

5.0 ALTERNATIVES

5.1 INTRODUCTION

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this draft environmental impact report (draft EIR) contains a comparative impact assessment of alternatives to the proposed Ball Estates project (proposed project). The primary purpose of this section is to provide decision makers and the general public with a range of reasonable project alternatives that could feasibly attain most of the basic project objectives while avoiding or substantially lessening any of the project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below.

- An EIR need not consider every conceivable alternative to a project.
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process.
- Reasons for rejecting an alternative include:
 - Failure to meet most of the basic project objectives;
 - Infeasibility; or
 - Inability to avoid significant environmental impacts.

5.1.1 SIGNIFICANT IMPACTS WITHOUT MITIGATION

Typically, assessment of project alternatives focuses on avoiding or lessening significant unavoidable impacts. However, there are no significant unavoidable impacts relating to the environmental topics examined in this draft EIR.

The project is described and analyzed in the previous sections with an emphasis on significant impacts and mitigation measures to avoid these impacts. Mitigation measures have been identified to reduce all potentially significant and significant impacts to a less-than-significant level. **Table 5-1** identifies project impacts that would be significant and potentially significant prior to incorporation of mitigation measures.

Table 5-1 Significant Impacts Without Mitigation Measures

Resource Topic	Impact Number	Impact Text
Aesthetics	Impact AES-1	New homes on the project site could conflict with the character of existing residential neighborhoods in the area.
	Impact AES-2	New exterior lighting from the project could adversely impact nighttime views in the area.
Agriculture and Forestry	Impact AG-1	Implementation of the project would result in the loss of forest land at the project site and thus would conflict with forest land zoning as established by California Public Resources Code 12220(g).
Air Quality	Impact AQ-1	Site preparation and grading would temporarily generate fugitive dust in the form of PM10 and PM2.5.
Biological Resources	Impact BIO-1	Grading and construction of the project has the potential to result in harm or mortality to individual Alameda whipsnake, if present in woodpiles or under other debris along the western boundary of the project site.
	Impact BIO-2	Construction of the project during nesting season has the potential to result in a take of protected birds or create disturbance that could result in nest abandonment.
	Impact BIO-3	Building demolition and tree removal could result in a take of roosting bats, including a maternity colony, if present.
	Impact BIO-4	Project construction activities (i.e., ground disturbance, vegetation removal, and earthwork) could result in the take of an active San Francisco dusky-footed wood rat lodge.
	Impact BIO-5	If American badger establishes dens within the project site, construction activities could result in the take of an active den.
	Impact BIO-6	The project would require the filling and daylighting of drainages and seasonal wetland.
	Impact BIO-7	The project could result in the degradation of water quality in the intermittent drainages and downstream waters.
	Impact BIO-8	Several protected trees would be removed to allow for project construction.
Cultural and Tribal Cultural Resources	Impact CUL-1	Construction of the project could potentially cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.
	Impact CUL-2	Construction of the project could potentially cause a substantial adverse change in the significance of an unknown archaeological resource pursuant to Section 15064.5.

Resource Topic	Impact Number	Impact Text
	Impact CUL-3	Construction of the project potentially could directly or indirectly destroy a unique paleontological resource on site or unique geologic feature.
	Impact CUL-4	Construction of the project could potentially disturb human remains, including those interred outside of formal cemeteries.
	Impact CUL-5	Construction of the project could potentially cause a substantial adverse change in the significance of an unknown tribal cultural resource.
Geology and Soils	Impact GEO-1	The project may be subject to strong seismic shaking from regional geologic faults.
	Impact GEO-2	Soils on the project site are unstable and could experience soil failure or other geotechnical hazards.
	Impact GEO-3	The project site may have risks related to liquefaction or other seismic-related ground failure.
	Impact GEO-4	Evidence of landslide areas in the hills west of the project site suggests that the area experienced landslides in the past.
	Impact GEO-5	The project site may be located on expansive soils.
Hazards and Hazardous Materials	Impact HAZ-1	Soils within portions of the project site could contain residual agrichemicals.
	Impact HAZ-2	Demolition of existing structures on the site could result in the release of lead, asbestos, and other contaminants.
Hydrology and Water Quality	Impact HYD-1	Project construction activities could substantially alter the existing drainage pattern of the project site in a manner which would result in substantial offsite erosion or siltation.
	Impact HYD-2	Construction activities could substantially degrade water quality.
Noise and Vibration	Impact NOI-1	Existing noise-sensitive land uses would be exposed to construction noise levels for over one year.

5.1.2 ALTERNATIVES TO THE PROPOSED PROJECT

The three alternatives to the project analyzed in this section are as follows:

- **Alternative 1 – No Project Alternative:** The site would remain in its existing condition and no development would occur.
- **Alternative 2 – Wetland Avoidance Alternative:** This alternative would avoid most direct impacts to Wetlands 1, 2, and 3 (see **Figure 4.10-1** and **Section 4.4, Biological Resources**). Wetland 1 is an isolated feature located on the western

portion of proposed Lot 9 and the adjacent proposed Parcel C. Wetlands 2 and 3 are located on the southeastern portion of the project site between proposed Lots 16, 17, 18, and 19. These wetlands are associated with runoff from the office building, irrigated landscape and parking area, and runoff from Drainage 2. Wetlands 4 and 5 are located on EBRPD property south of Lot 28 and Parcel D. In total, there are 0.282 acres of freshwater wetland habitat on the project site.

Alternative 2 proposes eliminating proposed Lots 17, 18, and 19 to prevent fill within Wetlands 2 and 3 and Drainage 2, and prohibiting development on a portion of Lots 9 and 16. Proposed Lot 27 could be sited to avoid hydrologic modifications to Drainage 2 and Wetlands 2 and 3, and proposed Lot 9 would be modified to ensure Wetland 1 has an adequate buffer (typically 50 to 100 feet) from any new structure. With preservation of proposed Lots 17, 18, 19 and portions of proposed Lots 9, 16, and 27, the remainder of the development area could be developed with a maximum of 35 single-family homes to a density of approximately 2.0 dwelling units per acre. This density is compatible with the development area's Single Family Residential – Low Density land use designation, which allows up to 2.9 dwelling units per acre. Like the proposed project, this alternative would retain the Parcel D staging area.

- **Alternative 3 – Lot 21 Staging Area:** Under this alternative, a staging area for nearby trails and open space would be located on proposed Lot 21, and would accommodate 19 parking spaces and about 8,200 square feet of gravel surfacing. Proposed Lot 28 would be split into two lots such that the project site would still include 35 residential lots.

The three alternatives to the project are analyzed below and include a comparison of the project and each individual project alternative. In several cases, the description of the impact may be the same under each alternative when compared with the CEQA thresholds of significance (i.e., both the project and the alternative would result in a less than significant impact). The actual degree of impact may be slightly different between the project and each alternative, and this relative difference is the basis for a conclusion of greater or lesser impacts. **Table 5-1** at the end of this chapter presents a comparative summary of the project impacts for the three alternatives.

CEQA Guidelines require identification of an environmentally superior alternative. If the alternative with the least environmental impact is determined to be the “no project alternative,” the EIR shall also identify an environmentally superior alternative among the other alternatives.

5.2 PROJECT OBJECTIVES

As described in **Chapter 3.0, Project Description**, the project has the following objectives:

- Develop the property consistent with the existing General Plan and Zoning. The project as proposed would provide residential opportunities in accordance with the project site's existing Single Family Residential-Low Density General Plan land use designation and R-20 zoning designation. The open space area would be permanently restricted from development, except for the area being developed as a staging area (Parcel D).
- Develop the property within the land use density of the General Plan. The proposed density for the 35 new lots is 1.76 units per acre, within the 2.9 units per acre allowed in the General Plan.
- Establish high-quality infill development. Establish a high-quality, aesthetically pleasing infill residential development that is compatible with neighboring residential areas and creates a thoughtfully laid out and highly livable environment for future homeowners.
- Maximize residential development potential to alleviate development pressures on more sensitive lands. Maximize the residential development potential of the project site so as to alleviate development pressures on open space land and address housing needs in the County, while ensuring consistency with surrounding residential uses, avoiding to the extent feasible development on hillsides, and giving consideration to the environmental footprint of development.
- Remove the commercial office building from a residential neighborhood. The implementation of the project would remove the existing office building.
- Preserve and enhance habitat. Preserve the majority of the project site as open space to be used for the creation of wetlands, if feasible, as well as habitat enhancement and flood control. Grade the residential lots to a minimal level to preserve trees, with building areas established among them, generally conforming to the natural environment of the project site.
- Repair unstable slopes within the project site. Slopes at the rear of the proposed lots along the open space boundary are generally stable and do not require extensive slope repair. Slopes constructed with fill were placed near the estate home in the 1940s and east of the office building in the 1960s to provide a usable area for the estate development and parking for the office building. These slopes were not constructed with engineered fill and would be repaired.

5.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

Pursuant to CEQA Guidelines 15126.6(c), an EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process, and briefly explain the reasons for rejection. Among the factors that may be used to eliminate alternatives from detailed consideration include: (1) failure to meet most of the basic project objectives, (2) infeasibility, or (3) inability to avoid significant environmental impacts. To assist with this discussion, a list of the project objectives is provided in **Subsection 5.2**.

5.3.1 Rezone to R-15

According to the Contra Costa County General Plan 2005-2020 (General Plan), the project site's established density is 1.0-2.9 units per acre in the northeastern approximately 20 acres of the project site. Deducting street areas, the net developable area total is approximately 18 acres, which could yield 18 to 53 lots at the current R-20 zoning. By rezoning to R-15, the property could result in as many as 53 lots with an average lot size over 15,000 square feet. Alamo is an R-20 community and expectations of the Alamo community are to develop lots with a 20,000-square-foot minimum. Developing the property at 2.9 units per acre would yield 53 lots but would not achieve the fundamental project objective of creating a quality, aesthetically pleasing infill residential development that is compatible with neighboring residential areas.

5.3.2 Retain Commercial Uses

This scenario would retain the commercial office and develop the remainder of the project site with 31 residential lots. This alternative would not maximize the residential development potential of the project site to alleviate development pressures on open space land and address housing needs in the County. Moreover, it would not achieve the fundamental project objective of creating a quality, aesthetically pleasing infill residential development that is compatible with neighboring residential areas.

5.3.3 Lot Reconfiguration

Topography uphill of the current estate and office building is such that several building sites could be constructed in the hill area above the estate and barn area of the property. This plan would not increase density but would provide additional residential lots. A General Plan Amendment would permit these elevated sites by

reconfiguring the current boundary between the open space and the lower portions of the project site with the Single-Family Residential – Low Density General Plan land use designation. This alternative was rejected because it does not achieve the fundamental project objectives of creating a compact infill residential development that maximize the residential development potential without encroaching on hillsides.

5.3.4 Reduced Density Alternative

Under this alternative, the project site would be developed with only 28 homes, representing a reduction of approximately 20 percent of units. This alternative was rejected because developing the site at a lower density would fail to meet two fundamental project objectives: (1) developing an infill location with residential homes to assist the County in meeting residential housing needs while reducing development pressures on open space lands; and (2) maximizing the residential development potential of the project site.

5.4 ALTERNATIVE 1 - NO PROJECT ALTERNATIVE

Under Alternative 1, the project site would remain in its current state and there would be no development of a residential subdivision. The existing structures on the site would remain, including the office building. Unstable fill slopes near the estate home and east of the office building would remain, and open space areas would remain in their current condition. No staging area to facilitate access to the Madrone Trail would be constructed and street parking along Camille Avenue for trail access would continue.

5.4.1 ALTERNATIVE 1 NO PROJECT IMPACT ANALYSIS

Under this Alternative, no new structures would be built; the existing buildings on site would remain and no new human occupation of the project site would occur. Project impacts related to construction and operation on the site would therefore be completely avoided.

Under this Alternative, the office building would remain on site, which would not achieve the residential opportunities established by the zoning and general plan land use designations. Unstable slopes within the project site would not be repaired. Traffic at and adjacent to the site would remain the same at approximately 110 vehicle trips per day (see **Section 4.16, Transportation and Traffic**).

In response to the Notice of Preparation, a local resident commented that the southeast corner of the project site (where Lots 16, 17, 18, 19, and 27 are located) is prone to flooding. Implementation of the project would include drainage improvements to address the existing flood prone conditions. Alternative 1 would not include these improvements and existing drainage deficiencies would remain in this area.

5.4.2 CONCLUSION

The No Project Alternative would avoid the project's significant impacts and reduce the impact on most environmental resources. However, this alternative would not meet any of the project objectives, identified in **Subsection 5.2, Project Objectives** and would not address the flooding issue at the southeast corner of the site.

5.5 ALTERNATIVE 2 - WETLAND AVOIDANCE

Alternative 2, Wetland Avoidance Alternative, would avoid most direct impacts to Wetlands 1, 2, and 3 (see **Figure 4.10-1** and **Section 4.4, Biological Resources**). Proposed Lots 17, 18, 19, and portions of Lot 9 and 16 would be retained in their natural state to avoid most fill within seasonal wetlands and Drainage 1 (with Lot 16 maintaining a 50-foot buffer between the lot's property line fencing and nearby wetlands and Lot 9 maintaining a 25-foot buffer between the lot's building site and nearby wetlands) The remainder of the project site would be developed with a maximum of 35 single-family homes at a density of approximately 2.0 units per acre. This density is compatible with the development area's current Single-Family Residential – Low Density land use designation, which allows up to 2.9 dwelling units per acre. This alternative would redistribute the placement of lots across the project site compared to the project. Internal roadways may also require relocation, but site access via Camille Avenue and Ironwood Place and the emergency vehicle access would remain. Increased development density may decrease setback distances from Drainage 2 (see **Figure 4.10-1**) for new structures within the development area, or require modification of this drainage channel.

The Wetland Avoidance Alternative would not alter proposed uses for Parcels A and B. However, the project includes construction of a wetland mitigation area on Parcel C to compensate for the loss of wetland features. Alternative 2 would not require wetland mitigation and would avoid construction disturbance in Parcel C. This Alternative would also avoid potential offsite wetland mitigation.

With preservation of proposed 17, 18, 19, and portions of Lot 9 and 16 (i.e., area within a 25-foot setback from Wetland 1 and a 50-foot setback from Wetlands 2 and 3) the Alternative 2 construction envelope would be significantly reduced on the

south side of the project site along Camille Lane. Alternative 2 would reduce the total area of ground disturbance, resulting in fewer alterations to existing drainage patterns, fewer tree removals, and a slightly shorter construction period.

5.5.1 ALTERNATIVE 2 WETLAND AVOIDANCE IMPACT ANALYSIS

Aesthetics

As discussed in **Section 4.1, Aesthetics**, the project site is not located within view of a state scenic highway and is not identified as a scenic vista in the General Plan. Similar to the proposed project, the Wetland Avoidance Alternative would not result in adverse effects on scenic vistas or scenic resources within a state scenic highway.

Relative to the proposed project, Alternative 2 would have a smaller construction footprint and would require less grading and site preparation. Proposed Lots 17, 18, 19, and portions of Lots 9 and 16 would remain undeveloped on the eastern side of the project site, creating a visual buffer between existing residences along Camille Lane. Madrone Trail users would also benefit from this visual buffer from Camille Lane.

Similar to the project, Alternative 2 would result in the conversion of currently undeveloped land into residential dwelling units, which could degrade visually quality across the project site. Preservation of wetlands under Alternative 2 would result in less conversion of currently undeveloped land, which could reduce the visual impact of the new development, specifically for receptors located on the eastern side of the project site along Camille Lane and users of Madrone Trail. Implementation of **Mitigation Measure AES-1** would ensure that new single-family homes proposed under Alternative 2 would be visually consistent with the surrounding residential neighborhood. Overall, Alternative 2 would have similar impacts as the project, and would result in a less-than-significant impact to the visual quality of the surrounding area.

Alternative 2 would create sources of light and glare that could impact existing residences adjacent to the project site. New development would be zoned compatibly with surrounding neighborhoods, and would not result in light and glare beyond levels generated by existing residences. Implementation of **Mitigation Measure AES-2** would also reduce nighttime lighting impacts that would result from converting an open space area into residential housing. Since Alternative 2 would cluster this development away from the southern property boundary, the light/glare envelope for this alternative would be smaller than the proposed project, but more concentrated along the northern boundaries. With implementation of **Mitigation Measure AES-2**, Alternative 2 would have less-than-significant light and glare

impacts, which would be similar, though slightly reduced, relative to the proposed project.

Agriculture and Forestry

Alternative 2 proposes to retain Lots 17, 18, 19 and portions of Lots 9 and 16, in their natural state. While these lots are generally composed of developed orchard areas, non-orchard woodland would also be preserved, including valley oak woodland/savanna in the southwestern portion of Lot 9 and eucalyptus woodland in the southern portion of Lot 27. Alternative 2 would result in the loss of forest land at the project site due to the development of a relatively undeveloped area (**Impact AG-1**), but impacts to forest resources would be slightly reduced relative to the project – approximately eight trees would be retained on Lots 16, 17, 18, and 19. Similar to the project, this impact would be reduced to a less-than-significant level through implementation of **Mitigation Measure BIO-8**.

Air Quality

The potential to create objectionable odors affecting a substantial number of people would be similar for the proposed project and Alternative 2. Construction of the Wetland Avoidance Alternative would generate localized diesel odors, but these odors would be temporary, localized, and typical of odors associated with construction. The only potential source of odor associated with operation of Alternative 2 would be garbage or waste associated with land uses proposed onsite. As with the project, proper collection and disposal of generated waste would minimize the creation of objectionable odors.

Like the proposed project, Alternative 2 would not conflict with the 2010 Clean Air Plan (CAP) since it would have emissions well below the Bay Area Air Quality Management District (BAAQMD) thresholds. Additionally, both the project and Alternative 2 would adhere to the CEQA and BAAQMD guidelines, and would thus comply with the County's CAP.

Neither the proposed project nor Alternative 2 would result in emissions exceeding BAAQMD significance thresholds during construction (see **Chapter 4.3, Air Quality**). Construction of both the proposed project and Alternative 2 would generate two toxic air contaminants (TAC) – particulate matter with a diameter less than 2.5 micrometers (PM_{2.5}) and diesel particulate matter. Because Alternative 2 would have a smaller project footprint, exposure of sensitive receptors to TACs would be reduced. In addition, the preservation of proposed Lots 17, 18, and 19 and portions of Lots 9 and 16 would create a buffer between sensitive receptors located along Camille Lane and the construction site. No stationary sources of TACs, such as generators, are proposed as part of either the project or Alternative 2. Like the

proposed project, Alternative 2 would introduce new sensitive receptors to the area in the form of future residences. However, there are no existing TAC sources within 1,000 feet of the project site. While Alternative 2 could decrease TACs generated during the construction period, this impact would be less than significant without mitigation for both the proposed project and Alternative 2.

Like the proposed project, construction of Alternative 2 would generate fugitive dust (**Impact AQ-1**). Because Alternative 2 proposes the same number of homes as the project on a smaller project site, this alternative would require less site grading and would result in lower levels of fugitive dust. In addition, receptors located along Camille Lane, including Madrone Trail users, would be less affected under Alternative 2 because the preservation of proposed Lots 17, 18, and 19 and portions of Lots 9 and 16 would create a buffer between the construction zone and existing residential communities in this area. With implementation of **Mitigation Measure AQ-1**, this impact would be similar to, but slightly lower than, the project and, accordingly, would be less than significant.

Biological Resources

Neither the project nor the Wetland Avoidance Alternative would impact adopted habitat conservation plans or wildlife corridors. With incorporation of mitigation measures, all biological resource impacts would be less than significant for the project and Alternative 2.

The most substantial difference between the proposed project and Alternative 2 would be the avoidance of most direct impacts to seasonal wetlands with implementation of Alternative 2. Alternative 2 would indirectly affect Wetlands 2 and 3 through the loss of runoff from the office building, parking lot and landscape irrigation and, over time, the loss of this runoff is expected to result in a shrinkage in the size of wetlands 2 and 3. While Alternative 2 would avoid most wetland fill, its potential to reduce wetland areas would require the re-establishment of site hydrology or the replacement of wetlands on- or off-site in a manner consistent with **Mitigation Measure BIO-6b**. Ultimately, Alternative 2 would have lesser impacts to wetlands than the proposed project before mitigation. With incorporation of mitigation measures, the impacts of the proposed project and Alternative 2 would be similar.

Similar to the proposed project, implementation of Alternative 2 would lead to discharge of fill directly into Drainage 2. Reduced site preparation and ground-disturbing under Alternative 2 would decrease the potential to degrade water quality due to construction period runoff, but would not eliminate this risk to an insignificant level without mitigation. Similar to the proposed project,

implementation of **Mitigation Measure BIO-7** would reduce this impact to a less-than-significant level.

Project construction would have the potential to result in 'take' of special-status species known to occur on the project site (see **Section 4.4, Biological Resources**). No special-status species are known to inhabit wetlands areas that would be protected under Alternative 2, which have very limited habitat value given their location in a developed setting. Surface flow into the wetlands is too episodic to provide habitat for aquatic species, but wildlife using other habitats within the project site could use the seasonal wetlands and drainages. While Alternative 2 would have the potential to impact the same special-status species resources, it would decrease the intensity of this impact relative to the project because of the reduced construction footprint (i.e., about two acres, or 10 percent of the developable footprint) would not undergo residential development under this alternative. Regardless of whether the project constitutes 30 homes or 35 homes, approximately 36 trees will have to be removed on Lots 17, 18, 19, and portions of Lots 9 and 16 due to their poor health, such that species would be disturbed on these five lots. With 35 homes being distributed among the remaining developable acreage (i.e., the project site minus the five aforementioned lots), the level of intensity of development on this remainder would be increased with regard to the proposed project, increasing the possibility of wildlife disturbance in this portion of the site. Similar to the project, implementation of **Mitigation Measures BIO-1** through **BIO-5** would be required to reduce potential impacts related to special-status wildlife.

Reduced ground-disturbing activities under Alternative 2 would reduce the potential to degrade water quality due to construction period runoff compared to the project. However, **Mitigation Measure BIO-8** would still be required to reduce impacts to insignificant levels. Because Alternative 2 would leave proposed Lots 17, 18, 19 and portions of Lots 9 and 16 in their natural state, approximately eight fewer trees would be taken. Although slightly fewer replacement trees would be required to mitigate this loss, the application of Mitigation Measure BIO-8 would still be necessary. Refer to the Agricultural Resources discussion, above, for more information about tree impacts. Thus, impacts to protected trees under Alternative 2 could be slightly higher relative to the project, but still reduced to a less-than-significant level with implementation of **Mitigation Measure BIO-8**.

Cultural and Tribal Cultural Resources

Ground-disturbing activities associated with both the proposed project and the Wetland Avoidance Alternative would have the same potential to damage unknown cultural and tribal resources on the project site (**Impact CUL-1** through **Impact CUL-5**). However, as the construction envelope under Alternative 2 would be reduced by

approximately 10 percent compared to the proposed project, the severity of the impact to unknown cultural resources is reduced under Alternative 2. Similar to the project, potential impacts to cultural and tribal cultural resources under Alternative 2 would be less than significant with implementation of **Mitigation Measures CUL-1** and **CUL-2**.

Energy

Similar to the proposed project, energy consumption during the construction of the Wetland Avoidance Alternative would result primarily from transportation fuels used for haul trucks, heavy-duty construction equipment, and construction workers traveling to and from the site. Energy consumption may be reduced due to the alternative's reduction in site preparation activities such as grading and excavation, but neither the proposed project nor Alternative 2 would result in inefficient energy usage or significant demand on energy supply during construction.

Operational energy consumption under Alternative 2 would occur from the proposed residences and transportation fuels used for vehicles traveling to and from the site. Because Alternative 2 proposes the same number of dwelling units as the project, Alternative 2 would result in the same energy demand impacts as the project; operational energy impacts would be less than significant.

Geology and Soils

Both the proposed project and the Wetland Avoidance Alternative would allow new development on the project site. Alternative 2 would result in a slightly smaller project footprint that could reduce the risk of encountering seismic and soil-related hazards compared to the proposed project; however, this difference is negligible and impacts under both alternatives would be similar and reduced to a less-than-significant level with implementation of **Mitigation Measures GEO-1** and **GEO-2**.

Greenhouse Gas Emissions

The Wetland Avoidance Alternative proposes the same number of dwelling units as the proposed project, which is below BAAQMD screening size for significant greenhouse gas (GHG) emissions. Because Alternative 2 would be constructed within a smaller footprint on the project site compared to the proposed project, it is reasonable to assume that construction-related GHG emissions would be slightly lower when compared to the project. Operational GHG emissions would likely be similar because Alternative 2 proposes the same number of dwelling units. Similar to the project, Alternative 2 would result in less-than-significant construction-related and operational GHG emissions with implementation of **Mitigation Measure GHG-1**.

Hazards and Hazardous Materials

Impacts related to hazardous flight zones, emergency response plans, or underground storage tanks removed from the project site would not occur under the proposed project or the Wetland Avoidance Alternative. Similar to the project, impacts related to schools or the routine transport or disposal of hazardous materials would be less than significant. Vegetation management practices such as annual mowing, disking pruning and removal of dead vegetation would be implemented by the HOA to reduce the risk of wildland fire.

Due to the history of the site as agricultural land, portions of the site may contain elevated levels of agrichemicals that could endanger construction workers or future residents (**Impact HAZ-1**). Because several of the proposed lots would be left undeveloped in some manner under the Wetland Avoidance Alternative, less ground disturbance would be required during the initial grading and site preparation phase. Therefore, this impact would be reduced under Alternative 2.

Demolition activities could mobilize lead particles, asbestos fibers, and/or other hazardous materials that could be inhaled by construction workers and the public (**Impact HAZ-2**). Structures on the project site would be demolished under Alternative 2; thus the impact would be similar to the project. Implementation of **Mitigation Measures HAZ-1** and **HAZ-2** would reduce both impacts to a less-than-significant level.

Hydrology and Water Quality

Impacts related to flood hazard areas would be similar to the project under the Wetland Avoidance Alternative because the project site is not located within a FEMA 100- or 500-year flood hazard area. Alternative 2 would not utilize groundwater for irrigation or drinking water, thus resulting in no impacts to groundwater supplies.

The project site is separated from the San Francisco Bay shoreline by more than 11 miles and substantial intervening topography. Therefore, the possibility of damage from a tsunami is low. The site is not located adjacent to any large body of water that could be expected to overtop its banks during an earthquake, and is therefore not subject to inundation due to seiche. Alternative 2, like the proposed project, would not have a significant potential for mudflow due to the low gradient of the drainage areas west of the site. Corrective grading measures would be used to mitigate existing landslide hazards such that this impact would be less than significant.

Implementation of Alternative 2 would result in an increase in impervious surface relative to existing conditions, though Alternative 2 would have a reduced amount

of new impervious surfaces compared to the project, resulting in reduced quantities of stormwater runoff. The project's Stormwater Control Plan (SWCP) would ensure the capture and treatment of stormwater on the project site. According to the SWCP, additional surface runoff would be treated in bioretention facilities and conveyed to proposed storm drain pipes within the right-of-ways for new access roads serving the project. The proposed drainage system would be designed to comply with National Pollutant Discharge Elimination System (NPDES) and the County Public Works Department's C.3 requirements. Therefore, the quantity of runoff from the project site would be equal to or below existing runoff amounts. Reduced runoff under Alternative 2 would, in turn, result in comparable or slightly reduced impacts to water quality compared to the project. Nonetheless, the Wetland Avoidance Alternative would result in a less-than-significant impact to stormwater runoff, similar to the project.

While the project would alter both Drainage 1 and Drainage 2, Alternative 2 would only necessitate the alteration of Drainage 1 because Lots 16, 17, 18, 19, and portions of Lots 9 and 27 would be left in their current state. Drainage 2 would continue to drain into the wetlands located in these lots. In response to the Notice of Preparation, a local resident commented that the southeast corner of the project site (where Lots 16, 17, 18, and 19 are located) is prone to flooding. Implementation of the project would include drainage improvements to address the existing flood prone conditions. Alternative 2 would not include these improvements and existing conditions would remain in this area.

Alternative 2 would have the potential to degrade water quality. Alternative 2 would likely have a reduced impact during the construction period compared to the project because fewer ground-disturbing activities would be necessary during site preparation. Impacts during the operation phase would be similar to the project because the same number of dwelling units would be constructed. Impacts from Alternative 2 would be reduced to less than significant levels with implementation of a Storm Water Pollution Prevention Plan (SWPPP), Erosion Control Plan, and other design features, similar to the project.

Similar to the project, most hydrologic impacts of the Wetland Avoidance Alternative would be less than significant without need for mitigation. Construction-related water quality impacts would be reduced to less than significant levels through the implementation of an SWPPP, Erosion Control Plan, and **Mitigation Measure BIO-7**.

Land Use and Planning

The Wetland Avoidance Alternative would be consistent with allowable land uses in the General Plan. Although this alternative would result in a higher residential density (1.99 dwelling units per acre) than the project (1.76 dwelling units per acre), both densities are consistent with the area's Single-Family Residential – Low Density land use designation, which allows up to 2.9 dwelling units per acre.

However, the proposed project site is zoned as Single Family Residential – Lot Size 20,000 square foot minimum (R-20) by the County Zoning Map. Alternative 2 would increase the density of lots on the proposed project site, thus reducing lot sizes to an average of approximately 18,450 square feet per lot. This inconsistency would require rezoning of the area as R-15, for which the minimum lot size is 15,000 square feet. Such a conversion would conflict with the project's objective to conform to R-20 zoning district uses, and could result in an incompatibility with existing residential uses adjacent to the project site. Additionally, avoiding wetlands would also cause Alternative 2 to result in smaller lots, which would create inconsistency with Title 8 of the County Zoning Code regarding minimum lot sizes.

Mineral Resources

The project site does not contain any mineral resources. Development under the Wetland Avoidance Alternative would not result in impacts to mineral resources.

Noise

The Wetland Avoidance Alternative would be located approximately 10 miles southeast of the Buchanan Airport; the Contra Costa County Airport Land Use Compatibility Plan indicates that the project site is not located within this airport sphere of influence. The Little Hands private airstrip, the nearest private airstrip, is located approximately 2 miles south of the project site in the San Ramon area. The airstrip is owned by Little Hands Ranch, which operates three single-engine aircraft on the property. Air traffic in and out of this airport is expected to be minimal as the owner has chosen not to chart the airport, and permission is required from the owner for any aircraft to utilize the airstrip. Therefore, Alternative 2 would not result in any airport-related noise impacts.

Construction-related noise impacts would occur from site preparation, foundation work, framing, and interior work under both the project and Alternative 2. Because four proposed lots along Camille Lane would remain undeveloped, residences adjacent to these lots would experience reduced noise impacts during construction compared to the project. Preservation of these proposed lots would also benefit Madrone Trail users because the undeveloped lots would act as a buffer between the construction area and the trail. However, existing noise-sensitive land uses

adjacent to other areas of the project site would still be exposed to substantial construction noise levels (**Impact NOI-1**). With incorporation of **Mitigation Measure NOI-1**, this impact would be less than significant for Alternative 2, similar to the project.

Because Alternative 2 proposes the same number of housing units as the project, the Alternative 2 would result in similar traffic increases, and would not increase traffic noise levels by more than 1 dBA. Given this small increase and the fact that the development would be consistent with the surrounding residential neighborhoods, this impact would be less than significant under the Wetland Avoidance Alternative, similar to the project.

Population and Housing

The Wetland Avoidance Alternative and the proposed project propose the same number of housing units. Similar to the proposed project, no significant impacts to population and housing would occur and no mitigation would be required for Alternative 2.

Public Services and Recreation

The same number of residential units would be constructed under the Wetland Avoidance Alternative and the proposed project. Implementation of Alternative 2 would result in an identical demand for recreational facilities and public services such as police, fire protection, and emergency services. Like the project, Alternative 2 would result in a less-than-significant impact to public services and recreation.

Traffic/Transportation

Since Wetland Avoidance Alternative would result in the same number of dwelling units as the proposed project, and trip generation rates would be identical for both scenarios. Alternative 2 would not result in traffic impacts and would not require mitigation.

Utilities

Impacts to utilities would be directly related to the number of new residents introduced by the Wetland Avoidance Alternative. Because the number of dwelling units and new residents would be identical to the project, impacts would be the same for Alternative 2, as they are for the project. Impacts to utilities under both the proposed project and Alternative 2 would be less than significant and would not require mitigation.

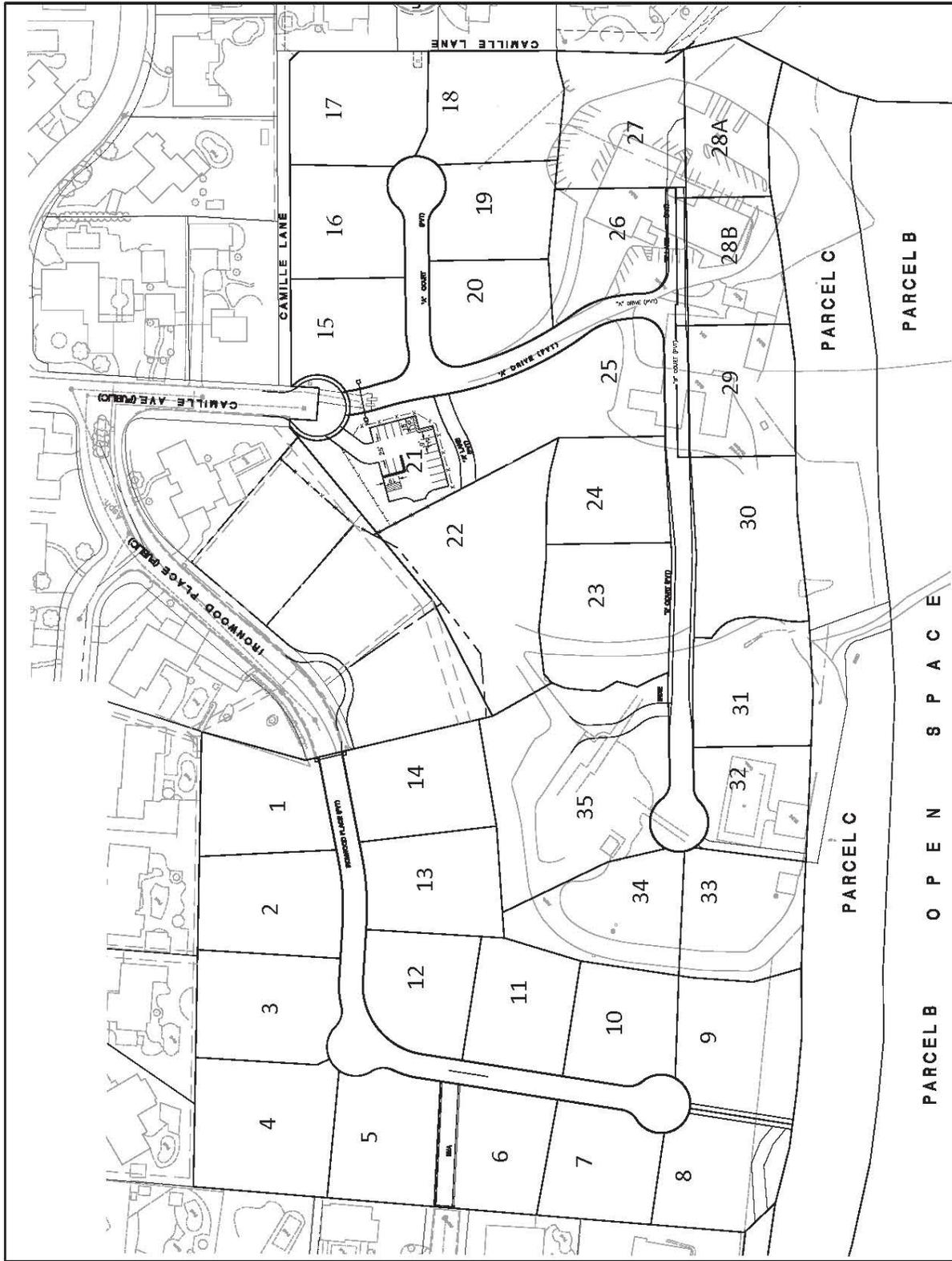
5.5.2 CONCLUSION

The Wetland Avoidance Alternative would meet all project objectives except for the one: Alternative 2 would conflict with the existing Single Family-Low Density General Plan land use designation or the R-20 zoning for the project site.

All significant impacts identified for the project would be reduced to a less than significant level with mitigation. Alternative 2 would reduce project impacts associated with filling wetlands and drainages on the southern portion of the project site by leaving wetland-encompassing lots undeveloped. Most other impacts would remain the same between the project and Alternative 2, but Alternative 2 would reduce the severity of impacts to several environmental resources due to a reduced construction footprint relative to the project. However, except for impacts to wetlands, none of these reductions to impact levels would be substantial. Alternative 2 would introduce one new potentially significant impact related to inconsistency with the existing zoning; a number of lots would not comply with Title 9 of the Ordinance Code, resulting in variances being required for lot width and lot depth.

5.6 ALTERNATIVE 3 - LOT 21 STAGING AREA

This alternative proposes a staging area on Lot 21 (see **Figure 5-1**). Under this alternative, a vehicle parking area for nearby trails and open space would be located on proposed Lot 21, and would accommodate 19 parking spaces and about 8,200 square feet of gravel surfacing. Proposed Lot 28 would be split into two lots such that the project site would still accommodate 35 lots.



Figure

Alternative 3 - Lot 21 Staging Area

5.6.2 ALTERNATIVE 3- LOT 21 STAGING AREA IMPACT ANALYSIS

Aesthetics

As discussed in **Section 4.1, Aesthetics**, the project site is not located within view of a state scenic highway and is not identified as a scenic vista in the Contra Costa County General Plan 2005-2020. Similar to the proposed project, the Lot 21 Staging Area Alternative would not result in adverse effects on scenic vistas or scenic resources within a state scenic highway.

Similar to the project, Alternative 3 would result in the conversion of currently undeveloped land into residential uses, which could degrade visual quality across the project site. Moving the staging area to Lot 21 would have slightly lesser, albeit similar, visual impacts when compared to Parcel D staging area. The Lot 21 staging area would be located within the residential development area and visible only from public vantage points along Camille Avenue. Parcel D, visible from Camille Lane and users of Madrone Trail, would be retained as open space.

Under Alternative 3, hikers on the Madrone Trail would not see a staging area on Parcel D, but would see more residential development in the vicinity of Lot 28, which would be split to accommodate two home sites. Overall, Alternative 3 would have slightly lesser impacts than the project, and would include **Mitigation Measure AES-1** to ensure that new single-family homes proposed under Alternative 3 would be visually consistent with the surrounding residential neighborhood. This impact would be less than significant for Alternative 3 and the project.

New residences proposed by Alternative 3 would create sources of light and glare that could impact existing residences adjacent to the development. Since this development would be compatible with surrounding neighborhoods, new light and glare would not exceed levels generated by existing residences. Implementation of **Mitigation Measure AES-2** would also reduce nighttime lighting impacts that would result from converting an open space area into residential housing. The light/glare envelope for this alternative would be slightly smaller than the project, since the Lot 21 staging area at the eastern edge of the project site would not be lit, though a future home on Lot 28A would likely be situated closer to the project site's southern boundary. With implementation of **Mitigation Measure AES-2**, Alternative 3 would have a less-than-significant light and glare impacts, and would have similar though slightly reduced impacts relative to the project.

Agriculture and Forestry

Neither the proposed project nor the Lot 21 Staging Area Alternative would impact agricultural resources. Under Alternative 3, approximately 25 trees proposed for removal on the Parcel D staging area would be retained. However, depending on the precise configuration of the Lot 21 staging area, trees proposed for preservation on Lot 21 may require removal. Overall, Alternative 3 would result in similar forestry impacts relative to the proposed project, which would be less than significant with implementation of **Mitigation Measure BIO-8**.

Air Quality

The Lot 21 Staging Area Alternative proposes the same number of homes as the project, and thus this alternative would result in identical impacts associated with objectionable odors, conflicts with an applicable air quality plan, and operational impacts. However, Alternative 3 would avoid construction on Parcel D, which would remain undeveloped. By avoiding construction within Parcel D, Alternative 3 would have a smaller construction footprint relative to the proposed project, and would result in reduced construction emissions. Alternative 3 would result in diminished impacts associated with construction emissions, which would remain less than significant with implementation of **Mitigation Measure AQ-1**.

Biological Resources

Neither the proposed project nor the Lot 21 Staging Area Alternative would impact adopted habitat conservation plans or wildlife corridors. With incorporation of mitigation measures, all biological resource impacts would be less than significant for the project and Alternative 3.

Construction would have the potential to result in injury or mortality to special-status species known to occur on the project site (see **Section 4.4, Biological Resources**). While Alternative 3 would have the potential to impact the same special-status species resources as the proposed project, it would decrease the intensity of the impact because of the reduced construction footprint. Similar to the proposed project, implementation of **Mitigation Measure BIO-1** through **Mitigation Measure BIO-5** would to reduce potential impacts related to special-status wildlife.

With respect to drainage channels within the project site, the project proposes a 10-foot long pedestrian bridge across Drainage 1 that may shade wetland vegetation and the channel beneath the bridge. This bridge would not be constructed for the Lot 21 staging area, but the Lot 21 Staging Area Alternative would locate the parking lot 10 feet from the top of a drainage channel. Overall, these differences are

minimal and impacts would be similar. Both the proposed project and the Lot 21 Staging Area Alternative propose development in close proximity to Drainage 1, including an arch culvert at 'A' Lane, a culvert south of Lot 21 for 'A' Drive, and an identically situated bioswale that is within 10 feet of top of bank. While the Lot 21 staging area would require hardscape 10 feet closer to the drainage than under the proposed project (the proposed project contemplates a 20' setback from the creek on Lot 21), the effect on water quality and habitat value in the drainage would be largely the same. Runoff under both development scenarios would be treated prior to discharge to the drainage. Habitat value associated with the open section of the drainage between the 'A' Lane arch culvert and the 'A' Drive culvert is minimal with essentially no difference in effect between development 10 or 20 feet from the top of bank. As such, the proposed project and Lot 21 Staging Area Alternative would result in similar potential impacts to drainage channels on the project site.

Similar to the proposed project, implementation of Alternative 3 would lead to discharge of fill directly into on-site drainages. Alternative 3 would require slightly lower grading quantities and new impervious footprint than the project. Furthermore, Alternative 3 would avoid ground disturbance on Parcel D. Since Parcel D would remain undeveloped, it would decrease the amount of earthwork required for the project and have a lower potential to degrade water quality due to construction-period stormwater runoff and erosion. Similar to the proposed project, implementation of **Mitigation Measure BIO-7** would reduce this impact to a less-than-significant level for Alternative 3.

Alternative 3 would avoid tree removals on Parcel D but could result in additional tree removals on Lots 21 and 28. This impact would be similar for Alternative 3 and the proposed project, and reduced to a less-than-significant level by **Mitigation Measure BIO-8**.

Cultural and Tribal Cultural Resources

Ground-disturbing activities associated with both the proposed project and the Lot 21 Staging Area Alternative would have the same potential to damage unknown cultural and tribal cultural resources on the project site (**Impact CUL-1** through **Impact CUL-5**). However, as the construction envelope of development under Alternative 3 would be slightly reduced compared to the project, the severity of the impact to unknown cultural and tribal cultural resources would be diminished under Alternative 3.

Energy

Similar to the proposed project, energy consumption during the construction of the Lot 21 Staging Area Alternative would result primarily from transportation fuels used for haul trucks, heavy-duty construction equipment, and construction workers traveling to and from the site. Energy consumption may be reduced due to the alternative's reduction in site preparation activities such as grading and excavation, but neither the proposed project nor Alternative 3 would result in inefficient energy usage or significant demand on energy supply during construction.

Operational energy consumption under Alternative 3 would occur from the proposed residences and transportation fuels used for vehicles traveling to and from the site. Because Alternative 3 proposes the same number of dwelling units as the project, Alternative 3 would result in the same energy demand impacts as the proposed project; operational energy impacts would be less than significant.

Geology and Soils

Both the proposed project and the Lot 21 Staging Area Alternative would allow new development on the project site. This Alternative would result in a slightly smaller project footprint that could reduce the risk of encountering seismic and soil-related hazards compared to the project; however, this difference is negligible and impacts under both alternatives would be similar and reduced to a less-than-significant level with implementation of **Mitigation Measures GEO-1** and **GEO-2**.

Greenhouse Gas Emissions

The Lot 21 Staging Area Alternative proposes the same number of dwelling units as the proposed project, which is below BAAQMD screening size for significant GHG emissions. Because Alternative 3 would be constructed within a slightly smaller footprint compared to the proposed project (due to avoidance of Parcel D), it is reasonable to assume that construction-related GHG emissions would be slightly lower when compared to the project. Operational GHG emissions would likely be similar because Alternative 3 proposes the same number of dwelling units and both options include a 19-space staging area. Similar to the proposed project, Alternative 3 would result in less-than-significant construction-related and operational GHG emissions with implementation of **Mitigation Measure GHG-1**.

Hazards and Hazardous Materials

Impacts related to hazardous flight zones, emergency response plans, or underground storage tanks removed from the project site would not occur under

the proposed project or the Lot 21 Staging Area Alternative. Similar to the proposed project, impacts related to schools or the routine transport or disposal of hazardous materials would be less than significant. Vegetation management practices such as annual mowing, disking pruning and removal of dead vegetation would be implemented by the HOA to reduce the risk of wildland fire.

Due to the history of the site as agricultural land, portions of the site may contain elevated levels of agrichemicals that could endanger construction workers or future residents (**Impact HAZ-1**). This potential impact would be reduced to a less-than-significant level through implementation of **Mitigation Measure HAZ-1**.

Demolition activities could mobilize lead particles, asbestos fibers, and/or other hazardous materials that could be inhaled by construction workers and the public (**Impact HAZ-2**). Structures on the project site would be demolished under Alternative 3; thus the impact would be similar to the proposed project. Implementation of **Mitigation Measures HAZ-1** and **HAZ-2** would reduce both impacts to a less-than-significant level.

Hydrology and Water Quality

Impacts related to flood hazard areas would be similar to the project under the Lot 21 Staging Area Alternative because the project site is not located within a FEMA 100- or 500-year flood hazard area. Alternative 3 would not utilize groundwater for irrigation or drinking water, thus resulting in no impacts to groundwater supplies.

The project site is separated from the San Francisco Bay shoreline by more than 11 miles and substantial intervening topography. Therefore, the possibility of damage from a tsunami is low. The site is not located adjacent to any large body of fresh water that could be expected to overtop its banks during an earthquake, and is therefore not subject to inundation due to seiche. Alternative 3, like the proposed project, would not have a significant potential for mudflow due to the low gradient of the drainage areas west of the site. Corrective grading measures would be used to mitigate existing landslide hazards such that this impact would be less than significant.

Alternative 3 would have a slightly reduced, albeit similar, amount of new impervious surfaces compared to the proposed project, resulting in reduced quantities of stormwater runoff. The project's SWCP would ensure the capture and treatment of stormwater on the project site. According to the SWCP, additional surface runoff would be treated in bioretention facilities and conveyed to proposed storm drain pipes within the right-of-ways for new access roads serving the project. The proposed drainage system would be designed to comply with NPDES and the County Public Works Department's C.3 requirements. Therefore, the quantity of

runoff from the project site would be equal to or below existing runoff amounts. Reduced runoff under Alternative 3 would, in turn, result in comparable or slightly reduced impacts to water quality compared to the project. Nonetheless, Alternative 3 would result in a less-than-significant impact to stormwater runoff, similar to the project.

While the proposed project would alter both Drainage 1 and Drainage 2, Alternative 3 would not require a footbridge over Drainage 1. Installation of this footbridge would not have any significant impacts under the proposed project, but Alternative 3 would not disturb this segment of Drainage 1. With respect to Drainage 1, both the proposed project and the Lot 21 Staging Area Alternative would include similar improvements in and around this waterway, including an arch culvert at 'A' Lane, an inlet culvert south of Lot 21 along 'A' Drive, and an identically situated bioswale that is within 10 feet of the top of the bank. While the Lot 21 Staging Area Alternative would require hardscape 10 feet closer to the drainage than under the proposed project, the effect on water quality and habitat value in the drainage would be largely the same. Runoff under both development scenarios would be treated prior to discharge to the drainage. Habitat value associated with the open section of the drainage between the 'A' Lane arch culvert and the 'A' Drive culvert is minimal, with essentially no difference in impact between development 10 or 20 feet from the top of the bank.

Alternative 3 would likely have a slightly reduced impact during the construction period because slightly fewer ground-disturbing activities would be necessary during site preparation. Impacts during the operation phase would be similar to the project because the same number of dwelling units would be constructed. Overall, Alternative 3 would result in slightly diminished hydrology and water quality impacts relative to the project, which would be less than significant with the implementation of an SWPPP, Erosion Control Plan, and **Mitigation Measure BIO-7**.

Land Use and Planning

The Lot 21 staging area would be located within the Single-Family Residential - Low Density land use area, and is not explicitly designated as an allowable use (though publicly-owned parks are allowed uses). By contrast, the Parcel D staging area would be located within an area designated as OS, and would be consistent with the site's open space designation. Alternative 3 would also require an exception from Title 9 creek structure setbacks meant to protect Drainage 1, which bisects Lot 21. Relative to the project, Alternative 3 is less compatible regarding land use designations, but land use impacts would remain less than significant for the proposed project and the Lot 21 Staging Area Alternative.

Mineral Resources

The project site does not contain any mineral resources. Development of the Lot 21 Staging Area Alternative would not result in impacts to mineral resources.

Noise

The Lot 21 Staging Area Alternative would be located approximately 10 miles southeast of the Buchanan Airport. A review of the Contra Costa County Airport Land Use Compatibility Plan indicates that the project site is not located within the airport sphere of influence. The Little Hands private airstrip, the nearest private airstrip, is located approximately 2 miles south of the project site in the San Ramon area. The airstrip is owned by Little Hands Ranch, which operates three single-engine aircraft on the property. Air traffic in and out of this airport is expected to be minimal as the owner has chosen not to chart the airport, and permission is required from the owner for any aircraft to utilize the airstrip. Therefore, the Lot 21 Staging Area Alternative would not result in any airport-related noise impacts.

Construction-related noise impacts would occur from site preparation, foundation work, framing, and interior work under both the project and Alternative 3. Within the project site, the internal construction pattern under Alternative 3 would be slightly different from the project: Alternative 3 proposes a staging area instead of a home on Lot 21 and a densification of homes in the vicinity of Lot 28. This development could modify the construction noise profile, reducing construction noise impacts near Lot 21 and increasing construction noise near Lot 28. These changes would not alter the overall construction noise profile, and noise-sensitive land uses adjacent to other areas of the project site would still be exposed to substantial construction noise (**Impact NOI-I**). With incorporation of **Mitigation Measure NOI-1**, this impact would be less than significant for Alternative 3, similar to the proposed project. However, since Parcel D would remain undeveloped, Alternative 3 would have a slightly smaller construction noise envelope relative to the proposed project.

Because Alternative 3 proposes the same number of housing units as the project, the Alternative 3 would result in similar traffic increases, and would not increase traffic noise levels by more than 1 dBA. Given this small increase and the fact that the development would be consistent with the surrounding residential neighborhoods, this impact would be less than significant under Alternative 3, similar to the project.

Population and Housing

The same number of residential units would be constructed under the Lot 21 Staging Area Alternative as the proposed project. Similar to the proposed project, no significant impacts to population and housing would occur and no mitigation would be required for Alternative 3.

Public Services and Recreation

Because the same number of residential units would be constructed under the Lot 21 Staging Area Alternative as compared to the proposed project, implementation of Alternative 3 would result in an identical demand for recreational facilities and public services such as police, fire protection, and emergency services. Like the proposed project, Alternative 3 would result in less-than-significant impacts to public services and recreation.

Traffic/Transportation

The Lot 21 Staging Area Alternative would result in the same number of dwelling units as the proposed project and thus trip generation would be the same as the project. Although the Lot 21 staging area would slightly modify internal circulation within the project site, transportation and traffic impacts would be similar for Alternative 3 and the proposed project. These impacts would be less than significant without mitigation.

Utilities

Impacts to utilities would be directly related to the number of new residents introduced by the Lot 21 Staging Area Alternative. Because the number of dwelling units and new residents would be identical to the proposed project, impacts would be the same for Alternative 3, as they are for the proposed project. Impacts to utilities under both the project and Alternative 3 would be less than significant and would not require mitigation.

5.6.3 CONCLUSION

The Lot 21 Staging Area Alternative, insofar as it avoids construction of a staging area on Parcel D, would result in similar or slightly reduced impacts when compared to the proposed project. Alternative 3 would require a slightly smaller construction envelope, would avoid ground disturbance in the Parcel D open space, and would not require a footbridge over Drainage 1. However, Alternative 3 would place a recreational staging area directly adjacent to existing residential homes within a

Single-Family Residential - Low Density land use designation, resulting in potential land use and zoning compatibility issues because the Single-Family Residential – Low Density land use designation does not explicitly allow staging area (although publicly-owned parks are acceptable uses). The Parcel D staging area proposed under the project would be located within an area designated as Open Space, and would be consistent with the site’s open space designation. Furthermore, Alternative 3 would require an exception from Title 9 Subdivision creek structure setbacks meant to protect Drainage 1, which bisects Lot 21.

5.7 SUMMARY OF COMPARATIVE IMPACTS

This section summarizes potential impacts that would occur under the project and each alternative. **Table 5-2** shows whether the impacts anticipated under each alternative would be equal to, below, or greater than those of the project.

Table 5-2 Summary of Comparative Impacts

Environmental Topic	Project	Alternative 1 - No Project		Alternative 2 - Wetland Avoidance		Alternative 3 - Lot 21 Staging Area	
		Significance	Comparison	Significance	Comparison	Significance	Comparison
<i>Aesthetics</i>							
Have a substantial adverse effect on a scenic vista	NI	LTS	=	LTS	=	LTS	=
Substantially damage scenic resources within a state scenic highway	NI	NI	=	NI	=	NI	=
Substantially degrade existing visual character or quality	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Create a new source of substantial light or glare	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Cumulative impacts	LTS	NI	↓	LTS	↓	LTS	↓
<i>Agriculture and Forestry</i>							
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance	NI	NI	=	NI	=	NI	=
Conflict with existing zoning for agricultural use, forestland, timberland, or a Williamson Act contract	NI	NI	=	NI	=	NI	=
Loss of forest land or conversion of forest land to non-forest use	LTS/M	NI	=	LTS/M	↓	LTS/M	=
Other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland, to non-agricultural use	LTS/M	NI	=	LTS/M	↓	LTS/M	=
Cumulative impacts	LTS	NI	↓	LTS	=	LTS	=
<i>Air Quality</i>							
Conflict with the applicable air quality plan	LTS	NI	=	LTS	=	LTS	=

Environmental Topic	Project	Alternative 1 - No Project		Alternative 2 - Wetland Avoidance		Alternative 3 - Lot 21 Staging Area	
		Significance	Comparison	Significance	Comparison	Significance	Comparison
Violate or contribute to an existing air quality violation	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Expose sensitive receptors to substantial pollutant concentrations	LTS	NI	↓	LTS	↓	LTS	↓
Result in a community risk due to an increased cancer risk	LTS	NI	↓	LTS	=	LTS	=
Create objectionable odors affecting a substantial number of people	LTS	NI	↓	LTS	=	LTS	=
Cumulative impacts	LTS/M	NI	↓	LTS/M	=	LTS/M	=
Biological Resources							
Impacts to special-status species	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Substantial effect on riparian habitat or other sensitive communities	LTS/M	NI	↓	LTS/M	↓	LTS/M	=
Substantial effect on wetlands and other waters	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Interfere with movement of native migratory wildlife species	NI	NI	=	NI	=	NI	=
Conflict with local policies protecting biological resources	LTS/M	NI	↓	LTS/M	↑	LTS/M	=
Conflict with a conservation management plan	NI	NI	=	NI	=	NI	=
Cumulative impacts	NI	NI	↓	NI	=	NI	=

Environmental Topic	Project	Alternative 1 - No Project		Alternative 2 - Wetland Avoidance		Alternative 3 - Lot 21 Staging Area	
		Significance	Comparison	Significance	Comparison	Significance	Comparison
<i>Cultural and Tribal Cultural Resources</i>							
Impacts on historic structures	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Impacts on archeological resources	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Impacts on paleontological resources	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Impacts on human remains	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Impacts on tribal cultural resources	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Cumulative impacts	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
<i>Energy</i>							
Inefficient energy usage	LTS	NI	↓	LTS	=	LTS	=
Significant demand on energy supply	LTS	NI	↓	LTS	=	LTS	=
Cumulative impacts	NI	NI	↓	NI	=	NI	=
<i>Geology and Soils</i>							
Substantial adverse effects involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, or landslides.	LTS/M	NI	↓	LTS/M	=	LTS/M	=
Soil erosion	LTS	NI	↓	LTS	↓	LTS	↓
Unstable soils	LTS/M	NI	↓	LTS/M	=	LTS/M	=
Expansive soils	LTS/M	NI	↓	LTS/M	=	LTS/M	=

Environmental Topic	Project	Alternative 1 - No Project		Alternative 2 - Wetland Avoidance		Alternative 3 - Lot 21 Staging Area	
		Significance	Comparison	Significance	Comparison	Significance	Comparison
Septic tank and alternative wastewater systems	NI	NI	=	NI	=	NI	=
Cumulative impacts	NI	NI	↓	NI	=	NI	=
Greenhouse Gas Emissions							
Impacts from greenhouse gas emissions	LTS	NI	↓	LTS	↓	LTS	↓
Conflicts with existing plans and policies	LTS/M	NI	↓	LTS/M	=	LTS/M	=
Hazards and Hazardous Materials							
Routine use/transport of hazardous materials	LTS	NI	↓	LTS	=	LTS	=
Accidental release of hazardous materials	LTS/M	NI	↓	LTS/M	↓	LTS/M	=
Emit hazardous materials in proximity to schools	LTS	NI	↓	LTS	=	LTS	=
On a Cortese list site	NI	NI	=	NI	=	NI	=
Safety hazards from public or private airports	NI	NI	=	NI	=	NI	=
Interfere with emergency response emergency plan	NI	NI	=	NI	=	NI	=
Wildland fires	LTS/M	NI	=	LTS/M	=	LTS/M	=
Cumulative impacts	NI	NI	↓	NI	=	NI	=
Hydrology and Water Quality							
Violation of water quality standards or waste discharge requirements	NI	NI	=	NI	=	NI	=
Effects on groundwater supplies and recharge	NI	NI	=	NI	=	NI	=
Changes to existing drainage patterns	LTS/M	NI	↓	LTS	↓	LTS	↓

Environmental Topic	Project	Alternative 1 - No Project		Alternative 2 - Wetland Avoidance		Alternative 3 - Lot 21 Staging Area	
		Significance	Comparison	Significance	Comparison	Significance	Comparison
Changes to stormwater runoff	LTS	LTS	↑	LTS	↑	LTS	=
Degradation of water quality	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Impacts from flooding in a flood hazard area	NI	NI	=	NI	=	NI	=
Impacts from failure of a levee or dam	NI	NI	=	NI	=	NI	=
Seiche, tsunami, or mudflow impacts	LTS	NI	=	LTS	=	LTS	=
Cumulative impacts	NI	NI	↓	NI	=	NI	=
Land Use and Planning							
Physical division of an established community	NI	NI	=	NI	=	NI	=
Conflicts with adopted city land use plans and policies	LTS	NI	↓	LTS	↑	LTS	↑
Conflict with a habitat conservation plan or natural community conservation plan	NI	NI	=	NI	=	NI	=
Cumulative impacts	NI	NI	↓	NI	=	NI	=
Mineral Resources							
Loss of availability of a known mineral resource that would be of value to the region and the residents of the state	NI	NI	=	NI	=	NI	=
Loss of availability of a locally-important mineral resource recovery site	NI	NI	=	NI	=	NI	=
Cumulative impacts	NI	NI	=	NI	=	NI	=
Noise and Vibration							
Generation of noise levels in excess of standards established in	LT	NI	↓	LTS	=	LTS	=

Environmental Topic	Project	Alternative 1 - No Project		Alternative 2 - Wetland Avoidance		Alternative 3 - Lot 21 Staging Area	
		Significance	Comparison	Significance	Comparison	Significance	Comparison
the local General Plan or noise ordinance, or applicable standards of other agencies							
Generation of excessive ground borne vibration or ground borne noise levels	LTS	NI	↓	LTS	=	LTS	=
Generation of a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project	LTS	NI	↓	LTS	=	LTS	=
Generation of a substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing levels existing without the project	LTS/M	NI	↓	LTS/M	↓	LTS/M	↓
Location within two miles of a public airstrip	NI	NI	=	NI	=	NI	=
Location within two miles of a private airstrip	NI	NI	=	NI	=	NI	=
Cumulative impacts	NI	NI	↓	NI	=	NI	=
Population and Housing							
Population growth	LTS	NI	↓	LTS	=	LTS	=
Displacement of housing	NI	NI	=	NI	=	NI	=
Displacement of people	LTS	NI	↓	LTS	=	LTS	=
Cumulative impacts	LTS	NI	↓	LTS	=	LTS	=
Public Services and Recreation							
Fire service impacts	LTS	NI	↓	LTS	=	LTS	=
Police service impacts	LTS	NI	↓	LTS	=	LTS	=

Environmental Topic	Project	Alternative 1 - No Project		Alternative 2 - Wetland Avoidance		Alternative 3 - Lot 21 Staging Area	
		Significance	Comparison	Significance	Comparison	Significance	Comparison
School impacts	LTS	NI	↓	LTS	=	LTS	=
Recreational impacts	LTS	NI	↓	LTS	=	LTS	=
Library impacts	LTS	NI	↓	LTS	=	LTS	=
Cumulative impacts	LTS	NI	↓	LTS	=	LTS	=
<i>Transportation and Traffic</i>							
Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation	LTS	LTS	↓	LTS	=	LTS	=
Conflict with an applicable congestion management program	LTS	NI	↓	LTS	=	LTS	=
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	NI	NI	=	NI	=	NI	=
Substantially increase hazards due to a design feature	LTS	NI	↓	LTS	=	LTS	=
Result in inadequate emergency access	LTS	NI	↓	LTS	=	LTS	=
Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities	LTS	NI	↓	LTS	=	LTS	=
Cumulative impacts	LTS	NI	=	LTS	=	LTS	=

Environmental Topic	Project	Alternative 1 - No Project		Alternative 2 - Wetland Avoidance		Alternative 3 - Lot 21 Staging Area	
		Significance	Comparison	Significance	Comparison	Significance	Comparison
Utilities and Service Systems							
Exceed wastewater treatment requirements	LTS	NI	=	LTS	=	LTS	=
Require or result in the construction of new water or wastewater treatment facilities	LTS	NI	↓	LTS	=	LTS	=
Require or result in the construction of new stormwater treatment facilities	LTS	NI	↓	LTS	=	LTS	=
Not have sufficient water supplies available to serve the project from existing entitlements and resources	LTS	NI	↓	LTS	=	LTS	=
Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand	LTS	NI	↓	LTS	=	LTS	=
Be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs	LTS	NI	↓	LTS	=	LTS	=
Not comply with federal, state, and local statutes and regulations related to solid waste	LTS	NI	=	LTS	=	LTS	=

NI = No Impact

LTS = Less than Significant

LTS/M = Less than Significant with Mitigation

= Equal to

↓ Lesser Impact than project

↑ Greater Impact than project

5.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior project alternative. The environmentally superior alternative must be an alternative to the project that reduces some of the environmental impacts, regardless of the financial costs associated with this alternative. Identification of the environmentally superior alternative is an informal procedure and the alternative identified as the environmentally superior alternative may not be that which best meets the goals or needs of a project. Additionally, if the No Project Alternative is determined to reduce most impacts, CEQA requires that the EIR identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e]).

Given the comparison of alternatives identified in **Table 5-2**, the No Project Alternative would avoid all of the significant impacts identified for the proposed project; however, it would not fulfill any of the project objectives.

Alternative 3, Lot 21 Staging Area Alternative would slightly reduce the construction profile and would avoid impacts in the Parcel D open space. Alternative 3 would meet all project objectives, but relative to the project, the impact to environmental resources under Alternative 3 would be similar. Alternative 3 could create land use compatibility issues by locating a staging area on Lot 21 because the *Single-Family Residential - Low* land use area is not explicitly designated as an allowable use (though publicly-owned parks are allowed uses).

Pursuant to CEQA, Alternative 2, the Wetland Avoidance Alternative, is the environmentally superior alternative. Alternative 2 would substantially reduce impacts to on-site wetlands and drainages by placing surrounding land into conservation easements rather than allowing development of homes that would require filling and daylighting. In addition to reducing this biological impact, Alternative 2 would further reduce the magnitude of the less-than-significant impacts identified for the proposed project related to aesthetics, agriculture and forestry, air quality, cultural and tribal cultural resources, greenhouse gas emissions, hazardous materials and wastes, and noise.

For these reasons, Alternative 2 is the environmentally superior alternative to the project. However, Alternative 2 would not meet the project objective to develop the property consistent with the existing R-20 zoning; which requires a minimum of 20,000 sq. ft. lots. By maintaining the 35 units within a smaller footprint on the project site, this alternative would reduce lot sizes to an average of approximately 18,450 square feet per lot. This inconsistency would require rezoning of the area as R-15, for which the minimum lot size is 15,000 square feet.

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