fencing. The City may require modifications to these details depending on the particular site conditions. c. Other protection measures may be necessary including using hay bales at the base of the trunk for trunk protection of critical trees, if necessary. In addition, 2 x 4s or other approved material may be necessary to protect overhanging limbs that are proposed to be retained. d. The site supervisor shall direct all contractors and subcontractors to remain outside of the fenced area of the dripline 	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>and shall not allow any type of construction activity, including parking or storage within the fenced area. The fencing must remain in place for the duration of the project.</p> <p>e. All underground work within tree driplines shall be avoided wherever possible to minimize impacts. Locating utilities and necessary trenching outside of the canopy driplines is the best solution; trenching and grading within the dripline has the potential to seriously compromise the health and structural integrity of the trees. If trenching or grading within the dripline is completely unavoidable because of site constraints, then the project arborist or landscape architect shall be consulted on-site to advise on the least damaging course of action. The trenching shall also be reviewed with the City inspector prior to excavation.</p> <p>f. Trenches within the dripline shall be hand dug. Cuts to tree roots shall be minimized to the extent feasible and shall be treated as exposed. Roots of trees shall never be pulled because of excessive damage. The project arborist or landscape architect shall be on-site to direct treatment of any damaged roots as they are exposed. Treatment shall include cutting the roots cleanly with sharp tools; no wound dressing products shall be used. The roots shall be trimmed, cleaned, and covered with wet burlap and/or shredded mulch. The project arborist or landscape architect shall assess a tree for structural impacts if roots over two inches in diameter are encountered.</p> <p>g. Cutting and filling within the dripline of trees shall be avoided. Any fill mistakenly placed against the trunk of a tree shall be removed to restore the natural</p>	

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>flair of the trunk. Appropriate retaining walls shall be constructed along and outside of the dripline area if grade changes approach the drip line and a 2:1 return slope cannot be constructed.</p> <p>h. Access within the dripline shall be granted only as a condition of the tree removal application. If pruning is required for safe access and clearance within the dripline, then necessary pruning shall be to the standards and guidelines of the International Society of Arboriculture. The safety of the construction equipment operators is paramount; however, excessive or improper pruning can seriously impact the health and vigor of the tree. Pruning shall be as minimal as possible, so equipment heights shall be measured and trees pruned accordingly under the direction of a certified arborist. Pruning shall be done prior to construction activities and shall not be done by construction personnel. Pruning more than 30 percent of a tree at one time is considered a significant impact. The project arborist shall identify and monitor all pruning activities during construction.</p> <p>i. Individual or isolated trees subject to the influences of trenching, grade changes, or altered drainage patterns shall be provided with a protective layer of mulch prior to construction activities. Mulch shall be chipped bark material placed in a layer that is 4 to 6 inches deep. Mulch shall be placed away from the trunk and extend out to the dripline of the canopy or the edge of the protective fencing. Any weeds growing beneath the canopy may be removed by hand before mulch is placed. Weeds shall not be sprayed with herbicide within the tree canopy zone. The area beneath the dripline shall be well-watered</p>	

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>prior to the placement of the mulch so that moisture is not wicked out of the soil by the mulch itself.</p> <p>j. If necessary, specific instructions for fertilization, disease, pest control, and weed control shall be made for individual trees. In general, chemical controls shall be avoided on the project site so that problems are not exacerbated and overall impacts to the natural balance are minimized.</p> <p>k. Watering during construction to minimize tree stress is crucial when ¼ or more of a tree’s roots have been disturbed. Water shall be slowly applied to a minimum depth of 12 inches for the full outer half of the canopy/dripline area. The area immediately adjacent to a tree trunk shall not be watered. Watering shall occur once a month during the dry season (May through September). Trees near asphalt shall be supplied with additional water because asphalt paving absorbs heat which in turn raises nearby soil temperature and increases moisture loss.</p> <p>l. All grading shall be designed to drain water away from the base of the trees to avoid creating areas of ponding within the dripline. The natural drainage across the site shall be retained as much as possible.</p> <p>m. If it is necessary to pave beneath the dripline the maximum allowable cut or fill shall be six inches for paving within the dripline. In addition, paving modifications including gap graded gravel, pier and grade beam footings, steel reinforcement, or aeration breaks in the paving may be required.</p> <p>n. If equipment access is absolutely necessary beneath the dripline of a tree, a mulch layer (4-12 inches, depending upon the weight of the equipment) of tree</p>	

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>chips or cocoa hulls shall be placed over the area that would be affected prior to allowing the equipment to cross. Work shall be scheduled so that the equipment is only required to cross the root zone once to enter and once to exit. The mulch shall be left on the site since removal may cause damage to surface feeder roots.</p> <p>o. Under each circumstance where an arborist is required to supervise or observe construction, the arborist may require additional mitigation measures or halt construction if necessary to protect the subject trees.</p> <p>p. Trees which are excessively damaged due to inadequate protection or negligence by the contractor shall be replaced at the project sponsor's expense. Replacement shall be determined in the same manner as mitigation plantings.</p>	
		<p>Mitigation Measure 3.5-5c: To protect trees remaining on the project site from the effects of overwatering, the project sponsor shall enter into a landscape maintenance agreement with the City to ensure the long-term maintenance of the protected trees. This maintenance agreement shall stipulate that the remaining oak trees shall not be irrigated, that irrigation runoff shall be directed away from the oak trees, and that landscape plants shall not be installed beneath the oak trees.</p>	Less Than Significant
		<p>Mitigation Measure 3.5-5d: The home on Lot 8 shall be moved at least 10 feet from the dripline of the 36-inch-diameter oak that is identified on the site plan. The current location of the home would damage the roots and canopy of the tree.</p>	Less Than Significant
<p>Potential Impact 3.5-6: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community</p>	No Impact	No mitigation is required.	No Impact

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<i>Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan?</i>			
Cultural Resources			
<i>Potential Impact 3.6-1: Would the proposed project cause a substantial adverse change in the significance of a historical or archaeological resource?</i>	Potentially Significant Impact	Mitigation Measure 3.6-1: If a deposit of prehistoric or historical archaeological material(s) is encountered during project activities, the City Planning Services Division shall be contacted immediately and all work within 50 feet of the discovery shall be redirected. A qualified archaeologist shall be contacted to evaluate the find(s) and make recommendations. It is recommended that any adverse impacts to such deposits be avoided by project activities. If impacts on such deposits cannot be avoided, they shall be evaluated for their eligibility for listing in the California Register (i.e., it shall be determined whether they qualify as historical or unique archaeological resources under CEQA). If the deposits are not eligible, avoidance is not necessary. If the deposits are eligible, they shall be avoided, if feasible; if avoidance is not feasible, the adverse effects shall be mitigated. Mitigation may include, but is not limited to, thorough recording on Department of Parks and Recreation Form 523 (DPR 523) and/or data recovery excavation. If data recovery excavation is selected, the excavation must be guided by a data recovery plan prepared and adopted prior to beginning the recovery work, and a report of findings shall be submitted to the Northwest Information Center (NWIC). (CCR Title 14(3) §15126.4(b)(3)(C))	Less Than Significant
<i>Potential Impact 3.6-2: Would the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</i>	Potentially Significant Impact	Mitigation Measure 3.6-2: Because of the high potential for project construction damaging paleontological resources, paleontological monitoring shall be conducted. To guide the monitoring, a qualified paleontologist shall prepare a paleontological monitoring plan prior to any ground-disturbing activities. The	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>monitoring plan shall take into account the specific details of project construction plans, relevant paleontological and geological literature, and geotechnical studies in coordination with, as appropriate, limited subsurface investigations. Prior to issuance of a grading permit, the monitoring plan shall be submitted to the Planning Services Division for review and approval. Monitoring shall be conducted in accordance with the recommendations of the monitoring plan. After completion of project construction, a final report shall be prepared to document the methods and findings of the monitoring paleontologist and submitted to the project sponsor and the City of Lafayette.</p>	
<p>Potential Impact 3.6-3: Would the proposed project disturb any human remains, including those interred outside formal cemeteries?</p>	<p>Potentially Significant Impact</p>	<p>Mitigation Measure 3.6-3: If human remains are encountered, work within 50 feet of the discovery shall be redirected and the County Coroner notified immediately, pursuant to Section 5070.5 of the California Health and Safety Code. At the same time, an archaeologist shall be contacted to assess the situation and the City Planning Services Division shall be notified. If the human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.</p> <p>Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results of the analysis, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the project sponsor, the City of Lafayette and the Northwest</p>	<p>Less Than Significant</p>

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Information Center (NWIC).	
Geology and Soils			
<i>Potential Impact 3.7-1: Would the proposed project expose people or structures to potentially substantial adverse effects, including the risk of loss, injury or death involving rupture a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.7-2: Would the proposed project result in substantial soil erosion or the loss of topsoil?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.7-3: Would the proposed project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</i>	Potentially Significant Impact	<p>Mitigation Measure 3.7-3a: Prior to Final Map approval or issuance of a grading permit, whichever occurs first, the project sponsor shall submit a grading plan to the Engineering Services Manager for review and approval. The plan shall demonstrate that the project would implement all recommendations of the geotechnical engineer, Cal Engineering & Geology, Inc., as contained in the Preliminary Geotechnical Report, Tract 6569 Lucas Drive, Lafayette, California (2005) for the project site. Landslide and soil stabilization work shall include plan review, observations and testing during construction by the project geotechnical engineer and engineering geologist, or their representative.</p> <p>Mitigation Measure 3.7-3b: Prior to Final Map approval or issuance of a grading permit, whichever occurs first, and during the process of determining specific building sites and road alignments, a certified geotechnical engineer shall be retained by the project sponsor to:</p> <p>a. Perform a records search of</p>	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>grading permits for the site;</p> <ul style="list-style-type: none"> b. Provide a visual observations report; c. Map the condition of the roadway (including fill location and any pavement distress); and d. Conduct a subsurface exploratory testing to evaluate the extent and quality of fill underneath the roadway. <p>The scope and location of subsurface testing and related investigations shall be coordinated with the Engineering Services Manager. In addition, subsequent subsurface testing and related reports shall be subject to review and approval by the Engineering Services Manager. If the presence of unstable fill and distressed pavement are confirmed, potential remedial measures shall include, but are not limited to, removal and replacement of distressed pavement and underlying materials and/or construction of retaining structures to stabilize existing materials in place. The Engineering Services Manager shall have final discretion in determining the scope and nature of any and all remedial work required.</p>	
<p>Potential Impact 3.7-4: Would the proposed project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</p>	<p>Potentially Significant Impact</p>	<p>Mitigation Measure 3.7-4: Prior to issuance of a building permit, the project sponsor shall submit plans to the Engineering Services Manager for review and approval. The plans shall demonstrate that the foundation design for the proposed structures have included all recommendations of the geotechnical engineer, Cal Engineering & Geology, Inc., as contained in the Preliminary Geotechnical Report, Tract 6569 Lucas Drive, Lafayette, California (2005). In particular, foundations shall be designed to resist a net uplift pressure of 1,000 pounds per square foot (psf). In addition, approximately two inches of compressible material shall be placed beneath the foundation's</p>	<p>Less Than Significant</p>

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		grade beams. The final project plans shall also include construction techniques to minimize the effects of expansive soils. Such techniques could include, but are not limited to, the removal of expansive soils, importation of unexpansive fill, and treatment of expansive soil with lime to reduce its expansive potential.	
<i>Potential Impact 3.7-5: Would the proposed project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?</i>	No Impact	No mitigation is required.	No Impact
<i>Potential Impact 3.7-6: Would the proposed project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</i>	No Impact	No mitigation is required.	No Impact
<i>Potential Impact 3.7-7: Would the proposed project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</i>	No Impact	No mitigation is required.	No Impact
Hydrology and Water Quality			
Potential Impact 3.8-1: Would the proposed project violate any water quality standards or waste discharge requirements?	Less Than Significant Impact With Mitigation	Mitigation Measure 3.8-1a: Prior to Improvement Plan approval or issuance of a grading permit, whichever occurs first, the project sponsor shall prepare and submit a detailed erosion control plan (ECP) and narrative to the Engineering Services Manager for review and approval. The purpose of the ECP shall be to mitigate erosion and sedimentation impacts during construction. At a minimum, the ECP and written narrative shall include the following: a. A proposed schedule of grading activities, monitoring, and infrastructure milestones in chronological format; b. Identification of critical areas of	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>high erodibility potential and/or unstable slopes;</p> <p>c. Contour and spot elevations indicating runoff patterns before and after grading;</p> <p>d. Identification or erosion control measures on slopes, lots and streets. Measures shall be based on recommendations contained in the “Erosion and Sediment Control Field Manual” published by the San Francisco Regional Water Quality Control Board (RWQCB);</p> <p>e. Soil stabilization techniques such as short-term biodegradable erosion control blankets and hydroseeding should be utilized; and</p> <p>f. Post-construction inspection of all drainage facilities for accumulated sediment, and the cleaning of these drainage structures of debris and sediment.</p> <p>g. Post-construction inspection of all drainage facilities for accumulated sediment, and the cleaning of these drainage structures of debris and sediment.</p>	
		<p>Mitigation Measure 3.8-1b: Hydroseeding for erosion control shall utilize the following performance standards:</p> <p>a. Hydroseeding on the regraded slopes shall include only native species;</p> <p>b. Hydroseeding shall take place in a time period that will ensure germination, or as directed by the Engineering Services Manager; and</p> <p>c. As dictated by weather and field conditions at the time of hydroseeding, the Engineering Services Manager may require the installation of erosion control blankets or matting to secure the hydroseed.</p>	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>Mitigation Measure 3.8-1c: Prior to issuance of grading or building permits, whichever occurs first, the project sponsor shall comply with NPDES General Construction Activities Storm Water Permit Requirements established by the CWA including preparation of a SWPPP. The SWPPP shall identify specific types and sources of storm water pollutants, determine the location and nature of potential impacts, and specify appropriate control measures to eliminate any potentially significant impacts to receiving water quality from storm water runoff. In addition to complying with the standards established by the CWA for preparation of a SWPPP, the SWPPP shall also comply with the directions for preparing a SWPPP contained in the latest edition of the Guidelines for Construction Projects published by the California Regional Water Quality Board San Francisco Region.</p>	Less Than Significant
		<p>Mitigation Measure 3.8-1d: Prior to issuance of grading or building permits, whichever occurs first, the project sponsor shall submit to the Engineering Services Manager a copy of the Notice of Intent (NOI) and SWPPP sent to the State Water Resources Control Board.</p>	Less Than Significant
<p>Potential Impact 3.8-2: Would the proposed project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?</p>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<p>Potential Impact 3.8-3: Would the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</p>	Less Than Significant Impact	No mitigation is required.	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Potential Impact 3.8-4: Would the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	Less Than Significant Impact With Mitigation	Mitigation Measure 3.8-4: Prior to Final Map and Improvement Plan approval or issuance of a grading permit, whichever occurs first, the project sponsor shall prepare and submit a hydrology and hydraulic analysis of the existing storm drain system (System 1) and the downstream connecting pipes to Grizzly Creek to the Engineering Services Manager for review and approval. Any impacts or deficiencies shall be mitigated as part of the subdivision improvements.	Less Than Significant
Potential Impact 3.8-5: Would the proposed project create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	No Impact	No mitigation is required.	No Impact
Potential Impact 3.8-6: Would the proposed project otherwise substantially degrade water quality?	No Impact	No mitigation is required.	No Impact
Potential Impact 3.8-7: Would the proposed project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood-hazard delineation map?	No Impact	No mitigation is required.	No Impact
Potential Impact 3.8-8: Would the proposed project place within a 100-year flood hazard area structures that would impede or redirect flood flows?	No Impact	No mitigation is required.	No Impact
Potential Impact 3.8-9: Would the proposed project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	No Impact	No mitigation is required.	No Impact
Potential Impact 3.8-10: Would the proposed project result in inundation by seiche, tsunami, or mudflow?	Less Than Significant Impact	No mitigation is required.	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Noise			
<i>Potential Impact 3.9-1: Would the proposed project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.9-2: Would the proposed project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.9-3: Would the proposed project result in substantial permanent increase in ambient noise levels in the project vicinity above existing noise levels without the project?</i>	Less Than Significant Impact With Mitigation	Mitigation Measure 3.9-3: Prior to issuance of a building permit for each custom home, the location of electrical and mechanical equipment (e.g., ventilation and air conditioning units) shall be shown on construction drawings. Such equipment shall be located as far away as feasible from sensitive-receptor areas. Additionally, the following shall be considered before installation: proper selection and sizing of equipment and installation of equipment with proper acoustical shielding. Furthermore, mechanical equipment shall comply with the noise standards of the City as specified in Table 3.9-2 (Outdoor Noise Limits).	Less Than Significant
<i>Potential Impact 3.9-4: Would the proposed project result in a temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</i>	Potentially Significant Impact	Mitigation Measure 3.9-4a: Prior to the start of grading or construction, whichever occurs first, a sign stating the allowed days and hours for construction shall be posted in a conspicuous location on the project site where it can be viewed by all contractors. The sign shall be no smaller than two square feet nor larger than four square feet with lettering between three inches and five inches in height.	Less Than Significant
		Mitigation Measure 3.9-4b: Prior to the start of grading or construction, whichever occurs first, a sign stating the name and telephone number of a disturbance coordinator shall be posted in a conspicuous location on the project site where it can be	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		viewed by the public. The disturbance coordinator shall be responsible for addressing noise-related complaints.	
		<p>Mitigation Measure 3.9-4c: Plans submitted for grading and building permits shall include the following noise mitigation copied onto the plans:</p> <ul style="list-style-type: none"> a. Site improvement and construction work, including setup, loading or unloading of materials and equipment, and/or the maintenance, refueling or tune-up of any equipment shall be restricted to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday. No construction shall occur on Sundays or federal holidays. b. All construction equipment powered by internal combustion engines shall be properly maintained and muffled to reduce noise levels to the maximum extent feasible. c. Unnecessary idling of internal combustion engines near existing noise sensitive receptors shall be prohibited. d. Stationary equipment shall be located as far away from residences as feasible, but in no case shall be closer than 40 feet to any property line or exceed 70 dBA at 50 feet. Non-stationary mobile equipment shall not exceed 83 dBA at 50 feet. e. Construction equipment staging shall be at least 200 feet from the nearest residence. 	Less Than Significant
Public Services, Utilities and Service Systems			
<i>Potential Impact 3.10-1: Would the proposed project result in substantial adverse physical impacts associated with the provisions of new or physically altered government facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in</i>	Less Than Significant Impact With Mitigation	Mitigation Measure 3.10-1a: Prior to Final Map approval or issuance of grading permits, whichever occurs first, the project sponsor shall incorporate the following design specifications into project plans: minimum road width of 36 feet; maximum road grade of 16 percent; minimum turn-around space of 45-foot radius; and fire hydrants of the	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<i>order to maintain acceptable service ratios, response times, or other performance objectives for fire protection, police protection, schools, parks, or other public facilities?</i>		East Bay type. The proposed project shall be required to provide a “defensible space,” which is a minimum of 100 feet in horizontal distance from wild land interface. Landscaping within the defensible space shall be fire-retardant and irrigated. In addition, the project sponsor shall provide adequate and reliable water supply for fire protection with a minimum fire flow of 1,000 gallons per minute (GPM). Required flow shall be delivered from one hydrant flowing for the duration of 120 minutes while maintaining 20 pounds residual pressure in the main. Any above-ground holding tanks shall be subject to review and approval through the City’s Design Review and Hillside Development Permit process.	
		Mitigation Measure 3.10-1b: Prior to issuance of building permits, construction drawings shall incorporate the following design specifications: fire-retardant roof materials and automatic fire sprinkler systems.	Less Than Significant
<i>Potential Impact 3.10-2: Would the proposed project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.10-3: Would the proposed project require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.10-4: Would the proposed project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.10-5: Would the proposed project have sufficient</i>	Potentially Significant	Mitigation Measure 3.10-5a: Prior to the issuance of building permits, the	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<i>water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</i>	Impact	project site shall be annexed into the EBMUD.	
		Mitigation Measure 3.10-5b: Water pumping facilities may be necessary, at the project sponsor's expense, to maintain adequate water pressure to all residences at all times and to provide water service to Lots 4 and 7. If such pumping facilities are required, the project sponsor shall submit the plans for the water pumping facilities to the EBMUD for review and obtain approval before the City grants a grading permit. In addition, EBMUD shall determine the location of the proposed project's water meters.	Less Than Significant
		Mitigation Measure 3.10-5c: Prior to the issuance of a building permit, the project sponsor shall comply with the City's current Efficient Landscape Requirements and Water Conservation Ordinance. Conservation measures shall incorporate equipment, devices, and methodologies for plumbing fixtures and irrigation that further water conservation, such as high-efficiency toilets, or ultra-low-flow toilets, and automatic irrigation system timers.	Less Than Significant
Potential Impact 3.10-6: <i>Would the proposed project result in the determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
Potential Impact 3.10-7: <i>Would the proposed project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
Potential Impact 3.10-8: <i>Would the proposed project comply with Federal, State and local statutes and</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant

Table S-1. Summary of Impacts and Mitigation

Environmental Impacts	Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<i>regulations related to solid waste?</i>			
Transportation/Traffic			
<i>Potential Impact 3.11-1: Would the proposed project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.11-2: Would the proposed project cause the operation of an unsignalized intersection to fail to meet the LOS criteria shown in Table 3.11.2?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.11-3: Would the proposed project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?</i>	Less Than Significant Impact	No mitigation is required.	Less Than Significant
<i>Potential Impact 3.11-4: Would the proposed project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</i>	No Impact	No mitigation is required.	No Impact
<i>Potential Impact 3.11-5: Would the proposed project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?</i>	No Impact	No mitigation is required.	No Impact
<i>Potential Impact 3.11-6: Would the proposed project result in inadequate emergency access?</i>	No Impact	No mitigation is required.	No Impact
<i>Potential Impact 3.11-7: Would the proposed project result in inadequate parking capacity?</i>	No Impact	No mitigation is required.	No Impact
<i>Potential Impact 3.11-8: Would the proposed project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?</i>	No Impact	No mitigation is required.	No Impact