3. Revisions to the Revised Draft EIR

This chapter presents changes to the Revised Draft Environmental Impact Report (EIR) that resulted from preparation of responses to comments, or from staff-directed changes, including corrections and clarifications. In each case, the page and location on the page in the Revised Draft EIR is presented, followed by the text or graphic revision. Underlined text represents language that has been added to the EIR; text in ~~strikethrough~~ has been deleted from the EIR. The revisions in this chapter do not require recirculation of the Revised Draft EIR because they do not constitute "significant new information" under Section 15088.5 of the CEQA Guidelines. All changes to the Revised Draft EIR's Table 1-1, *Summary of Impacts and Mitigation Measures*, are included in Chapter 1, *Executive Summary*, of this Final EIR.

CHAPTER 3 PROJECT DESCRIPTION

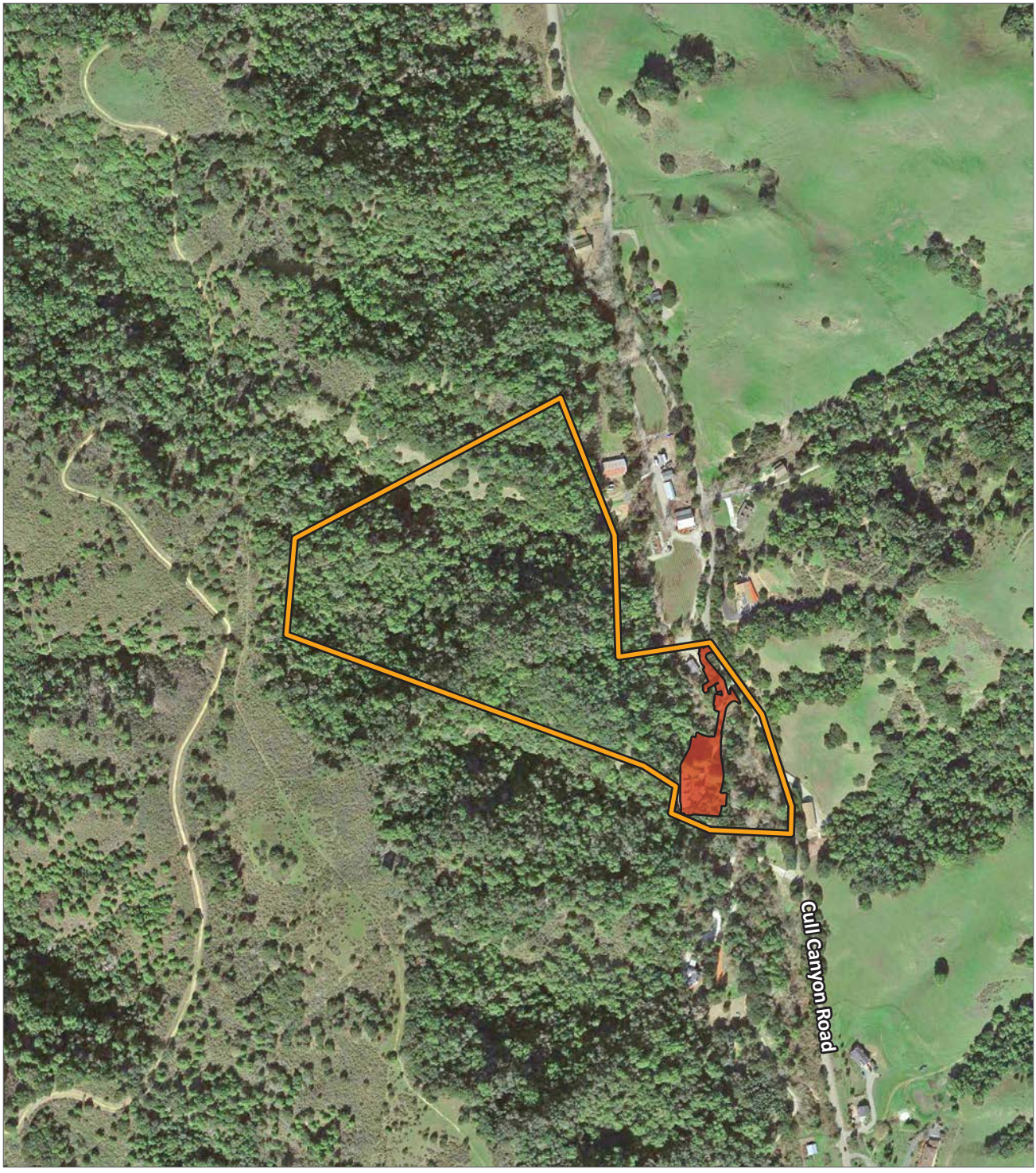
The first paragraph under Section 3.1, *Project Site Location and Characteristics*, on page 3-1 of the Revised Draft EIR is hereby amended as follows:

The proposed project is located on a 37-acre site at 17015 Cull Canyon Road near the unincorporated community of Castro Valley, in Alameda County, California, approximately three miles north of Interstate 580 (I- 580). The site is identified by the Alameda County Assessor's Office as Assessor's Parcel Number (APN) 085-1200-01-16. 1 The site is bounded by Cull Canyon Road to the east, Twining Vine Winery to the north, ~~Cull Canyon Regional Recreational Area~~ Eastbay Regional Parkland adjacent to the agricultural properties to the west, and residential property to the south. Figure 3- 1, Regional Location, shows the location of the project site.

The text under Section 3.1.2, *Surrounding Land Uses*, on page 3-2 of the Revised Draft EIR is hereby amended as follows:

Figure 3-2a, *Local Context*, shows the immediate vicinity of the project site. The project site is within a largely undeveloped area. Residential land uses are located east, south, and west of the project site; the Twining Vine Winery ~~and Event Center~~ is located to the north; and East Bay Regional Parkland is adjacent to the agricultural properties located along the western boundary. Within the Eastbay Regional Parkland, and bordering the project site to the west, is the Juan Bautista de Anza Historic Trail that stretches from the San Francisco Bay Area to Nogales, Arizona.

Figure 3-2, *Local Context*, on page 3-5 of the Revised Draft EIR is hereby revised and renumbered to Figure 3-2a and a new figure (Figure 3-2b, *Proposed 2-Acre Development Area*) is hereby added after page 3-5:



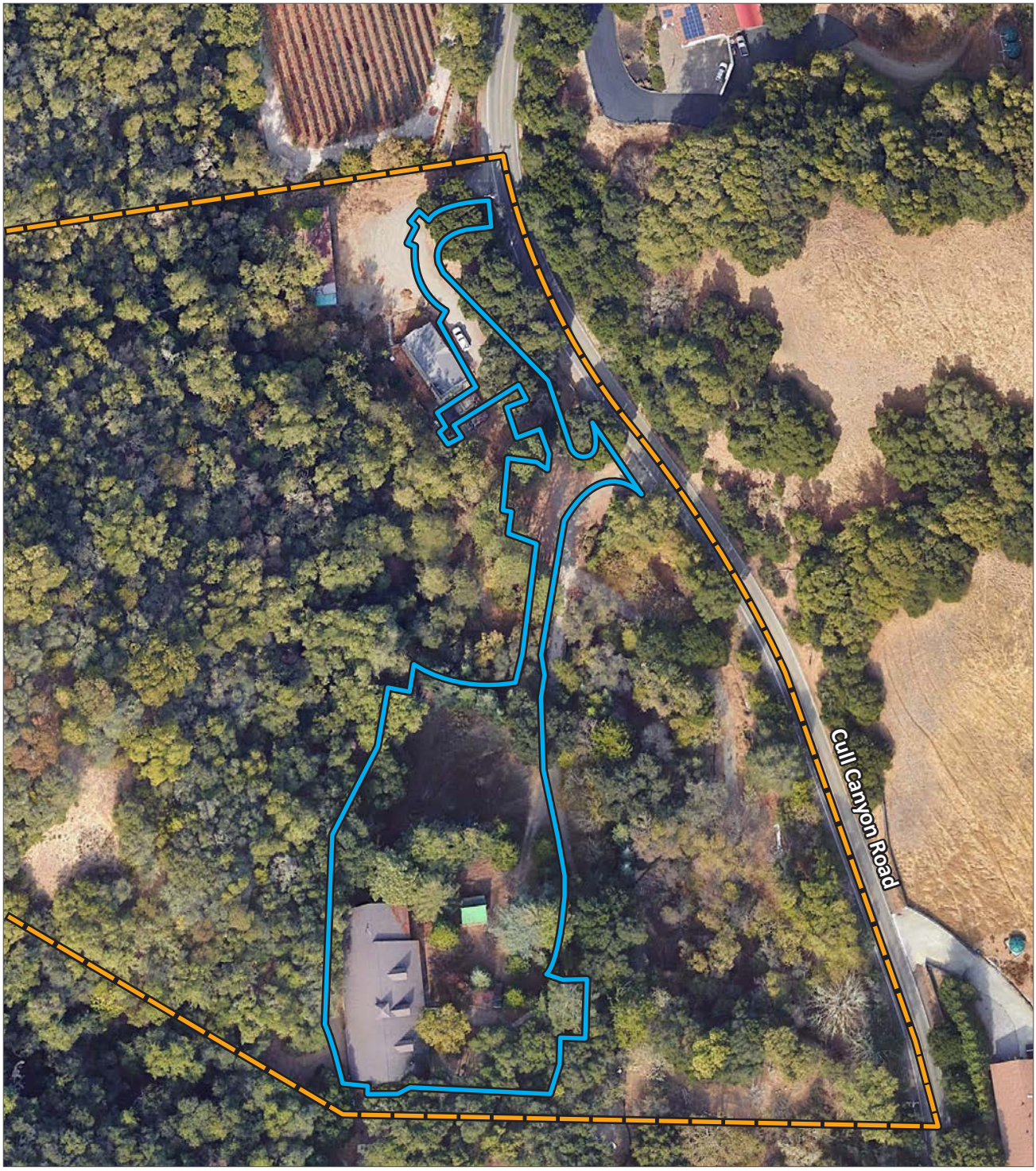
Source: Google Earth, 2021. PlaceWorks, 2021.

0 700
Scale (Feet)

Approximate Project Site Boundary

Approximate Proposed
2-Acre Development Area

Figure 3-2a
Local Context



Source: Google Earth, 2024. PlaceWorks, 2024.

0 100
Scale (Feet)

Approximate Project Site Boundary

Approximate Proposed
2-Acre Development Area

Figure 3-2b
Proposed 2-Acre Development Area

The bulleted list under Section 3.2, *Project Objectives*, on page 3-6 of the Revised Draft EIR is hereby amended as follows:

The project applicant has developed the following project objectives:

- Provide state-of-the-art experiential educational programs.
- Develop a project focused site within 30 miles of the majority of the partner elementary schools.
- Provide chickens ~~and goats~~ as a learning experience for the youth in the program ~~as well as natural maintenance of the property~~.
- Provide an organic garden for the site and program. Produce from the garden would be used in student meals and sold to the community. Students would learn about the history of cultivation in the area and the growing of produce.
- Provide improved pedestrian trail and site maintenance. Dirt roads and trails exist on the property and extend within the bay/oak woodland habitat that covers the slopes on the western side of the project site. These existing roads/trails would be repurposed to serve as a recreational pedestrian trail system~~, with undergrowth maintained by the goats housed on the property~~.
- Provide a caretaker's residence to watch over the facilities and animals when not in session.
- Meet the development standards of the Alameda County Castro Valley Jurisdiction, including fire access, storm water management, and site development restrictions.
- Provide parking to meet Alameda County's standards.
- Replace existing utilities to accommodate the proposed project including a small private water system and expanded private wastewater system.
- Provide a greywater irrigation system that can be used as a test project for Alameda County Environmental Health.

The text under Section 3.3.1.6, *Staff House*, on page 3-9 of the Revised Draft EIR is hereby amended as follows:

A 2,600-square-foot 6-bedroom staff house, or "family" dwelling (Figure 3-7, Staff House), would be constructed to the north of the cabins on the western portion of the project site to serve as the project staff's permanent home.

The text under Section 3.3.1.9, *Agricultural and Farming Activities*, on page 3-9 of the Revised Draft EIR is hereby amended as follows:

Farm animals consisting of up ~~to five pigmy goats and forty~~ twenty chickens, would be kept on-site with a proposed yard on the northern portion of the project site adjacent to Cull Canyon Road. The animals would be used for ~~natural property maintenance,~~ food~~,~~ and as an educational experience for the campers. ~~The animals would graze on the property with the main purpose of understory vegetation maintenance.~~ An additional goal of the agricultural and farming activities is for The Mosaic Project to earn income to

support its activities from selling ~~goat's milk~~ forest products, eggs, and vegetables~~, as well as from renting out the goats for grazing for fuel reduction and fire abatement~~.

The second bulleted list under Section 3.4, *Required Permits and Approvals*, on page 3-26 of the Revised Draft EIR is hereby amended as follows:

In addition to the above, other permits or approvals that may be required for the proposed project include:

- Permit Registration Documents and Stormwater Pollution Prevention Plan to the State Water Resources Control Board for compliance with the Construction General Permit for disturbance of land totaling one acre or more
- Stormwater Checklist for C.6/C.3 Compliance to the Alameda County Public Works Agency prior to the issuance of grading and building permits
- Consultation with the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife for construction of stormwater outfalls into Cull Creek, if re-routing of the existing culvert requires construction of stormwater outfalls
- Authorization under Sections 404 and 401 of the Clean Water Act from USACE and the San Francisco Bay RWQCB, if re-routing of the existing culvert requires construction of stormwater outfalls
- Resource Recovery Base Agreement for delivery of materials to East Bay Municipal Utility District, a Material Acceptance Permit, and proof of general liability insurance and auto and worker's compensation insurance

CHAPTER 4.1 AGRICULTURE AND FORESTRY RESOURCES

The second paragraph under impact discussion AG-1 on page 4.1-3 of the Revised Draft EIR is hereby amended as follows:

As described in Chapter 3, *Project Description*, of this Draft EIR, the proposed project would be an outdoor recreation facility with agricultural uses. Farm animals consisting of up to ~~five pigmy goats and forty~~ twenty chickens, would be kept on-site. The animals would be used for ~~natural property maintenance,~~ food, as an educational experience for the campers, and to earn income through selling of ~~goat's milk and~~ eggs~~ and renting out the goats for grazing for vegetation reduction and fire abatement~~. The proposed project would incorporate an organic garden site, with produce used in student meals and sold to the community.

CHAPTER 4.2 AIR QUALITY

The last bullet point under the "Regional Emissions Modeling" subheading in Section 4.2.3, *Impact Discussion*, on page 4.2-23 of the Revised Draft EIR is hereby amended as follows:

- Construction. While the start of construction depends upon reaching fundraising goals, the proposed project is anticipated to be constructed over an approximately 18-month period from ~~June 2023 through December 2024~~ June 2026 through December 2027. Construction would entail demolition and debris haul, site preparation, grading, building construction, paving, and architectural coating on approximately 2 acres of the 37-acre site. The construction activities are based on information provided by the applicant. Construction equipment mix is based on CalEEMod defaults, as are worker and vendor trips. Vendor trips have been adjusted to account for additional water truck trips.

The paragraph under the "Operation" subheading in impact discussion AQ-4, on page 4.2-31 of the Revised Draft EIR is hereby amended as follows:

The proposed project would involve the construction and operation of an outdoor recreation facility that would house up to ~~five goats and up to 40~~ twenty chickens. Farm animals housed at the project site have the potential to generate odors, primarily associated with manure. The manure produced onsite would remain onsite and would be composted rather than transported offsite. The primary sources of odors from manure are odorous raw materials, hydrogen sulfide, and ammonia released from materials containing nitrogen and anaerobic (without oxygen) decomposition. Under anaerobic conditions, methane gas, carbon dioxide, and sulfur compounds (e.g., hydrogen sulfide) are produced. The proposed yard for the ~~goats and~~ chickens is approximately 700 feet away from the nearest existing receptor and would be closer than the BAAQMD odor screening distance for a confined animal facility of one mile. As a result, odors from manure generated from the farm animals onsite have the potential to be *significant* in the absence of implementation of a manure management plan to ensure that odors from manure composting would not become a nuisance to nearby sensitive land uses.

The paragraph under impact discussion AG-5 on page 4.2-32 of the Revised Draft EIR is hereby amended as follows:

A project that exceeds BAAQMD's significance criteria in the context of emissions from all other development projected within the entire SFBAAB would cumulatively contribute to impacts. Project-related construction activities would not generate exhaust emissions that exceed BAAQMD's regional significance thresholds for criteria air pollutants but would generate fugitive dust during ground-disturbing activities and could expose sensitive receptors to substantial pollutant concentrations of TACs. Furthermore, construction of the proposed project would exceed the Air District's cancer risk threshold of 10 in a million. Because the project operation would house ~~five goats and 40~~ up to twenty chickens, proposed project would generate odors from manure management. Therefore, in combination with past, present, and reasonably foreseeable projects, the project would result in a *significant* cumulative impact with respect to air quality.

CHAPTER 4.3 BIOLOGICAL RESOURCES

The first paragraph under Section 4.3.1.2, *Existing Conditions*, on page 4.3-7 of the Revised Draft EIR is hereby amended as follows:

As shown on Figure 3-2a, *Local Context*, and Figure 3-2b, *Proposed 2-Acre Development Area*, in Chapter 3, Project Description, of this Draft EIR, the majority of the 37-acre property consists of oak-bay woodland and scrub on the steep slopes adjacent to the proposed development area, dominated by coast live oak (*Quercus agrifolia*) and California bay (*Umbellularia californica*). The understory in the woodland varies, with some locations supporting grassland and scrub species. Where the tree cover is dense, understory species are typically sparse, consisting of poison oak (*Toxicodendron diversilobum*), twinberry honeysuckle (*Lonicera involucrata*), snowberry (*Symphoricarpos albus* var. *laevigatus*), toyon (*Heteromeles arbutifolia*), California blackberry (*Rubus ursinus*), false Solomon's seal (*Maianthemum stellatum*), and bedstraw (*Galium* spp.).

The paragraph under the "Fish and Invertebrates" subheading in Section 4.3.1.2, *Existing Conditions*, on page 4.3-15 of the Revised Draft EIR is hereby amended as follows:

Suitable habitat for the fish and invertebrate species reported in the CNDDB from the Castro Valley vicinity is generally low to absent from the project site. Suitable aquatic habitat for special-status fish such as steelhead (*Oncorhynchus mykiss*) is absent from the reach of Cull Creek on the project site due to downstream barriers at Cull Canyon Reservoir. Crotch bumblebee, western bumblebee, and obscure bumblebee, which have been reported from the Castro Valley vicinity in the past and are found in a variety of habitats., ~~, technically do not have any legal protective status under the State or federal Endangered Species Acts, but records on their distribution in the western United States~~ They are now being more closely monitored by the CNDDB and other data bases because of a dramatic decline in numbers and distribution over the past two decades. Following a legal challenge to the California Fish and Game Commission determination in 2019 that listing for four species of bumble bees as endangered "may be warranted," candidacy status was reinstated in 2022 for Crotch bumble bee and western bumble bee under the CESA. As candidate species, these two species receive the same legal protection afforded to endangered or threatened species. Obscure bumble bee has no conservation status under CESA or FESA but is monitored by the CNDDB because of noted declines in abundance and distribution. Due to declines, the western bumblebee has experienced a considerable range contraction and is now considered to be confined to higher elevations in the Sierra Nevada range and portions of the Northern California coast and is no longer suspected to occur in the Castro Valley vicinity. Similarly, Crotch bumble bee has experienced a substantial decline in the northern part of its range and is now believed to occur primarily in coastal areas of California. Crotch bumblebee and obscure bumblebee are typically known from grassland and scrub habitat, making their possible presence within the proposed development area on the project site highly unlikely given the extent of past and on-going disturbance to the remaining areas of ruderal grassland cover and the dominance of woodland habitat. Obscure bumble bee is now commonly known as fogbelt bumble bee and generally occurs in open grassy coastal prairies and meadows along the Coast Range and is not found on the project site. The presence of any of these three bumblebee species on the project site, either foraging or nesting, is highly unlikely.

The second paragraph under impact discussion BIO-1 on page 4.3-18 of the Revised Draft EIR is hereby amended as follows:

As discussed above in Section 4.3.1.2, *Existing Conditions*, the habitat suitability analysis conducted as part of the field surveys by the EIR biologist determined that suitable habitat for most special-status animal species is absent from the proposed 2-acre development area on the project site. While mountain lion may occasionally forage and pass across the site and possibly through the proposed development area, no major disruption to individual movement opportunities is anticipated, and no significant impacts to this species are anticipated. However, the potential for disturbance of suitable habitat for the San Francisco dusky-footed woodrat, roosting habitat for several special-status bats, and active bird nests protected under federal and State regulations tree removal, building demolition and other disturbance could affect suitable habitat for San Francisco dusky-footed woodrat, roosting habitat for several special-status bats, and active bird nests protected under federal and State regulations, if present within the proposed development area during construction. In addition, there is a remote possibility that Alameda whipsnake could disperse across the proposed development area or that California red-legged frog or western point turtle could disperse along the Cull Creek corridor and could be inadvertently harassed or injured. The following section provides an assessment of the potential impacts on these special-status species, together with recommended measures where potentially significant impacts could occur.

CHAPTER 4.6 GREENHOUSE GAS EMISSIONS

The impact statement and mitigation measures under impact discussion GHG-1 on page 4.6-22 of the Revised Draft EIR is hereby amended as follows:

Impact GHG-1.1: The proposed project would use propane for the proposed structures ~~and fire pit~~ and therefore may generate GHG emissions that may have a significant impact on the environment.

> Mitigation Measure GHG-1.1~~a~~: The project applicant shall design and construct all new buildings to use all electric energy systems, meaning that electricity is the primary source of energy for water heating; mechanical; heating, ventilation, and air conditioning (HVAC) (i.e., space-heating); cooking; and clothes-drying. Prior to the issuance of building permits for new development projects within the project site, the project developer(s) shall provide documentation (e.g., site plans) to the County of Alameda Planning Director or their designee, to verify implementation of the of the design requirements specified above in this mitigation measure. Prior to the issuance of the certificate of occupancy, the County shall verify implementation of the design requirements specified above.[43]
>
> ~~Mitigation Measure GHG-1.1b: The project applicant shall purchase 450[2] voluntary carbon credits. The project applicant shall provide proof of offset credit retirement on the relevant registry – including certificate numbers or a transaction ID that match the quantity purchased – along with a clearly identified purpose and the beneficiary of the retirement -prior to issuance of an occupancy permit for each development phase to the County.~~

~~Local Prioritization~~. ~~The project applicant shall prioritize local (within the Northern California region) and in-state credits over national credits. Credits shall be third-party verified by a major registry recognized by the California Air Resources Board (CARB) such as Climate Action Reserve (CAR). If sufficient local and in-state credits are not available, the project applicant shall purchase CARB-conforming national credits registered with an approved registry~~

~~Purchase of Voluntary Carbon Offsets~~. ~~The project applicant shall purchase CARB-verified GHG credits to achieve the measure performance standards for each development phase.~~

~~The project applicant may purchase GHG credits from a voluntary GHG credit provider that has an established protocol that requires projects generating GHG credits to demonstrate that the reduction of GHG emissions are real, permanent, quantifiable, verifiable, enforceable, and additional (per the definition in California Health and Safety Code Sections 38562(d)(1) and (2)). Definitions for these terms are as follows.~~

- ~~Real: Estimated GHG reductions should not be an artifact of incomplete or inaccurate emissions accounting. Methods for quantifying emission reductions should be conservative to avoid overstating a project's effects. The effects of a project on GHG emissions must be comprehensively accounted for, including unintended effects (often referred to as "leakage").[1]~~
- ~~Additional: GHG reductions must be additional to any that would have occurred in the absence of the Climate Action Reserve, or of a market for GHG reductions generally. "Business as usual" reductions (i.e., those that would occur in the absence of a GHG reduction market) should not be eligible for registration.~~
- ~~Permanent: To function as offsets to GHG emissions, GHG reductions must effectively be "permanent." This means, in general, that any net reversal in GHG reductions used to offset emissions must be fully accounted for and compensated through the achievement of additional reductions.~~
- ~~Quantifiable: The ability to accurately measure and calculate GHG reductions or GHG removal enhancements relative to a project baseline in a reliable and replicable manner for all GHG emission sources, GHG sinks, or GHG reservoirs included within the offset project boundary, while accounting for uncertainty and activity shifting leakage and market shifting leakage.~~
- ~~Verified: GHG reductions must result from activities that have been verified. Verification requires third-party review of monitoring data for a project to ensure the data are complete and accurate.~~
- ~~Enforceable: The emission reductions from offset must be backed by a legal instrument or contract that defines exclusive ownership and the legal instrument can be enforced within the legal system in the country in which the offset project occurs or through other compulsory means. Please note that per this mitigation measure, only credits originating within the United States are allowed.~~

~~GHG credits may be in the form of GHG offsets for prior reductions of GHG emissions verified through protocols or forecasted mitigation units for future committed GHG emissions meeting protocols. All credits shall be documented per protocols functionally equivalent in terms of stringency to CARB's protocol for offsets in the cap-and-trade program.~~

~~Prioritization of Emissions Reduction Commitments. The project applicant shall identify GHG credits in geographies closest to the project site first and only go to larger geographies (i.e., California, United States) if adequate credits cannot be found in closer geographies, or the procurement of such credits would create an undue financial burden.~~

~~The project applicant shall provide the following justification for not using credits in closer geographies in terms of either availability or cost prohibition.~~

- ~~Lack of enough credits available in closer geographies (i.e., Northern California).~~
- ~~Prohibitively costly credits in closer geographies defined as credits costing more than 300 percent the amount of the current costs of credits in the regulated CARB offset market.~~
- ~~Documentation submitted supporting GHG credit proposals shall be prepared by individuals qualified in GHG credit development and verification and such individuals shall certify the following.~~
- ~~Proposed credits meet the criteria in California Health and Safety Code Section 38562(d)(1) and (d)(2).~~
- ~~Proposed credits meet the definitions for the criteria provided in this measure.~~
- ~~The protocols used for the credits meet or exceed the standards for stringency used in CARB protocols for offsets under the California cap-and-trade system.~~

Impact GHG-1.2: The proposed project does not meet the CALGreen Tier 2 requirement for number of EV charging stations and therefore may generate GHG emissions that may have a significant impact on the environment.

Mitigation Measure GHG-1.2: Site plans submitted to the County shall identify parking stalls with electric vehicle (EV) capable charging stations consistent with the 2019 California Green Building Standards Code (CALGreen) voluntary Tier 2 nonresidential measures to provide four electric vehicle (EV) charging stations for the 15 proposed parking spaces, as seen on Table A5.106.5.3.2 of the 2019 CALGreen. Prior to the issuance of building permits for new development projects within the project site, the project developer(s) shall provide documentation (e.g., site plans) to the County of Alameda Community Development Director or their designee, to verify implementation of the of the design requirements specified above in this mitigation measure. Prior to the issuance of the certificate of occupancy, the County shall verify implementation of the design requirements specified above.

Significance with Mitigation: Less than Significant. With implementation of Mitigation Measure~~s~~ GHG-1.1~~a and GHG-1.2~~, the proposed buildings would use all electric energy systems~~ and voluntary carbon offsets would be purchased to offset propane use~~. Implementation of Mitigation Measure GHG-1.2 would provide the required four EV charging stations; and therefore, the proposed project would implement the BMPs identified in the Justification Report.

~~Footnote 43: The caretaker's unit would remain without alteration or expansion, including its ongoing use of propane.~~

The impact statement and mitigation measure under impact discussion GHG-3 on page 4.6-27 of the Revised Draft EIR is hereby amended as follows:

Impact GHG-3: The proposed project, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to greenhouse gas emissions.

Mitigation Measure GHG-3: Implement Mitigation Measures GHG-1.1~~a, GHG-1.1b,~~ and GHG-1.2.

Significance with Mitigation: Less than significant. Implementation of Mitigation Measure GHG-1.1~~a and GHG-1.1b~~ would reduce GHG emissions by requiring that the proposed buildings would use all electric energy systems~~ and purchasing of voluntary carbon offsets~~. Mitigation Measure GHG-1.2 would reduce GHG emissions by providing four EV charging stations on the project site. Therefore, the project related GHG emissions and their contribution to global climate change would not be cumulatively considerable, and GHG emissions impacts less than significant with implementation of mitigation measures.

CHAPTER 4.8 HYDROLOGY AND WATER QUALITY

The second paragraph under impact discussion HYD-2 on page 4.8-23 of the Revised Draft EIR is hereby amended as follows:

The project would have an impact on groundwater supplies if these wells would result in a decrease in groundwater supply for the area surrounding the project site. The area surrounding the site is sparsely populated, with scattered agricultural properties to the south and east and the Twining Vine Winery~~ and Event Center~~ to the north. The project site and surrounding area are not in a designated groundwater basin and therefore are not subject to the requirements of a groundwater sustainability plan. The on-site groundwater wells will be pumped on an intermittent basis, typically less than 150 days/year, when the camp is in session. The average daily demand is 1.5 gpm and the maximum daily demand is 2.76 gpm, whereas the rated capacity of the wells is 7.7 gpm. Given the low pumping rates, the drawdown radius would not extend to or impact the neighboring properties. The project site is located in the Agriculture (A) zoning district of Alameda County and future dense residential development is not anticipated in this area. A detailed discussion of groundwater availability for the project, existing development in the area, and future foreseeable development is provided in Chapter 4.14, *Utilities and Service Systems*, of this Draft EIR.

CHAPTER 4.9 LAND USE AND PLANNING

The first paragraph under the "Surrounding Land Uses and Context" subheading in Section 4.9.1.2, *Existing Conditions*, on page 4.9-3 of the Revised Draft EIR is hereby amended as follows:

As shown in Figure 3-2a, *Local Context*, and Figure 3-2b, *Proposed 2-Acre Development Area*, in Chapter 3, *Project Description*, of this Draft EIR, the project site is within a largely undeveloped area. Residential land uses are located east, south, and west of the project site; the Twining Vine Winery ~~and Event Center~~ is located to the north; and East Bay Regional Parkland is adjacent to the agricultural properties located along the western boundary. Within the Eastbay Regional Parkland, and bordering the project site to the west, is the Juan Bautista de Anza Historic Trail that stretches from the San Francisco Bay Area to Nogales, Arizona.

The following paragraph is hereby added before the "Municipal Code" subheading under impact discussion LUP-1 on page 4.9-4 of the Revised Draft EIR:

Measure D

The project site has a land use designation of Resource Management (RM) and is therefore subject to the provisions of Measure D. Measure D allows a maximum building intensity of 0.01 FAR, but not less than 20,000 square feet, for non-residential buildings, which includes agricultural buildings. A maximum of 12,000 square feet is allowed for residential and residential accessory uses. As shown in Table 3-1, *Proposed Project Buildout,* in Chapter 3 of this Draft EIR, development of the proposed project would result in 3,842 square feet of residential buildings and 14,331 square feet of non-residential buildings, resulting in a non-residential FAR less than 0.01.[6] Measure D also requires all buildings to be located on a contiguous development envelope not to exceed 2 acres, except they may be located outside the envelope if necessary for security reasons or, if structures for agricultural uses, necessary for agricultural use. As shown in Figure 3-4, *Proposed Project Site Plan*, in Chapter 3 of the Revised Draft EIR, the contiguous 2-acre building envelope includes the existing bridge and the proposed roadway and fire access lane, parking area, staff lodging house, cabins, cafeteria building, bathroom buildings, water system storage/treatment, septic control building, and wastewater treatment facility. Not included in the building envelope are the existing barn and mobile home and the proposed garden yard and Council Ring. Because the existing barn and mobile home are structures necessary for agricultural use, and the proposed garden yard and Council Ring do not require buildings or paved surfaces, they are allowed outside of the 2-acre building envelope. Therefore, the proposed project would be in compliance with Measure D requirements.

Footnote 6: The 37-acre parcel translates to 1,610,000 square feet. Therefore, 14,331 square feet of non-residential development on a 1,610,000-square-foot parcel would result in a FAR of 0.0089.

CHAPTER 4.10 NOISE

The second paragraph under the "Garden Yard" subheading in impact discussion NOI-1, on page 4.10-17 of the Revised Draft EIR is hereby amended as follows:

In addition to gardening activities, the project would also house up to ~~five pigmy goats and forty~~ twenty chickens~~ and would graze on the property with the main purpose of understory vegetation maintenance~~. The animals would be used for ~~natural property maintenance,~~ food~~,~~ and as an educational experience for the campers. Noise associated with ~~goats and~~ chickens would be minimal and would overall not change the existing rural ambient noise characteristics of the project site and neighboring properties. Impacts would be less than significant.

CHAPTER 4.11 PUBLIC SERVICES

The first paragraph under impact discussion PS-1 on page 4.11-6 of the Revised Draft EIR is hereby amended as follows:

The ACFD would provide primary fire protection services for the proposed project. The proposed project would add a maximum of ~~108~~ 114 people on-site at a given time, including students, counselors, and permanent residents (e.g., site caretaker). The amount of people on-site would fluctuate throughout the year depending on when programs are in session. As described in Chapter 3, *Project Description*, of this Draft EIR, most occupants would be on-site temporarily during one of the 23 5-day programs or 12 weekend programs per year. Counting 3 days for the weekend programs, this amounts to 151 days per year (about 41 percent of the time) that would have the maximum or close to the maximum number of people on-site. The rest of the time would be in-between programs in which only staff and the on-site caretakers may be on-site, dramatically reducing the on-site population. The overall increased population on-site in comparison with existing conditions could result in an increased demand on ACFD services. However, the proposed project does not introduce significant new populations into the region, as camp-goers would be students from the Bay Area, and some if not all of the employees would likely come from the region as well.

Impact discussion PS-2 on page 4.11-8 of the Revised Draft EIR is hereby amended as follows:

As described in impact discussion PS-1, the proposed project would add more people on-site than currently exist, which could increase the likelihood that police services would be needed on-site. However, the amount of people on-site would fluctuate throughout the year depending on when programs are in session; the most amount of people on-site would be up to ~~108~~ 114, occurring during one of the 23 5-day programs or 12 weekend programs per year. In-between programs, site occupants would be limited to staff and the on-site caretakers. Additionally, the proposed project would not introduce new populations into the area, as it would serve students in the area, and would therefore not introduce substantial new populations that the Alameda County Sheriff's Office would need to serve. The proposed project is also located in close proximity (5 miles) to the nearest Sheriff's office, and therefore would not require expanding the Sheriff's Office territory or require a new facility in order to serve the area.

Because the proposed project would not introduce new populations into the region as a whole, it would not require police services to expand facilities, the construction of which could cause significant environmental impacts. Therefore, impacts would be *less than significant*.

Significance Without Mitigation: Less than significant.

CHAPTER 4.12 TRANSPORTATION

The first sentence under the "Roadways and Intersections" subheading in Section 4.12.1.2, *Existing Conditions*, on page 4.12-5 of the Revised Draft EIR is hereby amended as follows:

Roadways near the project site are shown on Figure 3-1, *Regional Location*, and on Figure 3-2a, *Local Context*, in Chapter 3, *Project Description*, of this Draft EIR.

CHAPTER 4.14 UTILITIES AND SERVICE SYSTEMS

Table 4.14-2, *Water Demand Assumptions*, under impact discussion UTIL-1 on page 4.14-6 of the Revised Draft EIR is hereby amended as follows:

TABLE 4.14-2 WATER DEMAND ASSUMPTIONS

Water Use Category	Per Capita Water Demand	Demand Type	Peak Occupancy
Campers and Counselors	25 gpd per person[1]	Temporary stay	108 persons
Facility Type	**Daily Water Demand Per Bedroom[2]**	**Demand Type**	**No. of Bedrooms**
Caretaker House	150 gpd/bedroom[2]	No. of bedrooms	3
Permanent Dwelling Residence (up to 3 bedrooms)	150 gpd/bedroom	No. of bedrooms	3
Permanent Dwelling (up to 5 additional bedrooms)[3]	~~150~~ 75 gpd/bedroom	No. of bedrooms	5

Notes:
1. Based on previous estimate by NorthStar for similar camp operations and EPA's OWTS manual for camps.
2. Conservative estimate of 150 gpd/bedroom based on the ACDEH standards for dwellings.
3. Permanent dwelling proposed to have 6 bedrooms but providing a conservative estimate of 5 additional bedrooms for a total of 8 bedrooms.
Source: SRT Consultants, March 2022, *The Mosaic Project – Water System Conceptual Design Report* (see Appendix G, *Hydrology Reports*, of this Draft EIR).

The introductory sentence of the first bulleted list under impact discussion UTIL-1 on page 4.14-8 of the Revised Draft EIR is hereby amended as follows:

The proposed facilities for the public water system (PWS) would include the following:

The third paragraph under impact discussion UTIL-2 on page 4.14-10 of the Revised Draft EIR is hereby amended as follows:

One ~~38,000~~approximately 44,000-gallon tank would be provided for fire protection. The tank has been sized to support a fire flow demand of 1,000 gpm. This system would use raw well water. Once the tank is filled, the demand will be minimal with use occurring only with system testing, passive system losses, and possibly needed repairs.

Impact discussion UTIL-3 on page 4.14-13 of the Revised Draft EIR is hereby amended as follows:

The project proposes a new on-site wastewater treatment system (OWTS) and associated leach field dispersal system. The initial design for this system was developed by NorthStar and was submitted to the ACDEH for review. The basis of design follows the Alameda County *Onsite Wastewater Treatment Manual* dated June 2018. To obtain approval/clearance for the proposed project, the project applicant must submit a Service Request Application (SRA) and fees to the ACDEH Finance Department. Upon receipt of the SRA and fees, ACDEH staff will review the files and provide the applicant with a written *File Summary Review and Estimated Regulatory Path and Fees for Project Approval/Clearance* within 15 days of the submittal. Depending on the project complexity, ACDEH may schedule a consultation meeting with the project applicants and their consultants/contractors.

Wastewater flow predictions are based on the following design parameters:

- Central Meeting and Dining Hall. This 8,500 square foot multi-purpose building would be constructed south of the cabins on the southern portion of the project site. It would be used for indoor activities and will contain restrooms, a medic room, kitchen, pantry, dining area, meeting space, laundry, restrooms, shows, and offices.
- Restroom/Shower Building. A 1,025 square foot restroom/shower building would be constructed just north of the camping cabins.
- Family Dwelling. A 2,600 square foot staff dwelling would be constructed to serve as Mosaic staff's permanent home and would be located north of the cabins on the western portion of the project site.
- Camping Cabins. Twelve 400 square foot camping cabins would be placed in the southwestern portion of the project site. The cabins would have no plumbing fixtures.
- Caretaker's Unit. The existing 1,200 square foot structure would remain as the caretaker's dwelling on the northern portion of the project site and would be served by the existing septic system. Therefore, wastewater flow from this unit is not included in this analysis.

A conservative design flow of 25 gpd/person/day was determined for this project, based on water flow meters at a similar facility which registered an average water use of 19 gpd/person. The 2002 USEPA Onsite Wastewater Treatment Manual has a typical vale for "Pioneer Camps" of 25 gpd. However, compliance with the CalGreen Building Code for new construction, which was not considered in the USEPA flow rate, would result in at least a 20 percent reduction in water usage. Therefore, a value of 25 gpd/person is conservative. The predicted wastewater flow rates are provided in Table 4.14-6, *Predicted Wastewater Flow Rates.*

TABLE 4.14-6 PREDICTED WASTEWATER FLOW RATES[1]

Occupant Type	Maximum Daily Occupants	Flow per person (gpd)	Total Gallons/Day
Campers	~~95~~ 120	25	~~2,375~~ 3,000
Day Staff	~~13~~ 8	25	~~325~~ 200
Family Dwelling Residence	~~8~~ 6 bedrooms	NA	~~825~~ 675
Total			~~3,525~~ 3,875

Notes: The proposed project would have a maximum occupancy of 114 but the report provides a conservative estimate of 128.
1. Based on estimate by Northstar for similar camp operations and EPA's OWTS manual for camps.
Source: Northstar, ~~2020~~ June 3. 2023, *Basis of Design Report for the Mosaic Project* (see Appendix G, ~~*Hydrology Reports,*~~ *Revised Water and Wastewater System Reports,* of this ~~Draft~~ Final EIR).

The total design flow of ~~3,535~~ 3,875 gpd was used for the sizing of the septic tanks, treatment system, and leach field dispersal system. An average design flow was assumed to be 80 percent of the total design flow, or ~~2,820~~ 3,100 gpd. Blackwater flow reductions with future greywater use for landscape irrigation were not subtracted from the design flow, except in analyzing the impacts on secondary treatment sizing.

At this conceptual phase of the project, it is assumed that there will be primary and secondary treatment of effluent. This will require, at a minimum, grease interceptor tanks, septic tanks, secondary treatment equipment, and surge/dosing tank with pumps and controls to move wastewater ~~evening~~ evenly and consistently to dispersal zones on the site.

The secondary wastewater treatment will be accomplished using an Orenco AdvanTex® textile filtration system with an AX100® treatment pod or a AXMax™ configuration. The proposed secondary treatment configuration will be provided as part of the final design report. Two scenarios for treatment sizing were evaluated:

- Scenario 1 – No greywater diversion and full blackwater flow. This scenario models when a greywater system is not active ~~or present~~, primarily when regulations limit the use of greywater in high precipitation conditions.
- Scenario 2 – Reduced blackwater flow with greywater diversion. This scenario models the results when a greywater system is active, lowering the daily flow rate and potentially increasing the organic loading.

The preliminary sizing results for the treatment system are provided in Table 4.14-7, *Conceptual Wastewater Treatment System Sizing.*

TABLE 4.14-7 CONCEPTUAL WASTEWATER TREATMENT SYSTEM SIZING

Component	Size	Notes
Septic Tank	20,000 gallons	May be multiple tanks serving various locations
Secondary Treatment	~~175~~ 225 square feet of filter area	Scenario 2~~ organic loading governs~~ Average Flow Organic Loading Governs; may be reduced with pre-treatment conditioning in final design phase
Dosing Tanks	~~5,000~~ 6,000 gallons	~~May be reduced with pre-treatment conditioning in final design phase~~ In conjunction with 2,200 gallons of capacity in AX Treatment System

Source: Northstar, ~~2020~~ June 3. 2023, *Basis of Design Report for the Mosaic Project* (see Appendix G, ~~*Hydrology Reports,*~~ *Revised Water and Wastewater System Reports,* of this ~~Draft~~ Final EIR).

The leach field dispersal system would apply secondary treated effluent to pressure dosed chambered trenches in an area between the proposed staff house and the cabins and restroom/shower building. Soil maps indicate the presence of Yolo loam and Danville silty clay loam beneath the site. Percolation test results from the proposed leach field area had rates ranging from ~~8 to 48~~ 10 to 192 minutes/inch, with an average percolation rate of ~~33~~ 18 minutes/inch. The 192 minutes/inch is considered an outlier, and additional percolation tests were conducted to confirm this.

The conceptual design for the leach field is based on a peak flow rate of ~~3,535~~ 3,875 gpd and a soil application rate of ~~1.03~~ 1.2 gpd/square foot and ~~5.0~~ 6.6 square feet of infiltrative area per lineal foot. With these conservative assumptions, the total lineal footage for the original dispersal field is approximately ~~480~~ 489 lineal feet of pressure dosed trenches. The conceptual design shows 639 lineal feet, which is 30 percent larger than required. Because secondary effluent treatment is proposed, the final design may incorporate infiltrative area in the design.

~~There are two planned locations for the replacement area.~~ The ~~primary~~ replacement area would be in the spacing between the proposed pressure dosed trenches. This would use the same configuration as the original dispersal system with ~~480~~ 630 lineal feet of pressure dosed chambers, which is more than 25 percent larger than required. ~~A backup repair alternative would be to use a drip dispersal area on the sloped areas of the property. Using a 3,535 gpd design flow and an application rate of 0.4 gpd/sf, an area of approximately 9,000 square feet for drip dispersal would be required.~~ The details for the leach field dispersal system are provided in Table 4.14-8, *Conceptual Dispersal System Sizing.*

TABLE 4.14-8 CONCEPTUAL DISPERSAL SYSTEM SIZING

Dispersal Method	Application Rate	Size	Notes
Pressure Dosed Chambers	~~1.0~~ 1.2 gpd/sf at ~~5~~ 6.6 sf/lf	~~480~~ 489 minimum lf	~~Conservative a~~Application rate using enhanced application rates and infiltrative surface area
~~Pressure Dosed Chambers~~	~~1.0 gpd/sf at 8 sf/lf~~	~~300 lf~~	~~Conservative application rate and infiltrative surface area increased to 8 sf/lf per Chapter 27.C.3~~
~~Drip (only for replacement option on slope)~~	~~0.4 gpd/sf~~	~~9,000 sf of surface area~~	~~Future only for replacement field~~

Notes: sf = square feet, lf = lineal feet
Source: Northstar, ~~2020~~ June 3. 2023, *Basis of Design Report for the Mosaic Project* (see Appendix G, ~~*Hydrology Reports,*~~ *Revised Water and Wastewater System Reports,* of this ~~Draft~~ Final EIR).

Based on the classification of the project as nonresidential with a design wastewater flow of over 2,500 gpd outside the Upper Alameda Creek Watershed above Niles (Impaired Area), a groundwater mounding analysis and groundwater nitrogen loading analysis are required. The results are presented in the ~~2020~~ 2023 Northstar report titled *The Mosaic Project Basis of Design*, which is provided as Appendix G, ~~*Hydrology Reports,*~~ *Revised Water and Wastewater System Reports,* of this ~~Draft~~ Final EIR.

The results of the groundwater mounding analysis showed that groundwater could mound up to ~~17~~ 18.7 feet and could be ~~10~~ 8.3 feet below the bottom of the proposed dispersal trenches. However, this distance is much greater than the allowable separation distance of 5 feet and therefore, groundwater mounding would not cause a significant impact. The criterion for evaluating nitrogen loading from the proposed OWTS is that it shall not exceed a concentration of ~~7.5~~ 7.0 mg/l of nitrate-nitrogen in groundwater beneath the site. The results show ~~than~~ less than a ~~25~~ 34 percent nitrogen reduction is needed from the treatment system to satisfy this requirement. An additional analysis showed that if the nitrogen concentrations were 1.5 to 2.0 times higher than residential strength nitrogen with a potential greywater system increasing the loading concentrations, the nitrogen removal percentage that the system would need to achieve is approximately ~~50~~ 60 percent. This is well within the capability of the proposed Orenco AdvanTex® system without additional denitrification enhancements.

In summary, the OWTS and dispersal system would be sized to accommodate a ~~3,525~~ 3,875 gpd maximum design flow and ~~2,820~~ 3,100 gpd average daily flow, with a domestic strength waste (BOD) ~~less than 30~~ between 300 mg/l and 500 mg/l, and a nitrogen input ranging from 70 mg/l to 140 mg/l. The system components are as follows:

- Septic tank with a volume of 20,000 gallons
- An Orenco AX MAX textile filter system with ~~175~~ 225 square feet of media and associated recirculation volume providing 30 mg/l BOD and 30 mg/l TSS and 50 percent nitrogen removal
- A 6,000-gallon dosing tank with the capacity to hold 1.5 days of design flow and delivery of secondary treated effluent to a subsurface dispersal field
- ~~400~~ 489 lineal feet of ~~24~~ 36-inch wide by 24-inch deep pressure dosed chambered dispersal trenches.

The proposed project would not result in the construction of new regional wastewater treatment facilities, because all generated wastewater would be retained onsite. The OWTS would be installed and monitored in accordance with the requirements of the Alameda County Onsite Wastewater Treatment Systems Ordinance and would be permitted and approved by the ACDEH. A final design report will be submitted to the ACDEH for review and approval and an installation permit will be issued by the ACDEH prior to the start of construction. Upon implementation of these regulatory requirements, the impact would be *less than significant.*

Significance without Mitigation: Less than significant.

Table 4.14-9, *Solid Waste Generation Rates*, under impact discussion UTIL-5 on page 4.14-26 of the Revised Draft EIR is hereby amended as follows:

TABLE 4.14-9 SOLID WASTE GENERATION RATES

Category	No. of People	Solid Waste Generation Rate (lb/person/day)	Solid Waste Generated (lb/day)	Total Days Per Year	Solid Waste Generated (lb/year)
Campers and Counselors	108	1.81	195	146	28,540
Family Residence[1]	8	2.13	17	350	5,964
Caretaker's Residence	3	2.13	6	350	2,237
Total			**219**		**36,741**

Note:
1. Permanent dwelling proposed to have 6 bedrooms but providing a conservative estimate of 5 additional bedrooms for a total of 8 bedrooms.
Source: The Mosaic Project, 2022; USEPA, 1971, Solid Waste Management in Recreational Forest Areas.

The third paragraph under impact discussion UTIL-5 on page 4.14-27 of the Revised Draft EIR is hereby amended as follows:

In addition, these calculations conservatively assume that all solid waste generated by the project would be transported to the local landfill. Over 59 percent of the waste generated by outdoor recreation facilities is food waste that can be recycled and composted. The project would incorporate solid waste reduction features, including a composting program and a food waste program. The proposed composting program would use manure from the chickens ~~and goats~~ mixed with food waste and green waste to provide mulch for an organic garden. Because the composting operation would store less than 500 cubic yards of materials at any given time and would process less than 5,000 cubic yards per year, it would be exempt from the SWRCB's Waste Discharge Requirements for commercial composting operations.

The first paragraph under impact discussion UTIL-7 on page 4.14-28 of the Revised Draft EIR is hereby amended as follows:

Regarding water supply impacts, the project is proposing to develop its own public water system, using two on-site groundwater production wells. The project would have a cumulative impact if these wells would result in a decrease in groundwater supply for the area surrounding the project site. The area surrounding the site is sparsely populated, with scattered agricultural properties to the south and east and the Twining Vine Winery ~~and Event Center~~ to the north.

CHAPTER 5 ALTERNATIVES TO THE PROPOSED PROJECT

The last bullet point under Section 5.3, *Overview of Project Alternatives*, on page 5-3 of the Revised Draft EIR is hereby amended as follows:

- **Reduced Building Footprint Alternative.** Under the Reduced Building Footprint Alternative, the site layout and building sizes would be modified. The Council Ring would be relocated out of the creek setback of 2:1 slope to the east side of the access road, near the proposed Staff Lodging House. The sheds located adjacent to the caretaker's unit would be removed so that there are no structures

within the Cull Creek setback area. The staff house building would be reduced in size by 22 percent (2,015 square feet versus ~~2,577~~ 2,636 square feet under the proposed project). The multi-use building would be reduced in size by 15 percent (7,273 square feet versus 8,506 square feet under the proposed project). The operating schedule and the number of students (95) and staff (13) would remain the same. Figure 5-1, *Reduced Building Footprint Alternative Site Plan*, shows the modified site layout and building sizes.

The text under Section 5.5.3, *Reduced Building Footprint Alternative*, on page 5-16 of the Revised Draft EIR is hereby amended as follows:

Under the Reduced Building Footprint Alternative, the site layout and building sizes would be modified. The Council Ring would be relocated out of the creek setback of 2:1 slope to the east side of the access road, near the proposed Staff Lodging House. The sheds located adjacent to the caretaker's unit would be removed so that there are no structures within the Cull Creek setback area. The staff house building would be reduced in size by 22 percent (2,015 square feet versus ~~2,577~~ 2,636 square feet under the proposed project). The multi-use building would be reduced in size by 15 percent (7,273 square feet versus 8,506 square feet under the proposed project). The operating schedule and the number of students (95) and staff (13) would remain the same. Figure 5-1 shows the modified site layout and building sizes.

The bulleted list under Section 5.6, *Objectives Assessment*, on page 5-21 of the Revised Draft EIR is hereby amended as follows:

As listed in Chapter 3, *Project Description*, of this Draft EIR, the project applicant has developed the following project objectives:

- Provide state-of-the-art experiential educational programs.
- Develop a project focused site within 30 miles of the majority of the partner elementary schools.
- Provide chickens ~~and goats~~ as a learning experience for the youth in the program~~ as well as natural maintenance of the property~~.
- Provide an organic garden for the site and program. Produce from the garden would be used in student meals and sold to the community. Students would learn about the history of cultivation in the area and the growing of produce.
- Provide improved pedestrian trail and site maintenance. Dirt roads and trails exist on the property and extend within the bay/oak woodland habitat that covers the slopes on the western side of the project site. These existing roads/trails would be repurposed to serve as a recreational pedestrian trail system~~, with undergrowth maintained by the goats housed on the property~~.
- Provide a caretaker's residence to watch over the facilities and animals when not in session.
- Meet the development standards of the Alameda County Castro Valley Jurisdiction, including fire access, storm water management, and site development restrictions.
- Provide parking to meet Alameda County's standards.

- Replace existing utilities to accommodate the proposed project including a small private water system and expanded private wastewater system.
- Provide a greywater irrigation system that can be used as a test project for Alameda County Environmental Health.

APPENDICES

Appendix D, *Biological Resources Information*, of the Revised Draft EIR has been revised to include the updated California Natural Diversity Database Summary Table, and is included as Appendix D, *Revised Biological Resources Information*, of this Final EIR.

Appendix E, *Geotechnical Engineering Investigation Report*, of the Revised Draft EIR has been revised to add the memo confirming validity of the Geotechnical Engineering Report, and is included as Appendix E, *Revised Geotechnical Engineering Investigation Report*, of this Final EIR.

Appendix G, *Hydrology Reports*, of the Revised Draft EIR has been renamed to "Water and Wastewater System Reports" and revised to add the acceptance letter from State Water Resources Control Board Division of Drinking Water, the Preliminary Technical Report for a New Public Water System, and the onsite wastewater treatment system feasibility study approval from the Alameda County Environmental Health Department, and is included as Appendix G, *Revised Water and Wastewater System Reports*, of this Final EIR.

Appendix K, *Williamson Act Compatible Use Plan*, of the Revised Draft EIR has been revised to include the updated Compatible Use Plan which removed the provision of pigmy goats, and is included as Appendix K, *Revised Williamson Act Compatible Use Plan*, of this Final EIR.

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