# Concannon Vineyard Warehouse/Administration Building Project

## Initial Study and Mitigated Negative Declaration


PREPARED FOR:
Alameda County
224 West Winton Avenue
Hayward, CA 94544

September 2011

# Concannon Vineyard
# Warehouse/Administration Building Project

## Initial Study/Mitigated Negative Declaration


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September TBD, 2011

# MITIGATED NEGATIVE DECLARATION

**Project: Concannon Vineyards Administration/Warehouse Building**

**Lead Agency: Alameda County**

## PROJECT DESCRIPTION

This Mitigated Negative Declaration (MND), supported by the attached Initial Study (IS), evaluates the environmental effects of a proposed administration/warehouse building at the Concannon Vineyards complex in Alameda County, California. The applicant, The Wine Group, is proposing the construction of a new 50,615 square foot (sq. ft.) building on the northwest corner of the property. The buildings' primary function would be to provide additional storage space for wine supplies and materials (e.g., dry bottles and boxes, packaged cases of wine), and administrative offices for existing employees. The building would provide a dedicated warehouse space to store equipment and supplies to support existing production operations.

Alameda County is the lead agency for this project and has prepared this MND.

## FINDINGS

An IS has been prepared to assess the projects potential effects on the environment and the significance of those effects. Based on the Initial Study, it has been determined that the proposed project would not have any significant effects on the environment once mitigation measures are implemented. This conclusion is supported by the following findings:

1. The proposed project would have no impact related to biological resources, mineral resources, and population and housing.
2. The proposed project would have a less-than-significant impact on aesthetics, air quality, land use planning, greenhouse gases, hazards and hazardous materials, noise, public services, recreation, and transportation and traffic,
3. Mitigation is required to reduce potentially significant impacts related to cultural resources, geology and soils, hydrology and water quality, and utilities and service systems. Mitigation measures would clearly reduce all significant impacts to a less-than-significant level. The applicant has agreed to implement all required mitigation.

Following are the mitigation measures that will be implemented by the applicant to avoid or minimize environmental impacts.

### CULTURAL RESOURCES

### Mitigation Measure CUL-1

*If an inadvertent discovery of cultural materials (e.g., animal bone, unusual amounts of shell, ceramics, glass, etc.) is made during project-related ground disturbing activities, any ground disturbance in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant per the NRHP/CRHR and develop appropriate mitigation. Mitigation may include, but not necessarily be limited to, in-field documentation, archival research, archaeological testing, data recovery excavations or recordation.*

## Mitigation Measure CUL-2

*Before the start of grading and/or excavation, the applicant shall retain a qualified paleontologist or archaeologist to train all construction personnel involved with earthmoving activities, regarding the possibility of encountering paleontological resources at the site, the appearance and types of paleontological resources likely to be seen during project construction, and proper notification procedures should such resources be encountered.*

*In the event that paleontological resources are discovered during ground disturbing activities, grading and construction work within 100 feet of the find shall be suspended until the significance of the features can be determined by a qualified professional paleontologist as appropriate. A qualified professional paleontologist shall then make recommendations for measures necessary to protect the find, or to undertake data recovery, excavation, analysis, and curation of paleontological materials as appropriate.*

*In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, potentially damaging excavation in the area of the burial shall be halted and the Alameda County Coroner and a professional archaeologist shall be contacted to determine the nature and extent of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code, Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code, Section 7050[c]).*

*If the remains are determined to be those of a Native American, then the following will occur:*

*(a) The (State Historic Preservation Office (SHPO), the construction contractor, an archaeologist, and the NAHC-designated Most Likely Descendant (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in Section 5097.9 of the California Public Resources Code.*

*(b) The SHPO shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD will have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. Assembly Bill (AB) 2641 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641(e) includes a list of site protection measures and states that the County will implement one or more of the following measures:*

- *record the site with the NAHC or the appropriate Information Center,*
- *utilize an open-space or conservation zoning designation or easement, and/or*
- *record a document with the County in which the property is located.*

*(c) The applicant or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The County may also reinter the remains in a location not subject to further disturbance if he/she rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the County.*

**GEOLOGY AND SOILS**

## Mitigation Measure GEO-1

*The project applicant or its contractor shall secure a General National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities from the State Water Resources Control Board (SWRCB). As a condition of that permit, a Stormwater Pollution Prevention Plan (SWPPP) for construction activities shall be prepared and implemented. The SWPPP shall identify pollutant sources that could affect the quality of stormwater discharge, and shall include provisions for implementing Best Management Practices (BMPs) that reduce or eliminate water pollution associated with project construction. The following includes a partial list of BMPs that shall be included, as applicable, in order to mitigate construction related water quality impacts:*

- *If excavation occurs during the rainy season, storm runoff from the construction area shall be regulated through a storm water management/erosion control plan that shall include temporary onsite silt traps and/or basins with multiple discharge points to natural drainages and energy dissipaters. Stockpiles of loose material shall be covered and runoff diverted away from exposed soil material. If work stops due to rain, positive grading away from slopes shall be provided to carry the surface runoff to areas where flow would be controlled, such as the temporary silt basins. Sediment basins/traps shall be located and operated to minimize the amount of offsite sediment transport. Any trapped sediment shall be removed from the basin or trap and placed at a suitable location onsite, away from concentrated flows, or removed to an approved disposal site.*

- *Temporary erosion control measures (such as fiber rolls, staked straw bales, detention basins, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be provided until perennial revegetation, landscaping, or pavement is established and can minimize discharge of sediment into nearby waterways.*

- *Sediment shall be retained onsite by a system of sediment basins, traps, or other appropriate measures.*

- *No disturbed surfaces shall be left without erosion control measures in place during the rainy season, from October 15th through April 30th.*

- *Erosion protection shall be provided on all cut-and-fill slopes. Revegetation shall be facilitated by mulching, hydroseeding, or other methods and shall be initiated as soon as possible after completion of grading and prior to the onset of the rainy season (by October 15th).*

- *Grass turf shall be established on the construction site, including the temporary staging area, as soon as possible after disturbance.*

*BMPs selected and implemented for the project shall be in place and operational prior to the onset of major earthwork on the site. The construction phase facilities shall be maintained regularly and cleared of accumulated sediment as necessary. Effective mechanical and structural BMPs that could be implemented at the project site include the following:*

- *Mechanical storm water filtration measures, including oil and sediment separators or absorbent filter systems installed within the storm drainage system to provide filtration of storm water prior to discharge.*

- *Vegetative strips, high infiltration substrates, and grassy swales used where feasible throughout the development to reduce runoff and provide initial storm water treatment.*

- *Roof drains shall discharge to natural surfaces or swales where possible to avoid excessive concentration and channelizing storm water.*
- *Permanent energy dissipaters included in drainage outlets.*

### Mitigation Measure GEO-2

*The applicant shall adhere to the following construction standards for the proposed administration/warehouse building, as indicated in the Geotechnical Study conducted by North American Technical Services (November 2010):*

### Grading and Fill

- *Any soil that is excavated and then compacted shall be mechanically compacted to 90 percent of its maximum dry density.*
- *The top 9 inches of soil shall be scarified. The scarified surface shall then be brought to the optimum moisture content and compacted to a minimum of 90 percent of its maximum dry density.*
- *All structural fill to be placed shall be brought to the optimum moisture content and mechanically compacted to a minimum of 90 percent of its maximum dry density.*
- *If the final subgrade elevation is equivalent to the existing grade, a minimum of 12 inches of the existing soil shall be compacted to a minimum of 90 percent of its maximum dry weight in place to provide uniform support for the building.*
- *Any trenches exceeding four feet or having the potential of reducing lateral support of any structure or poles shall be sloped or shored in accordance with current CAL/OSHA regulations.*
- *Any trenches created by the removal of irrigation drains or utility lines shall be backfilled to six inches below the anticipated final grade.*

### Foundations

- *No structure shall exceed the maximum allowable bearing capacity of the site soil of 2,500 pounds per square foot which may be increased by 1/3 for seismic consideration.*
- *The minimum footing depth shall be 12 inches below the lowest undisturbed grade.*
- *Prior to placing concrete, the foundation excavation shall be inspected by a qualified Geotechnical Engineer to verify that the bearing soils actually encountered is the same as those on which these recommendations are based.*
- *Any loose areas of soil material evident in the footing excavations shall be compacted to 90 percent of its maximum dry density.*
- *All soil supported slabs on grade shall be reinforced with reinforcing steel. A six millimeter plastic sheeting or equivalent vapor barrier shall be placed beneath the concrete.*
- *All soil subgrade shall be remoistened prior to placement of the exterior concrete flat work to at least three percent above optimum moisture content. The slab shall be at least four inches thick and reinforced with wire mesh.*

## Mitigation Measure UTIL-1

*The following requirements shall be met by the project applicant prior to issuance of any grading permits:*

- *All applicable waste discharge requirements and permits from the San Francisco RWQCB shall be secured for the existing process waste water treatment facility.*
- *The proposed septic system design and capacity shall be approved by Alameda County.*
- *All appropriate permits shall be obtained for the construction and installation of the proposed septic system.*

### AGREEMENT BY PROJECT SPONSOR

Applicant, whose name is undersigned, understands the mitigation measures set forth above and agrees to be bound by them if they are adopted as a result of project approval.

***Applicant's Signature*** ***Date***

***Applicant's Printed Name***

Questions or comments regarding this Mitigated Negative Declaration and Initial Study may be addressed to:

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After comments are received from the public and reviewing agencies, the County may (1) adopt the MND and approve the proposed project; (2) undertake additional environmental studies; or (3) disapprove the project. If the project is approved, the applicant may proceed with detailed design and construction.

## LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

***Albert Lopez, Planning Director*** ***Date***

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# 1 INTRODUCTION

## 1.1 INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study (IS) has been prepared by the County of Alameda (County) to evaluate the potential environmental effects of constructing an approximately 50,000 square foot (sq. ft.) administration/warehouse building on the Concannon Vineyard property (project site). The project site is located southeast of the City of Livermore in unincorporated Alameda County..

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An IS is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare…a proposed negative declaration or mitigated negative declaration…when: (a) The IS shows that there is no substantial evidence that the project may have a significant impact on the environment, or (b) The IS identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project would not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). By contrast, an EIR is required when the project may have a significant environmental impact that cannot clearly be reduced to a less-than-significant effect by adoption of mitigation or by revisions in the project design.

## 1.2 PURPOSE OF THE INITIAL STUDY

As described in the environmental checklist (Chapter 3), the proposed project would not result in significant environmental impacts, after imposition of certain mitigation measures. This IS concludes that an MND is the appropriate document for compliance with the requirements of CEQA.

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the proposed project. The County is the lead agency for the proposed project and has directed the preparation of an analysis that complies with CEQA.

The purpose of this document is to present to decision-makers and the public the environmental consequences of implementing the proposed project. An IS is required in support of an MND and is attached to the MND. This disclosure document is being made available to the public for review and comment. The MND (with the attached IS) is available for a 30-day public review.

Comments should be addressed to:

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After comments are received from the public and reviewing agencies, the County may (1) adopt the MND and approve the proposed project; (2) undertake additional environmental studies; or (3) disapprove the project. If the project is approved, the Applicant may proceed with detailed design and construction.

## 1.3 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the proposed project. Based on the issues evaluated in that chapter, it was determined that the proposed project would have no impact related to the following issue areas:

- Biological Resources
- Land Use and Planning
- Mineral Resources
- Population and Housing

Impacts of the proposed project would be less than significant for the following issue areas:

- Aesthetics
- Agriculture and Forest Resources
- Hazards and Hazardous Materials
- Air Quality
- Greenhouse Gas
- Public Services
- Recreation
- Traffic and Transportation

Impacts of the proposed project for the following issue areas would be less than significant with the incorporation of the mitigation measures described in Chapter 3:

- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Utilities and Service Systems

## 1.4 ENVIRONMENTAL PERMITS

In addition to County approval, the project would require a Regional Water Quality Control Board (RWQCB) waste discharge permit for the existing process (wine bottling production) wastewater discharge facility on the site in which the proposed facility would be connected to. The permit would be issued by the San Francisco Bay RWQCB. In addition, construction of the proposed project would result in disturbance of more than one acre of land. Therefore, a General National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities from the State Water Resources Control Board (SWRCB) would be required for the project.

## 1.5 DOCUMENT ORGANIZATION

This IS/ MND is organized as follows:

**Chapter 1: Introduction.** This chapter provides an introduction to the environmental review process. It describes the purpose and organization of this document as well as presents a summary of findings.

**Chapter 2: Project Description and Background.** This chapter describes the purpose of and need for the proposed project, identifies project objectives, and provides a detailed description of the proposed project.

**Chapter 3: Environmental Checklist.** This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if each issue would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any impacts were determined to be potentially significant, an EIR would be required. For this project, however, none of the impacts were determined to be significant after implementation of recommended mitigation measures.

**Chapter 4: References.** This chapter lists the references used in preparation of this IS/MND.

**Chapter 5: List of Preparers.** This chapter identifies report preparers.

# 2 PROJECT DESCRIPTION

## 2.1 INTRODUCTION

The proposed project is located on the Concannon Vineyard property in the Livermore Valley of unincorporated Alameda County (County). Concannon Vineyard is owned and operated by The Wine Group (applicant). The property currently consists of 250 acres of wine grape vineyards, a tasting room, an approximately 45,000 sq. ft. wine bottling and packaging facility, vacant Victorian home, a residence, cellar, mobile buildings, and a landscaped garden and patio area. The applicant is proposing the construction of a new approximately 50,000 sq. ft. building on the northwest corner of the property. The buildings' primary function would be to provide additional storage space for wine supplies and materials (e.g., dry bottles and boxes, packaged cases of wine), and administrative offices for existing employees. The building would provide dedicated warehouse space to store equipment and supplies to support existing production operations.

## 2.2 BACKGROUND

Concannon Vineyard was founded in 1883 by James Concannon. The vineyards have produced continuously since then, including production of sacramental wine for the Catholic Church during the prohibition era. The County of Alameda and the City of Livermore have developed goals and policies aimed to protect and promote wine production in the area. Concannon Vineyard is part of the South Livermore Area Plan (City of Livermore Specific Plan) and the East County Area Plan of the Alameda County General Plan. These plans focus on the preservation of agriculture land and vineyards through the use of conservation easements, agriculture preservation contracts, and land use regulations.

Alameda County developed the South Livermore Valley Area Plan (SVLAP) to provide strong economic incentives and equitable development regulations to promote investment in viticulture and ensure that development limits be placed on agricultural lands to preserve agricultural operations.

In 1994,the South Livermore Valley Agricultural Land Trust (currently known as the Tri-Valley Conservancy) was established.. The Tri-Valley Conservancy is a non-profit, public benefit corporation that preserves and protects important agricultural and open space lands. Concannon Vineyard has entered into an agreement with the Tri-Valley Conservancy and has agreed to limit development on the designated build out area as identified in the Tri-Valley Conservancy's Priority Landscapes map.

## 2.3 PROJECT OBJECTIVES

Concannon currently has insufficient storage and bottling space, and as a result uses offsite storage facilities, mobile truck trailers and other facilities to supplement existing permanent bottling and storage space. The overall objective of the project is to provide a permanent, dedicated storage facility that would meet Concannon Vineyard's current wine production and operational needs. Other objectives of the project include the following:

- Provide a multi-purpose building that provides sufficient storage and office space to meet existing operational needs,
- Eliminate the need for mobile storage units on the project site;
- Locate the building in an area that minimizes impacts to existing vineyards and operations and avoids sensitive environmental resources; and,
- Comply with the development limitations of Concannon Vineyard's Agreement with the Tri-Valley Conservancy.

## 2.4 PROJECT LOCATION

The applicant is proposing to build a new administration/warehouse building and associated support facilities at the existing Concannon Vineyard property located in the Livermore Valley of unincorporated Alameda County (Exhibit 2-1). Concannon Vineyard is located south of the City of Livermore where South Livermore Avenue meets Tesla Road (Exhibit 2-2). The proposed building would be constructed in the northwest corner of the property adjacent and north of the existing administration/processing building. The project site is an approximate two-acre parcel that is graded, undeveloped, and supports little to no vegetation. The parcel is surrounded by vineyards and the commercial/retail buildings associated with the winery.

## 2.5 PROJECT CHARACTERISTICS

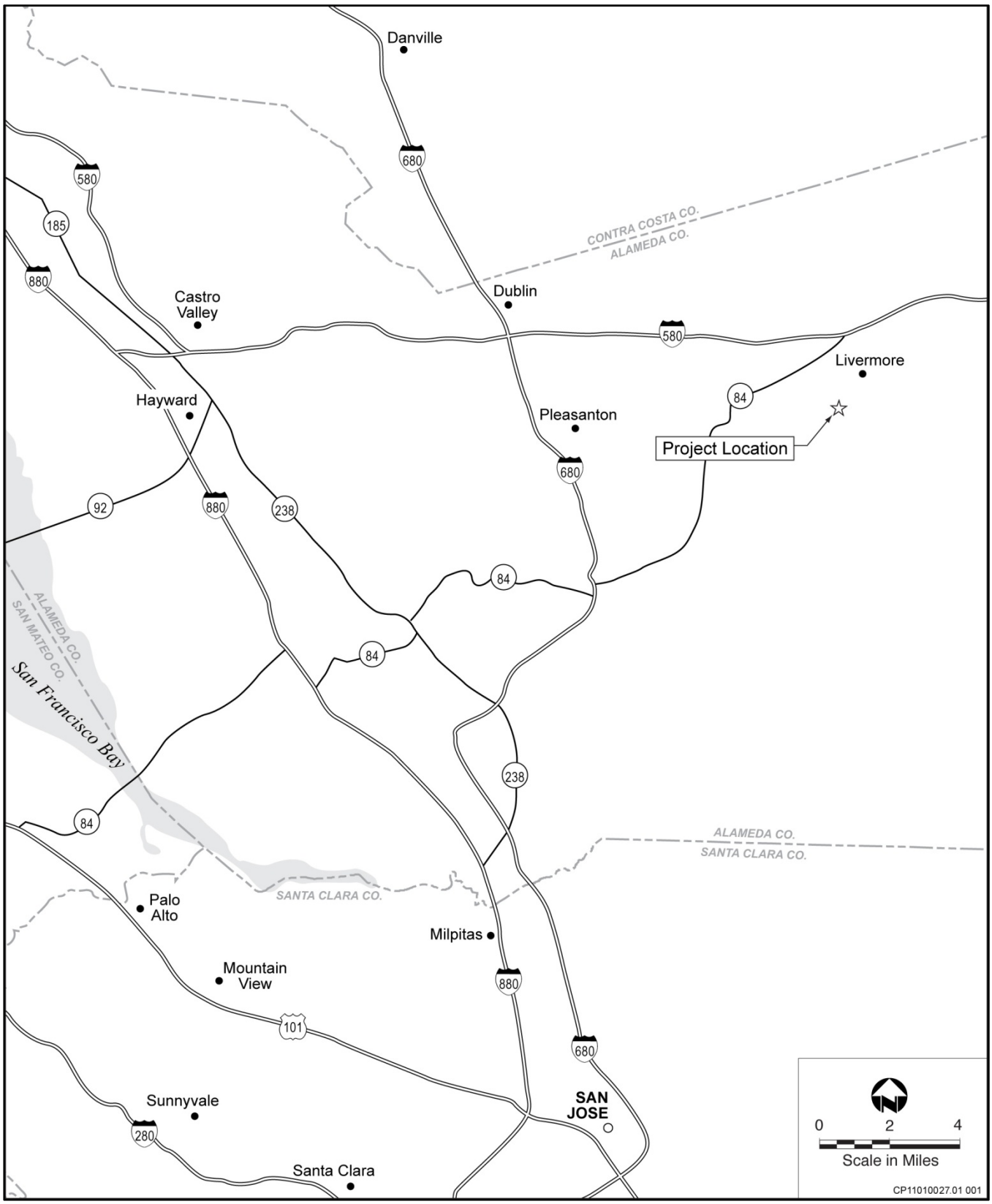
### BUILDING FEATURES

The proposed building would be a single-story warehouse structure approximately 28-feet tall at its highest point, 50,618 sq. ft. in size, with a total useable area of 48,000 sq. ft. Of this area, approximately 36,100 sq. ft. would be allocated for storage of wine processing materials (e.g., bottles) and finished product, approximately 13,000 sq. ft. would be office space (i.e., offices, restrooms, etc.), and approximately 1,500 sq. ft. would be dedicated to conference rooms. A loading dock would be located on the east wall of the building and landscaped planters would surround all remaining sides of the building.

The design and architecture of the building would resemble the existing administration building and would include similar architectural treatments, landscaping features, downward facing security lights, and soft earth tone architectural coatings to blend with the surrounding landscape. Exhibit 2-3 shows the existing administration/bottling facility at the site. A total of 11 office spaces and 40 new parking spaces would be provided.

### WASTEWATER FACILITIES

All waste production (processing and sanitary) for the proposed building would be handled by existing wastewater facilities or through the construction of new dedicated systems. Current winery operations result in the generation of process wastewater (e.g., water to clean bottles, rinse down facilities, and remove spilled product) that is disposed through an existing sump, screen treatment, and subsurface disposal system. The process wastewater drains through a trench drain in the floor of the existing building to catchment basins and then is conveyed via gravity flow to a 3,100 gallon, below ground sump. From there it is pumped through a rotary screen where it is screened for large debris. The debris is removed and hauled to an offsite disposal facility. The remaining liquid is conveyed via gravity to an onsite, subsurface infiltration system installed within the vineyards where it percolates into site soils (Exhibit 2-4). The applicant proposes to connect the new administration/warehouse building to this existing process wastewater system. Other than an interconnection to the existing piping, no changes or modifications to the existing system are proposed. Current winery operations result in the generation of approximately 7,100 gallons per day of process wastewater equating to 1.47 million gallons per year. Because the proposed administration/warehouse building would generally store dry or finished products, minimal process wastewater is anticipated to be generated, would be variable, and would likely only occur during a spill event. Exhibit 2-4 presents the layout of the existing process wastewater facility.




*Source: Ascent 2011*

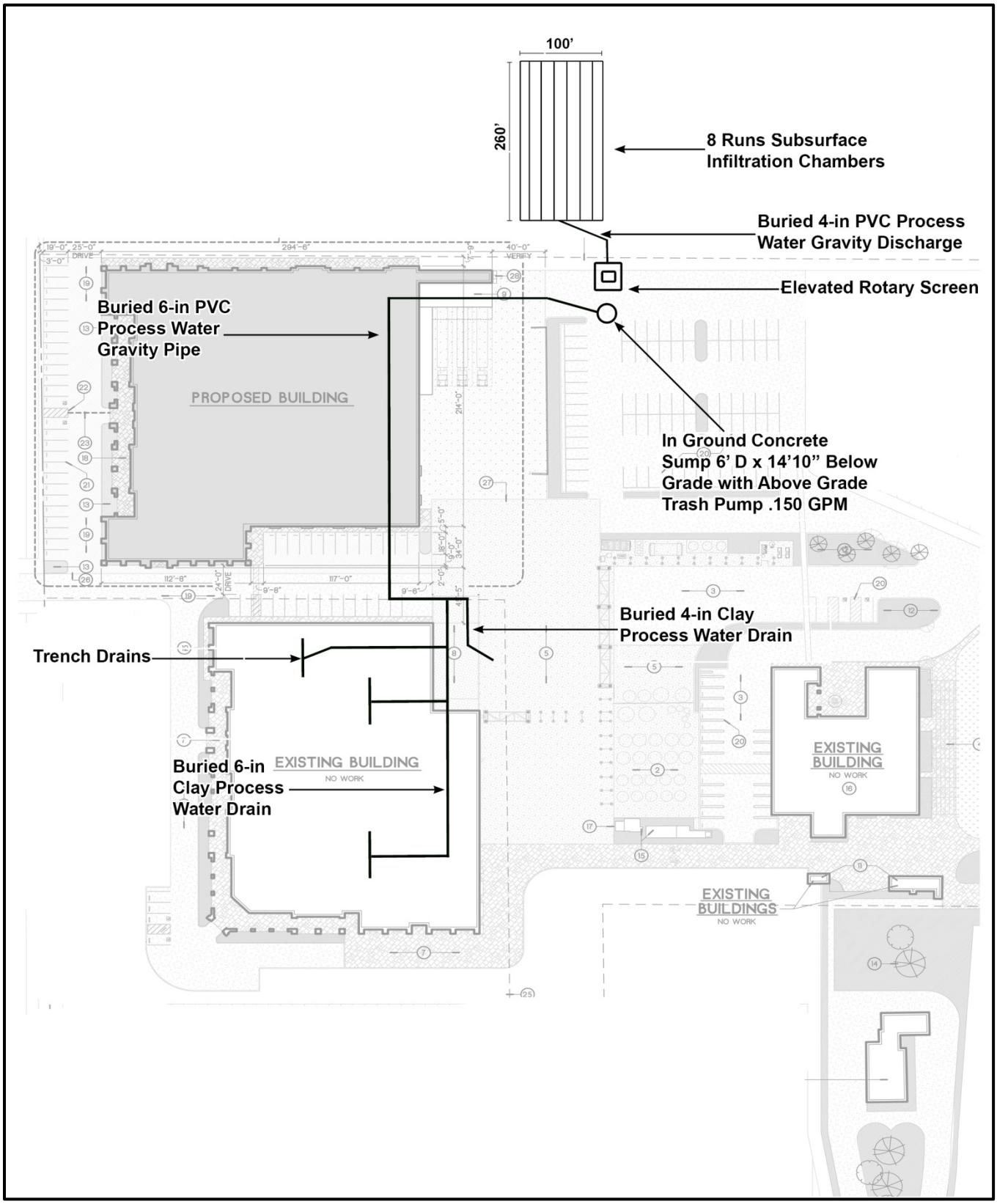
**Exhibit 2-1** **Regional Location**


*Source: Ascent 2011*

**Exhibit 2-2** **Project Site**

*Source: Ascent 2011*

**Exhibit 2-3 Existing Administration/Bottling Facility**




*Source: Ascent 2011*

**Exhibit 2-4** **Discharge Pipes**

It should be noted that Concannon Vineyard is currently operating the existing process wastewater system without an approved Waste Discharge Requirement (WDR) permit from the San Francisco Bay Region's RWQCB. The applicant has recently submitted a report of waste discharge to the RWQCB and is proceeding through the permitting process. Additional details regarding this process can be found in Section 3.9, "Hydrology and Water Quality" and Section 3.17 "Utilities and Service Systems."

Existing sanitary wastewater generated at the site is collected and treated separately from process wastewater through the use of an onsite septic system. The applicant proposes to construct a new separate septic system to process the proposed administration/warehouse building's sanitary wastewater. Sanitary wastewater would be conveyed underground to a new septic tank located approximately 1,000 feet north of the proposed building on an area of land that is currently disturbed and used for storage of agriculture equipment (Exhibit 2-2). . From the septic tank, the wastewater would be conveyed into an onsite leachfield of approximately 0.5 acre in size, where it would percolate into onsite soils.

### WATER SUPPLY

California Water Services Company (Cal Water) currently provides water service to the property and the new building would be connected to the existing water distribution system. The proposed building is estimated to generate demand for 1.1 acre feet per year (af/yr).

### STORMWATER DRAINAGE

All stormwater generated within the developed footprint of Concannon Vineyard is currently contained within the project site through the use of a County-approved, French drain system. The French drain system includes a network of perforated pipes located around the existing building perimeters and in parking and storage areas. This drainage system conveys water away from building foundations and allows it to percolate to underlying soils. The proposed administration/warehouse building would include the construction of a new French drain stormwater drainage system, similar to the existing system, to convey stormwater generated at the project site away from the building.

Consistent with State regulations, the applicant would be required to obtain a General National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities from the State Water Resources Control Board (SWRCB). As a condition of that permit, a Stormwater Pollution Prevention Plan (SWPPP) for construction activities would be required to reduce or eliminate water pollution associated with construction activities.

## 2.6 PROJECT OPERATIONS

The proposed administration/warehouse building would not change the existing operations at the site except that adequate administration and storage space would be provided to meet existing operational demands. No changes to the existing wine processing capacity or visitor use (100 visitors per day during peak periods) of the facility would occur. However, mobile storage facilities, currently used to meet some of the needs the project would replace, would be removed from the site. No new employees would be required and winery operations would continue to be served by the existing 50 employees.

## 2.7 PROJECT CONSTRUCTION

Construction of the proposed building is expected to last approximately eight months with peak construction activities taking place over a period of two months. On average, 20 construction workers would be on the site on

a daily basis with a maximum of 35 workers onsite during peak construction activities. The specific construction schedule is unknown at the time but all construction would take place during day time hours (i.e., Monday-Friday 7:00 A.M. to 7:00 P.M. and Saturday and Sunday 8:00 A.M. to 5:00 P.M.). No nighttime construction activities are proposed.

Construction would include typical activities such as excavating, grading, building erection, and the application of architectural coatings. Construction activities would disturb approximately two acres of the site. Construction equipment that would be used onsite includes dozers, excavators, pavers, backhoes, lifts, concrete trucks, generators, and a crane.

# 3 ENVIRONMENTAL CHECKLIST

## 3.1 AESTHETICS

| | Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|---|
| **I.** | **Aesthetics. Would the project:** | | | | |
| | a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| | b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☒ |
| | c) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ |
| | d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

### ENVIRONMENTAL SETTING

Aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, aesthetic impacts may occur. This analysis is based on review of project maps and drawings, aerial and ground level photographs of the project area, and available planning documents.

Concannon Vineyard consists of approximately 250 acres of vineyards and winery facilities. In general, views of the Concannon Vineyard property from offsite areas consist of large expanses of vineyards that surround a small core of developed winery commercial/bottling facilities. The vineyard array is typical of other vineyards in the surrounding area (i.e., organized rows of grape vines).

Property surrounding the vineyards includes single family homes to the west, north, and east of the project site. The Wente Brothers vineyards are located to the south of property across Tesla Road. Tesla Road forms the southern boundary of the Concannon Vineyard. Views of the project site from surrounding areas include the following:

- **North:** Views of the site from the north include vineyards in the foreground with views of the existing administration/bottling facility and miscellaneous agricultural equipment available in the background.
- **South:** Views of the site from the south along Tesla Road consist of the Concannon Vineyard gateway entrance (Exhibit 3.1-1) and rows of wine grapes in the foreground, views of the existing wine tasting room, administration/bottling facility, and the Victorian home in the mid- ground, views of and vineyards in the background. (Exhibits 3.1-1 and 3.1-2).
- **East:** Areas east of the project site have views of vineyards in the foreground and the existing buildings in the background.
- **West:** Areas west of the project site have views of vineyards in the foreground, and the existing buildings and parking lot areas in the background. Distant views of the ridgeline and hills of the Altamont Pass are available in the background.


*Source: Ascent 2011*

**Exhibit 3.1-1 View from Tesla Road-Vineyards and Entrance**

*Source: Ascent 2011*

**Exhibit 3.1-2 View from Tesla Road-Existing Facility**

## DISCUSSION

### a) Have a substantial adverse effect on a scenic vista?

***Less-than-Significant Impact***. The County considers the rural character of the South Livermore Area a unique scenic resource characterized by low density residential housing, vineyards, open space, and ridgelines of the Altamont Pass. The proposed project is located within the developed core of the Concannon Vineyard property (Exhibit 2-2). The proposed project would develop approximately 2 acres of land which is currently undeveloped and vacant with a new 28-foot tall structure. This structure would be located within the core of existing buildings onsite and would be similar in appearance as existing administration buildings onsite. No vineyards would be removed with implementation of the project. Views of the site would continue to primarily consist of vineyards surrounding a core of administrative, storage, and other miscellaneous buildings. The overall character of the site would not be substantially different from existing conditions. Therefore, the project would not have a substantial adverse effect on a scenic vista and this would be a less-than-significant impact.

### b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

***No Impact***. The proposed project is not located near a designated state scenic highway or eligible state scenic highway (DOT 2007) and, would not damage scenic resources, including but not limited to trees, outcroppings, and historic buildings within a state scenic highway. Therefore, no impact would occur.

### c) Substantially degrade the existing visual character or quality of the site and its surroundings?

***Less-than-Significant Impact***. The proposed project would add a new, large building to the existing developed core of the Concannon Vineyard property. The proposed building would be approximately 50,000 sq. ft., single story, would be designed to meet the County's design standards, and would be similar in architectural character as the existing administration building onsite. The building would be approximately 28-feet tall. Views of the building would be available from the residences located to the west, north, and east of the project site. Views of the proposed building to travelers and the public would be available from Tesla Road. However, from this viewpoint, views of the proposed building would be mostly blocked by other buildings onsite and would be short-term in duration, only occurring during the time the vehicle approaches and drives past the site.

Views of the proposed administrative/warehouse building from surrounding locations would largely be unchanged and would continue to consist of vineyards in the foreground and the Concannon winery building complex in the background. The proposed building would not introduce a new dominate feature on the project site or in the overall landscape. Rather, the proposed building would be similar in size, orientation, and architectural character as the existing administration building onsite. Further, because of its limited height (28-feet tall) the proposed building would not block distant views of surrounding hillside locations from any surrounding sensitive receptors.

Overall, the proposed project would not substantially degrade the existing visual character or quality of the site because it would be developed within the existing developed core of the property, would include similar architectural features and coatings as the existing administration building, and would not substantially alter views of the site from offsite areas or block views of surrounding hillside areas. This would be a less-than-significant impact.

### d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

***Less-than-Significant Impact***. The proposed building would include non-reflective architectural treatments to minimize daytime glare impacts. In addition, the proposed building would include perimeter lighting, primarily focused on entrance areas, the loading dock, and parking facilities. The proposed nighttime lighting fixtures would be designed consistent with the County's lighting Policy 115 which states that "all exterior lighting must be located , designed, and shielded so as to confine direct rays to the parcel where the lighting is located" and would be similar to existing lighting sources currently installed at the property (Alameda County 1994). All proposed lighting would be shielded and downward facing and would not cast light onto adjacent parcels.

Because of the relatively rural nature of the project location, any additional light sources have the potential to increase the illumination intensity in the area and increase skyglow from lights that point upward or reflect off hard surfaces. Concannon Vineyard currently has a developed core of winery facilities that include perimeter nighttime lighting fixtures. This lighting results in some nighttime illumination and sky glow around the facility complex. The proposed administration/warehouse building would be immediately adjacent to an existing, large building that provides perimeter lighting and is the primary source of nighttime lighting at the property.

The proposed lighting for the administration/warehouse building would be similar in illumination intensity as existing lighting sources and would only be installed in areas necessary to maintain adequate security to employees and visitors. Further, all light fixtures would be downward facing and shielded to reduce skyglow and reflection and would be designed consistent with the County's lighting standards. The project would not result in the introduction of a new lighting source in an area that was previously dark. Rather, the project would add additional lighting to the developed core of the winery complex. However, this additional lighting would not substantially expand the illuminated area of the site or result in lighting that is substantially brighter than existing lighting sources. Therefore, overall, nighttime views of the winery complex would be similar to existing conditions.

Interior lighting may be illuminated during nighttime hours; however, no windows are located along the northern perimeter of the building such that surrounding sensitive receptors (e.g., residences) would have adverse light or glare impacts.

Because the project's proposed lighting would be minimal to maintain appropriate safety and security, would comply with existing County lighting standards, would be downward facing and shielded, the proposed project would not create a new source of substantial light or glare that would adversely affect nighttime views in the area. This would be a less-than-significant impact.

# 3.2 AGRICULTURE AND FOREST RESOURCES

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **II. Agriculture and Forest Resources.** | | | | |
| In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. | | | | |
| Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with existing zoning for agricultural use or a Williamson Act contract? | ☐ | ☐ | ☒ | ☐ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

The Concannon Vineyard property is primarily an agricultural parcel dedicated to the cultivation of wine grapes. There are no forest resources on or within the project vicinity.

The California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (FMMP) designates agricultural land, based on soil quality and irrigation status, into eight categories. Based on the FMMP data, the administration/warehouse building would be located on soils designated as "Farmland of Statewide Importance".

The CDC also maps and monitors land under Williamson Act contracts. The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with

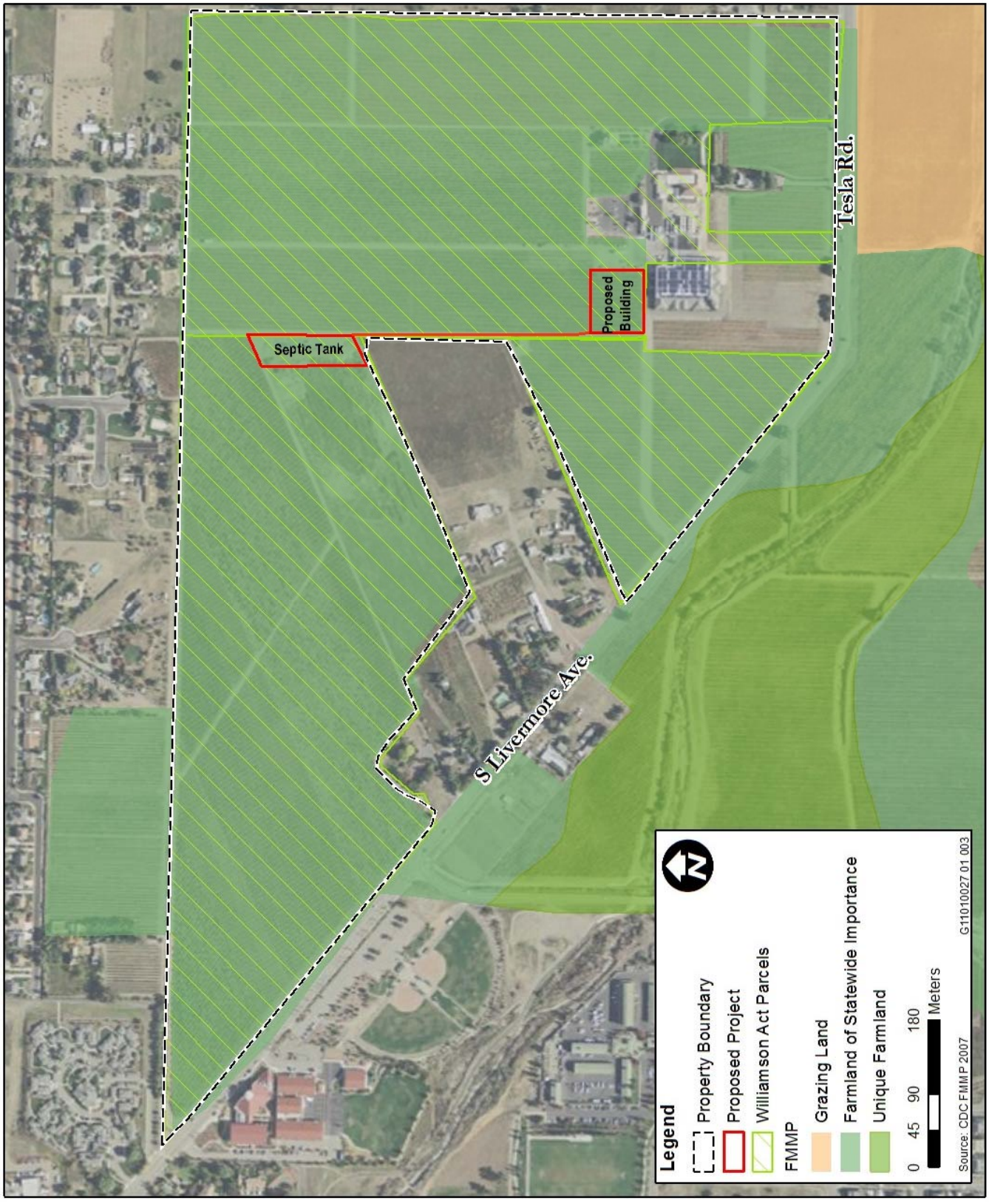
private landowners for the purpose of preserving agriculture and restricting unnecessary conversion to urban uses. Under the contract, landowners receive reduced property tax assessments based on the property's value for farming and open space uses as opposed to full market value. (See Exhibit 3.2-1). The Williamson Act does allow compatible uses that would enable the development of facilities on prime agriculture land as long as the uses are directly related to the commercial production of the agricultural land. Each county that participates in the Williamson Act program is responsible for developing its own guidelines and policies for implementing the Williamson Act based on the basic guidelines and provisions in the Williamson Act itself. Ultimately, a compatible use would be allowed on a parcel under a Williamson Act contract as long as it was directly related to the production of that specific land. Alameda County would be responsible for making this determination and would issue a Conditional Use Permit if it determined that the use was acceptable. According to the CDC 2009 Williamson Act Contract map for Alameda County, the project site is located within a parcel of land that is currently under an active Williamson Act contract (CDC 2009).

The Tri-Valley Conservancy is a land trust that focuses on conservation of fertile soils, rangelands, open space, biological resources, and agriculture lands of the South Livermore Valley Area. It holds conservation easements on over 100 properties in the Livermore Valley Area. The Tri-Valley Conservancy has entered into a conservation easement with Concannon Vineyard to promote and protect the agriculture resources that they own. The easement requires that Concannon Vineyard continue to engage in viticulture operations and sets a limit on the development area of the property to maximize conservation of vineyard resources.

## DISCUSSION

### a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

***Less-than-Significant Impact***. The project site is designated as Farmland of Statewide Importance pursuant to the FMMP of the California Resources Agency (CDC 2010). The proposed project involves the construction of an administrative/warehouse building on approximately two acre within the facility core of Concannon Vineyard. A septic tank and leach field, which would occupy approximately 0.3 acre would be located approximately 1,000 feet north of the building in a currently disturbed area used for storage. The proposed administrative/warehouse building would support the existing agricultural operations at Concannon Vineyard. There are currently no vineyards on the project site or in the area where the septic tank and leach field would be located. Therefore, no vineyards would be displaced by the project. While soils on the site are designated as Farmland of Statewide Importance, the proposed project would not conflict with but would instead support the existing agricultural operations onsite. Further, the proposed project would be located within the existing developed core of the site and would be within the allowed developable area as agreed to with the Tri-Valley Conservancy. The septic tank and leach field would be located in an area that currently does not support vineyards and could be removed and site soils returned to pre-existing conditions at the end of its useful life if onsite facilities are connected to the municipal sewer system. While a new building would be constructed, this building would not alter the agricultural status or use of the property for agricultural purposes. Therefore, this would be a less-than-significant impact to Farmland of Statewide Importance.




*Source: Ascent 2011*

**Exhibit 3.2-1** **Farmland Mapping Categories-Williamson Act**

### b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

***Less-than-Significant Impact***. The project site is zoned agriculture and is under a Williamson Act contract. The purpose of the Williamson Act is to limit the development of prime agriculture land by disallowing uses inconsistent with agriculture or agriculture production. The Williamson Act does allow compatible uses that would enable the development of facilities on prime agriculture land as long as the uses are directly related to the commercial production of the agricultural land. Alameda County would be responsible for making this determination and would issue a Conditional Use Permit if they determined that the use was acceptable (CDC 2004).

The proposed project involves the construction of administration/warehouse building within the facility core of Concannon Vineyard. This building would support existing viticulture operations at the site. While the County will ultimately determine whether to approve the project and issue a Conditional Use Permit, the project would not conflict with the purpose and intent of existing Williamson Act contracts for the site as the site would continue to be devoted to viticulture operations. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract and this impact would be less-than-significant.

### c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

***No Impact***. There are no forest resources located within the project site and the site is not zoned for timber harvest. The project site is a viticulture operation on agriculture-designated land. The proposed project would have no impact related to timberland harvest or conflicts with land zoned for forestry or timber harvest.

### d) Result in the loss of forest land or conversion of forest land to non-forest use?

***No Impact***. The project area is not forested. The site does not support any forestry resources, as defined in Public Resources Code (PRC) 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). No impact would occur.

### e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

***No Impact***. Indirect impacts on agricultural lands can occur in two ways: 1) by urban development placing pressure on adjacent agricultural lands to convert to non-agricultural uses; or 2) through conflict between the two types of land uses leading to the abandonment of agricultural uses.

The proposed project is consistent with land use policies of the East Alameda County General Plan and adopted zoning designations. Further, the project would support existing viticulture operations onsite. The project would not include residential development, which could result in conflicts that could encourage the conversion of existing farmland to non-agricultural uses. No forest land or timberland exists on or in the vicinity of the project site and the proposed project does not include components that would result in the conversion of forest land to non-forest use. Therefore, the proposed project would have no impact related to conversion of farmland or forest land to a non-agricultural/non-forest use.

# 3.3 AIR QUALITY

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **III. Air Quality.** | | | | |
| Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations. | | | | |
| Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☐ | ☒ | ☒ |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | ☐ | ☐ | ☒ | ☐ |
| d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☒ |
| e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

## ENVIRONMENTAL SETTING

The project site is located in Alameda County, which lies in the San Francisco Bay Area Air Basin and is under the jurisdiction of Bay Area Air Quality Management District (BAAQMD). With respect to ozone, Alameda County is currently designated as a nonattainment area for the 1-hour state ambient air quality standard and the 8-hour state and national ambient air quality standards (California Air Resources Board 2010). Alameda County is designated as unclassified for the national $PM_{10}$ (i.e., respirable particulate matter with an aerodynamic diameter of 10 micrometers or less) standard; and is designated as nonattainment for the state and national $PM_{2.5}$ (i.e., respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less) standards (ARB 2010).

Air quality within Alameda County is regulated by such agencies as the U.S. Environmental Protection Agency (EPA), and California Air Resources Board (ARB) at the federal and state levels, respectively, and locally by the BAAQMD. The BAAQMD seeks to improve air quality conditions in Alameda County through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the BAAQMD includes the development of programs for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. BAAQMD also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the federal Clean Air Act (CAA), federal Clean Air Act Amendments of 1990 (CAAA), and the California Clean Air Act (CCAA).

The BAAQMD adopted the Final Bay Area 2010 Clean Air Plan, which defines a strategy to: (1) reduce emissions and decrease ambient concentrations of harmful pollutants; (2) safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily impacted by air pollution; and (3) reduce greenhouse gas (GHG) emissions to protect the climate (BAAQMD 2010c). In compliance with the requirements set forth in the CCAA, the plan specifically addresses the nonattainment status for ozone and to a lesser extent, $PM_{10}$ and $PM_{2.5}$.

BAAQMD adopted new thresholds of significance and guidance for the evaluation of projects under CEQA in early June of 2010 (BAAQMD 2010). These documents provide detailed guidance for evaluating both short-term construction projects and the long-term operations of a project.

This analysis takes into account the quantitative thresholds of significance BAAQMD has adopted for the evaluation of criteria air pollutants and precursors generated by construction and operational activities, which are listed below. According to BAAQMD's adopted thresholds of significance, construction- or operation-related emissions would be significant if average daily emissions exceeded the following limits (BAAQMD 2010):

- 54 pounds per day (lb/day) of reactive organic gases (ROG),
- 54 lb/day of nitrogen oxide ($NO_X$),
- 82 lb/day of $PM_{10}$ exhaust, and
- 54 lb/day of $PM_{2.5}$ exhaust.

## DISCUSSION

### a) Conflict with or obstruct implementation of the applicable air quality plan?

***Less-than-Significant Impact***. The emission inventories used to develop a region's air quality attainment plans are based primarily on projected population growth and vehicle miles traveled (VMT) for the region, which are based, in part, on the planned growth identified in regional and community plans. Therefore, projects that would result in increases in population or employment growth beyond that projected in regional or community plans could result in increases in VMT above that planned in the attainment plan, further resulting in mobile source emissions that could conflict with a region's air quality planning efforts. Increases in VMT beyond that projected in area plans generally would be considered to have a significant adverse incremental effect on the region's ability to attain or maintain state and federal ambient air quality standards.

The proposed project would not generate demand for any new permanent employees. Temporary construction activities would result in the peak employment of 35 construction workers for approximately two months and an average employment of 20 construction workers over the 8-month construction period. The project would not result in any new employment opportunities or new housing and, therefore, it would not change the amount of development projected in the East Alameda County Area Plan, and it would be consistent with the population growth and VMT projections contained in the BAAQMD's Air Quality Attainment Plan. The project would not interfere with the region's ability to attain or maintain state and national ambient air quality standards. Thus, implementation of the proposed project would not conflict with or obstruct implementation of any air quality planning efforts. As a result, this impact would be less than significant.

## b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

### *Short-Term Construction-Related Criteria Air Pollutants and Precursors*

***Less-than-Significant Impact***. The proposed project includes the construction of an approximate 50,000 sq. ft. administration/warehouse building on Concannon Vineyard. The construction is expected to last approximately 8 months and would consist of typical construction activities for buildings of this type such as grading, filling, paving, erection of the building, and application of architectural coatings. There would be no expected operational activities that would generate emissions such as motor vehicle trips by new employees or the use of area sources or stationary sources after the 8-month construction period.

During construction of the proposed project, criteria air pollutant (and precursor) emissions would be temporarily and intermittently generated from a variety of sources. Project-related excavation and site grading activities would generate fugitive particulate matter (PM) dust emissions. Fugitive PM dust emissions are primarily associated with ground disturbance and material transport and vary as a function of parameters such as soil silt content and moisture, wind speed, acreage of disturbance area, and the intensity of activity performed with construction equipment. Exhaust emissions from diesel equipment, material transport trips, and construction worker-commute trips also contribute to short-term increases in PM dust emissions, but to a lesser extent. Exhaust emissions from these construction-related mobile sources would also include ROG and $NO_X$. In addition, the application of architectural coatings (i.e., interior and exterior surface painting) would result in off-gas emissions of ROG.

Construction-related emissions of criteria air pollutants and precursors were modeled in accordance with BAAQMD-recommended methodologies using project specifications (e.g., construction schedule, and duration), and default settings and parameters contained in the Urban Emissions Model Version 9.2.4 (URBEMIS) for Alameda County. URBEMIS uses project-applicable emission factors published by ARB in its widely-accepted EMFAC 2007 and OFFROAD 2007 computer models. The modeled emissions are summarized in Table 3.3-1. Refer to Appendix A for specific input parameters and modeling output results.

Based on the modeling conducted, project-generated short-term construction-related emissions would not exceed BAAQMD's applicable thresholds of significance. Thus, project-generated emissions from construction would not violate or contribute substantially to an existing or projected air quality violation, including the nonattainment status of Alameda County for ozone, $PM_{10}$, and $PM_{2.5}$. As a result, this impact would be less than significant.

**Table 3.3-1 Summary of Modeled Criteria Air Pollutant and Precursor Emissions from Short-Term Construction Activities**

| Construction Activity | ROG (lb/day) | $NO_X$ (lb/day) | $PM_{10}$ (lb/day) | $PM_{2.5}$ (lb/day) |
|---|---|---|---|---|
| 2011 Totals | 6 | 44 | 13 | 5 |
| 2012 Totals | 5.7 | 41 | 13 | 4 |
| BAAQMD Thresholds of Significance | 54 | 54 | 82 | 54 |

Notes:
lb/day = pounds per day; ROG = reactive organic gases; $NO_X$ = oxides of nitrogen; $PM_{10}$ = particulate matter with aerodynamic diameter less than 10 microns; $PM_{2.5}$ = particulate matter with aerodynamic diameter less than 2.5 microns; BAAQMD = Bay Area Air Quality Management District; yr= year. Detailed assumptions and modeling output files are included in Appendix A.
Source: Modeling Conducted by Ascent Environmental 2011.

### *Long-Term Operational-Related Regional Criteria Air Pollutant and Precursor Emissions*

***No Impact.*** The proposed administration/warehouse building would be used for administrative activities (e.g., meetings, work space) and storage of dry goods and finished wine products. The proposed project would not include the long-term operation of any stationary TAC emitting equipment. Therefore, the project would not result in any long-term operational stationary source emissions, and no impact would occur.

### *Long-Term Operational-Related Local Mobile-Source Carbon Monoxide Emissions*

***Less-than-Significant Impact.*** CO concentration is a direct function of vehicle idling time and, thus, traffic flow conditions. Under specific meteorological conditions, CO concentrations near congested roadways and/or intersections may reach unhealthy levels with respect to local sensitive land-uses such as residential areas, schools, and hospitals. As a result, it is recommended that CO not be analyzed at the regional level, but at the local level.

BAAQMD provides a screening methodology to determine project impacts from localized CO emissions. This screening methodology was utilized to analyze local CO emissions from the operation of this project. It states that the following criteria must be met:

- Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The proposed building would not increase the population or bring new employees to the area. Therefore, the proposed project would not be expected to increase traffic on the surrounding streets or intersections. As a result, this impact would be less than significant.

## c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

***Less-than-Significant Impact.*** Alameda County is currently designated as a nonattainment area for the 1-hour state ambient air quality standard and the 8-hour state and national ambient air quality standards (California Air Resources Board 2010). Alameda County is designated as unclassified for the national $PM_{10}$ standard; and is designated as nonattainment for the state and national $PM_{2.5}$ standards (ARB 2010).

Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. As explained in BAAQMD's CEQA Guidelines, and consistent with CEQA, if a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant (BAAQMD 2010).

In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Thus, as discussed in the analysis under item "b" above, project-generated emissions would not exceed applicable thresholds and, therefore, would not violate or contribute substantially to an existing or projected air quality violation. As a result, project-generated emissions of criteria air pollutants and precursors would not be cumulatively considerable. This would be a less-than-significant impact.

## d) Expose sensitive receptors to substantial pollutant concentrations?

### *Criteria Air Pollutants and Precursors*

***Less-than-Significant Impact.*** The closest sensitive receptors to the project site include offsite residences located approximately 1,100 feet to the southwest and west of the project site. Other surrounding land uses consist of vineyards and agriculture land. As discussed in "b" above, project implementation would not result in regional (e.g., $NO_x$, $PM_{10}$) or local (e.g.,CO) emissions of criteria air pollutant or precursors from construction or operational-related activities.(e.g., $NO_x$, $PM_{10}$) that would exceed applicable BAAQMD thresholds of significance. Thus, project-generated criteria air pollutant and precursor emissions would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.

### *Toxic Air Contaminants*

***Less-than-Significant Impact.*** The project would result in short-term diesel exhaust emissions from onsite construction equipment. Particulate exhaust emissions from diesel-fueled engines (diesel PM) were identified as a TAC by the ARB in 1998. The potential cancer risk from the inhalation of diesel PM, as discussed below, outweighs the potential for all other health impacts (ARB 2003), so diesel PM is the focus of this discussion. The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the proposed project (OEHHA 2001).

The primary source of diesel PM from the proposed project would be from construction-related activities (e.g., exhaust from off-road heavy-duty diesel equipment). Sensitive receptors surrounding the project site include nearby residential neighborhoods located over 1,000 feet to the west, north, and east. Based on the emission modeling shown above under item "b", the highest level of $PM_{10}$ (combined dust and diesel exhaust) that would occur on the worst construction day would be 8.5 lbs/day. This level is substantially lower than the threshold of 82 lbs/day established by the BAAQMD. Additionally, the construction phase is estimated to last approximately 8 months with the peak construction for only 2 months. Construction would only be allowed to take place Monday through Friday from 7:00 A.M. to 7 P.M. and Saturday and Sunday from 8:00 A.M. to 5:00 P.M. Typically, there are fewer people in their homes during the time when construction would take place. Thus, considering the highly dispersive properties of diesel PM (Zhu and Hinds 2002), the substantially low amount of emissions predicted from this project, and the short duration and daily timing of construction activities,

construction-related activities would not be anticipated to result in the exposure of sensitive receptors to substantial pollutant concentrations.

The proposed project would not operate any new stationary equipment that produces TAC emissions. The proposed building would be used for storage of supplies and materials and for administrative purposes. No new production equipment would be used in the building. Additionally, the building would not use groundwater wells for its water supply which could potentially emit air pollutants in the form of diesel particulate matter due to increased water pumping.

Thus the project would result in less-than-significant impacts related to construction TACs and no impacts related to operational TACs.

### e) Create objectionable odors affecting a substantial number of people?

***Less-than-Significant Impact.*** The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

Regulation 7, Odorous Substances, established by the BAAQMD provides the basis for offensive odors thresholds (BAAQMD 1982). It also exempts agriculture operations as described in the California Health and Safety Code (CHSC), Section 41705 from the thresholds established in the regulation. This section of the CHSC exempts odors emitted from operations necessary for the growing of crops or the raising of fowl or animals (California Health and Safety Code 41705 2009).

Implementation of the proposed project would not result in any major sources of odor (i.e., the project is not one of the common types of facilities nor includes activities that are known to produce odors [landfill, coffee roaster, wastewater treatment facility]). Minor odors from the use of onsite equipment during construction activities would be intermittent and temporary, and would dissipate rapidly from the source with an increase in distance. In addition, operation of the project would not result in locating sensitive receptors' near an existing odor source. Thus, project implementation would not create objectionable odors affecting a substantial number of people. As a result this impact would be less than significant.

# 3.4 BIOLOGICAL RESOURCES

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. Biological Resources. Would the project:** | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☒ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☒ |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☒ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

The proposed administration/warehouse building would be located within the developed core of a winery and vineyard. Land surrounding the proposed building is devoted to wine production and consists entirely of vineyards, developed, and disturbed land. There are no aquatic features or natural habitats present on the project site. The proposed septic system footprint would be located on disturbed land surrounded by vineyards.

## DISCUSSION

### a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

***No Impact***. The project site (administration/warehouse building and septic tank site) is located on land that consists of disturbed land. No natural habitats or communities that support species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of

Fish and Game (CDFG) or the U.S. Fish and Wildlife Service (USFWS) are present on the project site. The proposed administrative/warehouse building is surrounded by vineyards and developed land, providing little wildlife habitat. The adjacent parcel, to the west of the proposed septic pipeline and to the south of the proposed septic system, contains developed land and grassland habitat. The height of the grassland vegetation is approximately two feet tall making it unlikely habitat for burrowing owl, which typically are found in areas with short vegetation. California tiger salamander is unlikely to occur on the project site due to the absence of aquatic and upland habitats. The project would result in no impact to special-status species.

**b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?**

***No Impact***. The project site is located on land that is disturbed. No riparian vegetation or sensitive natural communities occur on the project site. Therefore, the proposed project would not result in adverse effects on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by California DFG or USFWS.

**c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

***No Impact***. Wetlands or jurisdictional waters do not exist on or near the project site. Therefore, the project would not remove, fill, or hydrologically interrupt federally protected wetlands. No impact would occur.

**d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

***No Impact***. Wildlife corridors are features that provide connections between two or more areas of habitat that would otherwise be isolated and unusable. Often drainages, creeks, or riparian areas are used by wildlife as movement corridors as these features can provide cover and access across a landscape. The project site is currently developed as a vineyard and does not contain any important wildlife corridors. Therefore, the proposed project would not impede wildlife movement through the site and no impact would occur.

**e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

***No Impact***. The proposed project does not conflict with any local biological resource protection policy or plan and would not result in the removal of any trees. Furthermore, the Alameda County Tree Ordinance (NO: 0-2004-23, Chapter 12.11) [Alameda County Public Works Agency] only regulates trees within the County right-of-way. Therefore, the proposed project is not subject to the County's tree ordinance. No impact would occur.

**f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

***No Impact***. Alameda County includes two large scale conservation plans, currently in the planning process: the San Francisco Public Utilities Commission (SFPUC) Alameda Watershed Habitat Conservation Plan (HCP) and the Altamont Pass Wind Resources Area (APWRA) Conservation Plan. The project site is not within either planning area.

Although it is not a conservation plan, the project site is within the planning area for the East Alameda County Conservation Strategy (Alameda County 2010) which is intended to provide an effective framework to protect, enhance, and restore natural resources. The Conservation Strategy focuses on impacts on biological resources such as endangered and other special-status species as well as sensitive habitat types. The Conservation Strategy allows local projects to comply with state and federal requirements within a framework of comprehensive conservation goals and objectives, and be implemented using consistent and standardized mitigation requirements for a selected set of focal special-status species and sensitive habitats. There are no natural communities present on the project site and focal species of the Conservation Strategy do not utilize the land cover types affected by the proposed project. Therefore, the proposed project would result in no impact related to conflicts with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

# 3.5 CULTURAL RESOURCES

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **V. Cultural Resources. Would the project:** | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? | ☐ | ☐ | ☐ | ☒ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | ☐ | ☒ | ☐ | ☐ |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☒ | ☐ | ☐ |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☒ | ☐ | ☐ |

## ENVIRONMENTAL SETTING

Background information on cultural resources for the project area was obtained from review of a landmark search for Alameda County in the California Office of Historic Preservation's (OHP) database and a review of Alameda County literature relevant to the project site.

According to the search results from the OHP, Concannon Vineyard has been designated as a California State Historic Landmark (#641). In 1883, James Concannon founded Concannon Vineyard. The Vineyard produced sacramental wines during prohibition and later produced quality wines for commercial production that helped establish the Livermore Valley as one of America's select wine-growing districts.

## DISCUSSION

### a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

***No Impact***. There are no buildings or structures located within the project footprint. Therefore, no impact would occur to any buildings or structures listed on the State Office of Historic Preservation' California Register or the National Register of Historic Places. No impact would occur.

### b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

***Less-than-Significant with Mitigation Incorporated***. Implementation of the proposed project would involve soil disturbance (i.e., grading, excavating, grubbing, vegetation removal, etc.). Although no known archaeological sites are documented within the project site, the potential exists to encounter previously undiscovered cultural material during project-related ground disturbing activities. Because these activities could disturb previously unknown, buried, and important cultural resources, this would be a potentially significant impact. Implementation of Mitigation Measure CUL-1 would reduce the project's potential for disturbance of buried important cultural resources to a less-than-significant level.

### Mitigation Measure CUL-1

*If an inadvertent discovery of cultural materials (e.g., animal bone, unusual amounts of shell, ceramics, glass, etc.) is made during project-related ground disturbing activities, any ground disturbance in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant per the NRHP/CRHR and develop appropriate mitigation. Mitigation may include, but not necessarily be limited to, in-field documentation, archival research, archaeological testing, data recovery excavations or recordation.*

### *Significance after Mitigation*

Implementation of mitigation measure CUL-1 would reduce impacts to undiscovered cultural resources to a less-than-significant level because appropriate preservation measures would be implemented to preserve significant cultural resources if they are discovered during project construction activities.

## c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

***Less-than-Significant with Mitigation Incorporated***. Geological maps indicate that the project site is located on Quaternary alluvium and marine deposits (Pliocene to Holocene) (USGS 2005). This geological mapping unit has the potential to contain paleontological resources. Based on a locality search of the University of California Museum of Paleontology (UCMP), Alameda County contains 401 records of known paleontological sites (UCMP 2011). The UCMP designates various localities within the County for which paleontological sites have been determined. The nearest sites to the proposed project are the Tesla Mine and Tesla Road. Based on a search of the UCMP database, no known specimens have been recorded in these localities. Although there is low potential to encounter paleontological resources during construction, it is possible that paleontological resources could be uncovered during proposed earthwork activities. This would be a potentially significant impact. Implementation of Mitigation Measure CUL-2 would reduce any potential impacts to less-than-significant levels with respect to paleontological resources.

### Mitigation Measure CUL-2

*Before the start of grading and/or excavation, the applicant shall retain a qualified paleontologist or archaeologist to train all construction personnel involved with earthmoving activities, regarding the possibility of encountering paleontological resources at the site, the appearance and types of paleontological resources likely to be seen during project construction, and proper notification procedures should such resources be encountered.*

*In the event that paleontological resources are discovered during ground disturbing activities, grading and construction work within 100 feet of the find shall be suspended until the significance of the features can be determined by a qualified professional paleontologist as appropriate. A qualified professional paleontologist shall then make recommendations for measures necessary to protect the find, or to undertake data recovery, excavation, analysis, and curation of paleontological materials as appropriate.*

### *Significance after Mitigation*

Implementation of mitigation measure CUL-2 would reduce impacts to undiscovered paleontological resources to a less-than-significant level because appropriate preservation measures would be implemented to preserve significant paleontological resources if they are discovered during project construction activities.

### d) Disturb any human remains, including those interred outside of formal cemeteries?

***Less-than-Significant with Mitigation Incorporated***. No evidence is available to suggest that any prehistoric or historic-era marked or unmarked interments are present within or in the immediate vicinity of the project site. However, there is a possibility that unmarked previously unknown graves of Native American or Euro-Americans could be present within the project site. Potential disturbance of previously undiscovered human remains during project construction would be a potentially significant impact. Implementation of Mitigation Measure CUL-3 would reduce the project's potential for disturbance of human remains to a less-than-significant level.

## Mitigation Measure CUL-3

*In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, potentially damaging excavation in the area of the burial shall be halted and the Alameda County Coroner and a professional archaeologist shall be contacted to determine the nature and extent of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code, Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code, Section 7050[c]).*

*If the remains are determined to be those of a Native American, then the following will occur:*

*(a) The (State Historic Preservation Office (SHPO), the construction contractor, an archaeologist, and the NAHC-designated Most Likely Descendant (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in Section 5097.9 of the California Public Resources Code.*

*(b) The SHPO shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD will have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. Assembly Bill (AB) 2641 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641(e) includes a list of site protection measures and states that the County will implement one or more of the following measures:*

- *record the site with the NAHC or the appropriate Information Center,*
- *utilize an open-space or conservation zoning designation or easement, and/or*
- *record a document with the County in which the property is located.*

*(c) The applicant or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The County may also reinter the remains in a location not subject to further disturbance if he/she rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the County.*

### *Significance after Mitigation*

Implementation of mitigation measure CUL-3 would reduce impacts to undiscovered human remains to a less-than-significant level because appropriate measures would be implemented to properly handle and inter any remains during project construction activities.

# 3.6 GEOLOGY AND SOILS

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. Geology and Soils. Would the project:** | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.) | ☐ | ☐ | ☒ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☒ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

### REGIONAL GEOLOGY

The project site is located in eastern Alameda County in the Livermore Valley. The Livermore Valley lies south and west of the Diablo Range and east of the East Bay Hills. This valley is a deep alluviated depression, containing sediments deposited as part of the Livermore Gravels Formation.

The Greenville fault forms the eastern border of this valley, separating it from the western foothills of the Diablo Range. It is postulated that the Greenville Fault is connected to the Concord Fault at depth by a buried "blind" thrust fault system. It is this interaction of the Greenville and Concord Faults that has created the Mount Diablo uplift, a presently active, Late Quaternary (11,000 years ago to present) tectonic feature located in the north-central portion of the valley. The bedrock structure of the Mount Diablo uplift is composed of rocks of the Miocene Green Valley/ Tassajara Formation and is postulated to contain deposits of the Livermore Gravels Formation. The core of the Mount Diablo uplift, located just north of the valley, contains older Franciscan rocks, flanked by east- and westward-younging sedimentary strata of Eocene through Pliocene age (54 million years ago to 5 million years ago) (Alameda County 2010).

### SEISMIC HAZARDS

The project site is surrounded by various faults, specifically the Greenville Fault, that could increase the potential for ground-shaking damage. Earthquake waves pass through dense rocks to less dense alluvial or water-saturated materials which result in an increase in amplitude and longer lasting ground motion. Buildings and/or structures located on loose, unconsolidated materials could lead to structural damage during a groundshaking event. The United States Geological Survey (USGS) produced a ground shaking potential map, which placed the project site in a strong shaking potential zone (USGS 2003).

### PROJECT SITE GEOLOGY

#### Soil Conditions

The Geotechnical Investigation conducted on the proposed project site, by North American Technical Services, determined that the site consisted of gray silty sand with gravel. This type of soil is classified by the U.S. Department of Agriculture, Natural Resources Conservation Service Web Soil Survey (USDA 2009) as Livermore very gravelly coarse sandy loam. This type of soil is derived from sandstone and shale and is fairly prominent in the Livermore Valley. It is present within alluvial deposits at elevations of 220 to 800 feet from sea level and is nearly level to gently sloping with slopes ranging from 0 to 7 percent. The soil is somewhat excessively drained and has rapid permeability of 7 minutes per inch. Runoff is very slow and the available water holding capacity is very low. Root penetration is very deep and erosion hazard is slight when cultivated (Kennedy/Jencks 2011).

#### Site Seismicity

The 1972 Alquist-Priolo Earthquake Fault Zoning Act (AP Zone Act) was passed to prevent the new development of buildings and structures for human occupancy on the surface of active faults. The locations of active faults are established into fault zones by the AP Zone Act. According to the State of California Department of Conservation, the project site does not lie within a designated Alquist-Priolo Earthquake Fault Zone (CDC 1982).

## DISCUSSION

### a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

#### i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

***Less-than-Significant Impact***. No known active or inactive faults or earthquake hazard zones are located on the project site. The nearest Earthquake zone delineated by the Alquist-Priolo zoning map is the Greenville Fault Zone, located approximately one mile southeast of the project site. Because surface ground rupture along faults is generally limited to a linear zone a few feet wide, ground rupture because of a fault across the project site is unlikely. Therefore, hazards associated with a potential fault rupture would be less than significant.

#### ii) Strong seismic ground shaking?

***Less-than-Significant Impact***. If a seismic event occurs at a nearby fault, seismic induced settlement could affect the project site. The extent of damage would depend on a soil characteristics, groundwater depth, and duration and intensity of the earthquake. Geotechnical reports prepared for the project identify the Greenville Fault as a

potential cause for moderate strength seismic events. Consistent with the County of Alameda policy, the proposed project would be designed to meet applicable Uniform Building Code Standards, which identify specific criteria for seismic hazards. Because proposed facilities would include appropriate design measures to mitigate potential seismic hazards consistent with State and local regulations, potential hazards associated with strong seismic ground shaking would be less than significant.

#### iii) Seismic-related ground failure, including liquefaction?

***Less-than-Significant Impact.*** Liquefaction is the sudden temporary loss of strength in saturated, loose to medium dense, granular sediments subjected to ground shaking. Liquefaction can cause foundation failure of buildings and other facilities due to the reduction of foundation bearing strength. During a seismic event, the extent of damage from ground failure including liquefaction would depend on the soil characteristics, groundwater depth, and duration and intensity of the earthquake. Geotechnical studies prepared for the project site have determined that the potential for seismic-related ground failure and liquefaction is low (NATS 2010). Further, consistent with County policies, the project would be designed to meet applicable Uniform Building Code Standards, which identify specific criteria for seismic and liquefaction hazards. Because it has been determined that liquefaction potential on the project site is low and proposed facilities would include appropriate design measures to mitigate potential seismic and liquefaction hazards consistent with State and local regulations, potential hazards associated with strong ground failure or liquefaction would be less than significant.

#### iv) Landslides?

***Less-than-Significant Impact***. The project site is a relatively flat site and, therefore, would not be subject to landslides. This would be a less-than-significant impact.

### b) Result in substantial soil erosion or the loss of topsoil?

***Less-than-Significant with Mitigation Incorporated***. The project site consists of Livermore very gravelly coarse sandy loam with slopes between 0 and 7 percent. This type of soil is present within alluvial deposits, is generally somewhat excessively drained, and has a high capacity to transmit water. Its erosion hazard is slight when cultivated. (USDA 2009).Depending on wind and rain conditions, grading activities and improvements could result in the potential for erosion and sedimentation of site soils both on- and offsite and, therefore, this would be considered a potentially significant impact. Implementation of Mitigation Measure GEO-1 would reduce the project's potential for soil erosion to a less-than-significant level.

### Mitigation Measure GEO-1

*The project applicant or its contractor shall secure a General National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities from the State Water Resources Control Board (SWRCB). As a condition of that permit, a Stormwater Pollution Prevention Plan (SWPPP) for construction activities shall be prepared and implemented. The SWPPP shall identify pollutant sources that could affect the quality of stormwater discharge, and shall include provisions for implementing Best Management Practices (BMPs) that reduce or eliminate water pollution associated with project construction. The following includes a partial list of BMPs that shall be included, as applicable, in order to mitigate construction related water quality impacts:*

- *If excavation occurs during the rainy season, storm runoff from the construction area shall be regulated through a storm water management/erosion control plan that shall include temporary onsite silt traps and/or basins with multiple discharge points to natural drainages and energy dissipaters. Stockpiles of loose material shall be covered and runoff diverted away from exposed soil material. If work stops due to*

*rain, positive grading away from slopes shall be provided to carry the surface runoff to areas where flow would be controlled, such as the temporary silt basins. Sediment basins/traps shall be located and operated to minimize the amount of offsite sediment transport. Any trapped sediment shall be removed from the basin or trap and placed at a suitable location onsite, away from concentrated flows, or removed to an approved disposal site.*

- *Temporary erosion control measures (such as fiber rolls, staked straw bales, detention basins, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be provided until perennial revegetation, landscaping, or pavement is established and can minimize discharge of sediment into nearby waterways.*
- *Sediment shall be retained onsite by a system of sediment basins, traps, or other appropriate measures.*
- *No disturbed surfaces shall be left without erosion control measures in place during the rainy season, from October 15th through April 30th.*
- *Erosion protection shall be provided on all cut-and-fill slopes. Revegetation shall be facilitated by mulching, hydroseeding, or other methods and shall be initiated as soon as possible after completion of grading and prior to the onset of the rainy season (by October 15th).*
- *Grass turf shall be established on the construction site, including the temporary staging area, as soon as possible after disturbance.*

*BMPs selected and implemented for the project shall be in place and operational prior to the onset of major earthwork on the site. The construction phase facilities shall be maintained regularly and cleared of accumulated sediment as necessary. Effective mechanical and structural BMPs that could be implemented at the project site include the following:*

- *Mechanical storm water filtration measures, including oil and sediment separators or absorbent filter systems installed within the storm drainage system to provide filtration of storm water prior to discharge.*
- *Vegetative strips, high infiltration substrates, and grassy swales used where feasible throughout the development to reduce runoff and provide initial storm water treatment.*
- *Roof drains shall discharge to natural surfaces or swales where possible to avoid excessive concentration and channelizing storm water.*
- *Permanent energy dissipaters included in drainage outlets.*

### *Significance after Mitigation*

Implementation of mitigation measure GEO-1 would reduce the project's construction-related soil impacts to a less-than-significant level because appropriate best management practices and water quality protection measures would be implemented to properly handle, treat, and discharge stormwater generated onsite.

### c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

***Less-than-Significant Impact***. As described in item iii) above, liquefaction impacts are considered less-than-significant. In addition, the proposed building would be designed to meet all applicable UBC engineering requirements to ensure that the facilities would not be affected by potential lateral spreading, liquefaction, or collapse. Therefore, the proposed project would result in less-than-significant impacts related to unstable geologic or soil units.

### d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?

***Less-than-Significant with Mitigation Incorporated***. Expansive soils are soils that are high in expansive clays or silts and that swell and shrink with wetting and drying, respectively. This shrinking and swelling can result in differential ground movement, which can cause damage to foundations. However, proper fill selection, moisture control, and compaction during construction can prevent these types of soils from causing significant damage. Due to the potential for damage to life and property this would be considered a potentially significant impact

A Geotechnical Study was conducted for the proposed project by North American Technical Services in November 2010. The study conducted includes specific site development and construction standards by soil type to prevent expansive soil hazards. These standards have been incorporated into the mitigation below. Implementation of Mitigation Measure GEO-2 would reduce the project's potential for unstable soil conditions to a less-than-significant level.

#### Mitigation Measure GEO-2

*The applicant shall adhere to the following construction standards for the proposed administration/warehouse building, as indicated in the Geotechnical Study conducted by North American Technical Services (November 2010):*

#### Grading and Fill

- *Any soil that is excavated and then compacted shall be mechanically compacted to 90 percent of its maximum dry density.*
- *The top 9 inches of soil shall be scarified. The scarified surface shall then be brought to the optimum moisture content and compacted to a minimum of 90 percent of its maximum dry density.*
- *All structural fill to be placed shall be brought to the optimum moisture content and mechanically compacted to a minimum of 90 percent of its maximum dry density.*
- *If the final subgrade elevation is equivalent to the existing grade, a minimum of 12 inches of the existing soil shall be compacted to a minimum of 90 percent of its maximum dry weight in place to provide uniform support for the building.*
- *Any trenches exceeding four feet or having the potential of reducing lateral support of any structure or poles shall be sloped or shored in accordance with current CAL/OSHA regulations.*
- *Any trenches created by the removal of irrigation drains or utility lines shall be backfilled to six inches below the anticipated final grade.*

### Foundations

- *No structure shall exceed the maximum allowable bearing capacity of the site soil of 2,500 pounds per square foot which may be increased by 1/3 for seismic consideration.*
- *The minimum footing depth shall be 12 inches below the lowest undisturbed grade.*
- *Prior to placing concrete, the foundation excavation shall be inspected by a qualified Geotechnical Engineer to verify that the bearing soils actually encountered is the same as those on which these recommendations are based.*
- *Any loose areas of soil material evident in the footing excavations shall be compacted to 90 percent of its maximum dry density.*
- *All soil supported slabs on grade shall be reinforced with reinforcing steel. A six millimeter plastic sheeting or equivalent vapor barrier shall be placed beneath the concrete.*
- *All soil subgrade shall be remoistened prior to placement of the exterior concrete flat work to at least three percent above optimum moisture content. The slab shall be at least four inches thick and reinforced with wire mesh.*

### *Significance after Mitigation*

Implementation of Mitigation Measure GEO-2 would reduce the project's potential expansive soil hazards to a less-than-significant level because proper fill selection, moisture control, and compaction during construction can prevent these types of soils from causing significant damage.

### e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The proposed project would include the installation of a septic system and underground pipes. The soil on the project site contains Livermore very gravelly coarse sandy loam soil which has a moderately high capacity to transmit water (USDA 2009). Soils with high percolation rates generally can support and allow the quick and efficient drainage of septic systems. The septic tank would be designed to provide adequate capacity to serve the proposed project and would meet the County's design and siting requirements for septic systems. Therefore, soils onsite could adequately support a septic system and this impact would be less than significant.

# 3.7 GREENHOUSE GAS EMISSIONS

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **VII. Greenhouse Gas Emissions. Would the project:** | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |

## ENVIRONMENTAL SETTING

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. GHGs are responsible for "trapping" solar radiation in the earth's atmosphere, a phenomenon known as the greenhouse effect. Prominent GHGs contributing to the greenhouse effect are carbon dioxide ($CO_2$), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is extremely unlikely that global climate change of the past 50 years can be explained without the contribution from human activities (Intergovernmental Panel on Climate Change [IPCC] 2007). By adoption of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, and Senate Bill (SB) 97, the state of California has acknowledged that the effects of GHG emissions cause adverse environmental impacts. AB 32 mandates that emissions of GHGs must be capped at 1990 levels by the year 2020 (H&SC section 38530).

Emissions of GHGs have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. Although the emissions of one single project will not cause global climate change, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change.

Legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs, even relatively small (on a global basis) additions. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and therefore significant.

The proposed project is located in Alameda County. Although most implications of climate change have been examined primarily at global and regional scales, effects on sea level and water supply in Alameda County have also been examined. The United States Geological Survey (USGS) has created detailed sea level rise projections for the entire San Francisco Bay Area. These projections estimate that by 2100, approximately 200 acres within the unincorporated areas of Alameda County could be inundated if a 4.5-foot increase in sea levels were to occur (Alameda County 2011) The East Bay Municipal Utilities District (EBMUD) studied the potential effects of

climate change on both water supply and distribution. The agency determined that the region's water supplies are most vulnerable to a potential shift in the timing of springtime runoff from the normal April-to-July period to winter months, and to decreases in annual runoff volumes. Sea level rise could also threaten Delta water quality and conveyance infrastructure, disrupting water utilities' ability to deliver adequate water supplies to Alameda County (Alameda County 2011).

The Bay Area Air Quality Management District (BAAQMD) is the local agency in charge of air quality considerations in Alameda County. The BAAQMD is the only air district in California that has established a CEQA significance threshold for GHGs of 1,100 metric tons carbon dioxide equivalent per year (MT $CO_2e$/yr) (BAAQMD 2010). The BAAQMD's threshold is not meant to apply to construction-related GHG emissions rather; it is applicable to operational emissions. GHG emissions generated by the proposed project would predominantly be in the form of $CO_2$ and would occur during project construction. Although the thresholds determined by the BAAQMD are intended for operational GHG emissions it is still useful to compare the estimated construction GHG emissions from this project to the magnitude of emissions considered substantial by the BAAQMD.

## DISCUSSION

### a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

***Less-than-Significant Impact***. GHG emissions generated by the proposed project would predominantly be in the form of $CO_2$ and would occur during project construction. Emissions would be associated with mobile-source exhaust from construction worker commute trips, haul truck trips, and equipment used onsite (e.g., pavers, lifts). While emissions of other GHGs such as methane ($CH_4$) and nitrous oxide ($N_2O$) are important with respect to global climate change, the emission levels of these GHGs for the sources associated with project activities are nominal compared with $CO_2$ emissions, even considering their higher global warming potential. Therefore, all GHG emissions for construction are reported as $CO_2$.

GHG emissions associated with the project were calculated using applicable portions of the Urban Emissions Model (URBEMIS), which uses emission factors published by the California Air Resources Board (ARB) in its widely-accepted EMFAC 2007 (ARB 2006a) and OFFROAD 2007 (ARB 2006b) computer models. URBEMIS allows for the input of project-specific information to estimate emissions generated by worker commute trips, onsite equipment, and haul truck trips. Input parameters were based on project-specific information, default model settings, and reasonably conservative assumptions. Modeling was conducted for the construction of the proposed administration/warehouse building. The modeled yearly emissions are summarized in Table 3.7-1 and described in more detail in Appendix A.

As shown from the emission estimate in Table 3.7-1, the emissions from this project would be minor (e.g., less than 100 tons). The BAAQMD has established a level of 1,100 MT $CO_2e$/yr as its significance threshold for GHG emissions. The estimated construction-related emissions from the proposed project would be well-below the level considered substantial by the BAAQMD.

Construction would be expected to last approximately 8 months with the peak construction occurring for 2 months. The construction phase would be relatively short, and the associated emissions would not be substantial. No new mobile, area, or stationary sources of GHGs would be associated with the proposed project. For these reasons, it is unlikely that this project would conflict with the goals of AB 32. Therefore, the proposed project would have a less-than-cumulatively considerable and, therefore, less than significant impact on climate change.

| Table 3.7-1 Summary of Modeled GHG Emissions Associated with Building Construction | |
|---|---|
| **Construction Activity** | **$CO_2$ MT/yr** |
| 2011 Totals | 132 |
| 2012 Totals | 83 |
| BAAQMD Thresholds of Significance | 1,100 |

Notes: $CO_2$ = carbon dioxide; GHG = greenhouse gas; MT/yr = metric tons per year.
Values from URBEMIS were converted from short tons per year to metric tons per year.
See Appendix A for detailed modeling results.
Source: Modeling Conducted by Ascent Environmental 2011.

## b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

***Less-than-Significant Impact***. As discussed under item a) above, the total GHG emissions associated with this project would be below the 1,100 MT $CO_2e$/yr threshold established by the BAAQMD. As these GHG emissions would only result from the construction phase of the project there would be no new mobile, area, or stationary sources of GHGs associated with the proposed project. Therefore, implementation of the proposed project would not result in a net increase of long-term operation-related GHG emissions from mobile, stationary, or area sources. For these reasons, as stated above in a) the proposed project would not generate substantial GHG emissions, and therefore, would not conflict with AB 32 or any other applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As a result, this impact would be less than significant.

# 3.8 HAZARDS AND HAZARDOUS MATERIALS

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. Hazards and Hazardous Materials. Would the project:** | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☒ | ☐ |

## ENVIRONMENTAL SETTING

A computerized data search of various agency lists was conducted for the project site and surrounding area to identify potential hazardous contamination sites. There are no facilities on or adjacent to the project site that are listed as a Resource Conservation and Recovery Act (RCRA) generators of hazardous waste, according to the U.S. Environmental Protection Agency's (EPA's) Envirofacts Web database (EPA 2011) and the California Department of Toxic Substances Control (DTSC) EnviroStor Database (DTSC 2011).

## DISCUSSION

### a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

***Less-than-Significant Impact.*** Construction of the proposed project would result in the transport of materials generally regarded as hazardous materials. It is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluids, paint, and other similarly related materials would be brought to the project site, used, and stored during the construction period. The types and quantities of materials to be used could pose a significant risk to the public and/or the environment if not properly handled.

State agencies regulating hazardous materials are the California Environmental Protection Agency (Cal/EPA) and the Office of Emergency Services (OES). The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) enforce regulations for hazardous materials transport. Within Cal/EPA, the Department of Toxic Substances Control (DTSC) has primary regulatory authority to enforce hazardous materials regulations. State hazardous waste regulations are contained primarily in Title 22 of the California Code of Regulations (CCR). The California Occupational Health and Safety Administration (Cal OSHA) has developed rules and regulations regarding worker safety around hazardous and toxic substances. Because the applicant and its contractors would implement and comply with all relevant local, State, and Federal regulations related to the handling, transport, and storage of hazardous materials, impacts related to creation of significant hazards to the public through routine transport, use, and disposal of hazardous materials would not occur. Additionally, because the applicant would prepare and adhere to a Stormwater Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMP) during project construction (see mitigation measure GEO-1), impacts from potential spills of hazardous materials would be minimized. Therefore, this impact would be less than significant.

### b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

***Less-than-Significant Impact.*** During construction of the proposed project, fuels and lubricants have the potential to be released into the environment, causing environmental and/or human exposure to these hazards. However, as described in item “a” above, the applicant and its contractors would handle, store, and dispose of all hazardous materials used onsite in accordance with all applicable local, State, and federal laws regulating the uses of hazardous materials. Therefore, this would be a less-than-significant impact.

### c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

***No Impact.*** There are no existing or proposed schools located within 0.25 mile of the project site. The nearest schools to the project site are Vineyard Independent Study (1401 Almond Ave. Livermore CA 94550), located approximately 3 miles north of the site, and East Avenue Middle School (3951 East Ave. Livermore, CA 94550), located approximately 2.5 miles north of the site. Therefore, no impacts would occur related to emissions or handling of hazardous materials within 0.25 mile of an existing or proposed school.

### d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

***No Impact*.** The project area is not identified by EPA or DTSC as a hazardous materials site (EPA 2011; DTSC 2011). Thus, the proposed project would not create a significant hazard to the public or to the environment as a result of existing hazardous material contamination. Therefore, no impact would occur.

### e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

***No Impact*.** The nearest publicly operated airport is the Livermore Municipal Airport (636 Terminal Circle Livermore, CA 94551) located approximately 4.5 miles to the northwest of the project site. The City of Livermore has established in the Land Use Element of the 2003-2025 General Plan, an Airport Protection Area which is intended to keep incompatible uses from encroachment upon the airport. The proposed project is not included in this area (City of Livermore 2009). Further, the proposed project does not include any structures of significant height or include any activities that would impair operations of the Livermore Municipal Airport or any other airport use. The proposed project would not affect airport safety. Therefore, no impact would occur.

### f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

***No Impact*.** The nearest private air transport facility is the Meadowlark Field (4300 Greenville Rd Livermore, CA 94550) located approximately 2.5 miles to the east of the project site. The proposed project does not include any structures of significant height or include any activities that would impair operations or air safety of these private air transport facilities. Therefore, no impact would occur.

### g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

***No Impact*.** No new housing or facilities would be constructed such that the project would permanently impair implementation of or physically interfere with the County's adopted emergency response plan or emergency evacuation plan. As a result, no impacts are anticipated.

### h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

***Less-than-Significant Impact*.** The project area is located on agriculture land in the Livermore Valley of Alameda County just outside the city limits of Livermore, California. The surrounding land uses consist of vineyards and rural, low-density residential neighborhoods. The threat of wildland fires in the project vicinity would be minimal because most of the surrounding area is either developed or irrigated farmland. Therefore, wildland fire risks associated with the project would be considered less-than-significant.

# 3.9 HYDROLOGY AND WATER QUALITY

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. Hydrology and Water Quality. Would the project:** | | | | |
| a) Violate any water quality standards or waste discharge requirements? | ☐ | ☒ | ☐ | ☐ |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or offsite erosion or siltation? | ☐ | ☒ | ☐ | ☐ |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or offsite flooding? | ☐ | ☐ | ☒ | ☐ |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☒ | ☐ |
| f) Otherwise substantially degrade water quality? | ☐ | ☒ | ☐ | ☐ |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☐ | ☒ |
| h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows? | ☐ | ☐ | ☐ | ☒ |
| i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☐ | ☐ | ☐ | ☒ |
| j) Result in inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

The proposed project is located within the Arroyo Mocho watershed in the Livermore Valley of east Alameda County just outside the City of Livermore, California. The Livermore Valley lies about 40 miles east of San Francisco and 30 miles southwest of Stockton within a structural trough of the Diablo Range. Surface drainage features include Arroyo Valle, Arroyo Mocho, and Arroyo las Positas as principal streams, with Alamo Creek, South San Ramon Creek, and Tassajara Creek as minor streams. All streams converge on the west side of the basin to form Arroyo de la Laguna, which flows south and joins Alameda Creek in Sunol Valley. No waterbodies are located on the project site or within the Concannon Vineyard property. The nearest water body to the project site is Lake Del Valle which is located approximately 7 miles to the south.

Water for Concannon Vineyard is provided by the California Water Service Company (Cal Water). Cal Water services the City of Livermore through the use of local groundwater pumped from 12 wells and surface water purchased from Alameda County, Zone 7 Water Agency.

The 100-year floodplain is defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. The project area is located outside of the FEMA 100-year floodplain (FEMA 2009).

## DISCUSSION

### a) Violate any water quality standards or waste discharge requirements?

***Less-than-Significant with Mitigation Incorporated.*** Construction of the proposed project could result in increased levels of water pollution to offsite or downstream areas as a result of construction activities. Specifically, construction activities such as grading and trenching would result in disturbance of soils and sediments that could be carried into the onsite stormwater drainage system or to offsite areas during storm events. During construction activities, stormwater runoff could contaminate offsite waterbodies through the accidental discharge of construction-related fuels, oils, hydraulic fluid, and other hazardous substances. Because the applicant would prepare and adhere to a Stormwater Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMP) during project construction (see mitigation measure GEO-1), potential for runoff generated at the project site to contaminate the offsite water bodies would be reduced to a less-than-significant level.

### b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

***Less-than-Significant Impact.*** The project would result in an increase in the impervious surface areas on the Concannon Vineyard property as a result of the new administration/warehouse building and paved parking areas. The addition of impervious surfaces could reduce infiltration of precipitation into the groundwater. However, the proposed building would be constructed with a dedicated storm water drainage system which would collect all stormwater runoff from associated impervious surfaces and redirect it to a French drain system that surrounds the building and percolates into onsite soils, thus retaining much of the stormwater runoff that would otherwise have been diverted off the site. Additionally, the total amount of impervious surface proposed is small in relation to the existing agriculture land on the property and the surrounding areas (i.e., <2% of the entire Concannon Vineyard parcel). Because the proposed project would redirect stormwater runoff into surrounding soil, would result in a relatively small surface area being converted to impervious surfaces, and because adjacent land surfaces would continue to provide adequate infiltration capacity and groundwater recharge, no significant changes in groundwater infiltration or level is anticipated. This would be a less-than-significant impact.

### c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or offsite erosion or siltation?

***Less-than-Significant with Mitigation Incorporated.*** Construction of the project would result in grading and other soil-disturbing activities and the installation of new impervious surfaces. These activities could result in increased discharge of stormwater runoff to drainage facilities, which could cause additional erosion, siltation, or both onsite and offsite. This would be a potentially significant impact. However, implementation of Mitigation Measure GEO-1, above, would reduce these potential impacts to less-than-significant levels because appropriate best management practices and water quality protection measures would be implemented to properly handle, treat, and discharge stormwater generated onsite.

### d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or offsite flooding?

***Less-than-Significant Impact.*** Construction of the proposed project would result in the generation of additional stormwater flows from new impervious surfaces during storm events. However, the increased stormwater runoff would be collected by the new stormwater drainage system (i.e., French drain system that surrounds the building). The increased drainage would be collected and would percolate into underlying soils and groundwater. The project would not result in the alteration of the course of any surrounding stream or river. The proposed stormwater system would be designed to handle the stormwater flows anticipated to be generated by the project consistent with County requirements. Therefore, the project would not result in on- or offsite flooding and this would be a less-than-significant impact.

### e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

***Less-than-Significant Impact.*** As described in item d) above, the project includes the construction of a stormwater system that would have adequate capacity to handle projected stormwater generation. Further, appropriate stormwater and water quality measures would be in place (GEO-1) to prevent the release of pollutants to onsite stormwater or downstream water bodies. Therefore, this would be a less-than-significant impact.

### f) Otherwise substantially degrade water quality?

***Less-than-Significant with Mitigation Incorporated.*** New impervious surfaces that would be constructed as part of the project would collect oils, sediments, brake dust, and other potential water pollutants. During storm events, these pollutants could be carried by runoff and potentially discharged into surrounding vineyards on the project site or downstream from the property, resulting in increased water pollution. However, implementation of Mitigation Measure GEO-1, which implements a SWPPP, would reduce these potential impacts to less-than-significant levels because appropriate best management practices and water quality protection measures would be implemented to properly handle, treat, and discharge stormwater generated onsite.

Wastewater at the Concannon facility is processed by an onsite treatment system which consists of an existing sump and screen treatment system and subsurface disposal system. The applicant is currently in the process of securing a Waste Discharge Requirement (WDR) permit from the San Francisco Bay RWQCB for the existing process wastewater facility. Sanitary wastewater is currently collected and treated by an onsite septic system that discharges effluent to the adjacent vineyards where it percolates to underlying soils. The applicant will also

be required to ensure that the septic system meets all County design and treatment requirements prior to its installation. Because the applicant does currently have the appropriate permits for the waste water discharge, it is unknown whether or not all San Francisco RWQCB water discharge requirements are being met. Therefore this would be considered a potentially significant impact. Implementation of Mitigation Measure UTIL-1 would reduce potential impacts from waste water discharge to a less-than-significant level.

### g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

***No Impact*.** The proposed project would not include construction of any housing and the project area is located outside of the FEMA 100-year floodplain. Therefore, no housing would be placed within a flood zone as a result of this project, and no impact would occur.

### h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

***No Impact*.** The project site is located outside of the FEMA 100-year floodplain. Therefore, none of the proposed facilities would be subject to significant flooding risks, and, therefore, would not be anticipated to result in impeded or redirected flood flows. No impact would occur.

### i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

***No Impact*.** As described above, the entire project area is located outside of the FEMA 100-year flood zone. Additionally, the proposed project would not disturb, disrupt, or otherwise contribute to the failure of any levee, dam, or other flood control structure. Therefore, no impact would occur.

### j) Result in inundation by seiche, tsunami, or mudflow?

***No Impact*.** The project area is not located in the vicinity of any lakes or other large water bodies that would be susceptible to seiche, in the event of seismic activity. Additionally, the project area is not located in the vicinity of any tidally-influenced waters, and is at an elevation above 65 feet sea level. Therefore, the project area would not be susceptible to tsunami. Finally, the project area is situated in the South Livermore Valley of Alameda County within a large, open expanse of flat topography. As such, the area is not susceptible to large-scale mudflows. No impact would occur.

# 3.10 LAND USE AND PLANNING

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **X. Land Use and Planning. Would the project:** | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

The proposed project is located on the Concannon Vineyard property in east Alameda County in the South Livermore Planning Area. The project site is designated as Agriculture by Alameda County Land Use Plan. Concannon Vineyards is surrounded by other agricultural properties and viticulture operations. Low-density residential neighborhoods are located over 1,000 feet away to the west, east, and north of the project site.

The project site is zoned Agriculture. As specified in the County of Alameda zoning ordinance in Chapter 17.06.030-Agricultural districts permitted uses include crop, vine or tree farm, truck garden, plant nursery, greenhouse apiary, aviary, hatchery, horticulture. This section also allows uses on this zone for winery or olive mill related uses. The proposed building would be used to store supplies and materials, and produce wine for commercial retail.

## DISCUSSION

### a) Physically divide an established community?

***No Impact*.** The project would be located entirely within property owned by Concannon Vineyard. No existing communities are located on the property and construction of the proposed administrative/warehouse building would not disrupt or divide the physical arrangement of an existing community through access or installation of physical barriers. Therefore, no impact would occur.

### b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

**Less Than Significant Impact.** The proposed building would be consistent with the land uses allowed by Alameda County on Agriculture designated land. The proposed building would support current viticulture production and, therefore, would be allowed by Sections 17.06.040 and 17.06.050 of the Alameda County Zoning Ordinance. Section 17.06.040 allows various conditional uses on Agriculture designated land, which include winery related uses. Section 17.06.050 allows the construction of buildings for packing or handling products raised on the

premises and administrative offices or maintenance buildings, when accessory to a principle use permitted by section 17.06.040 described above. The proposed building would be directly related to and would be in support of the existing viticulture operations.

The East County Area Plan (ECAP) identifies maximum building intensities allowable on parcels. Building intensities are expressed in terms of maximum floor-area-ratios (FARs), based on net acreage for non-residential uses. An FAR is a ratio of the gross building square footage permitted on a lot to the net square footage of the lot. The maximum building intensity for non-residential buildings on large agricultural parcels are .01 FAR (floor area ratio) but not less than 20,000 square feet. The proposed building is 50,618 square feet in size. With the proposed building, the total developed square footage on the 250 acre parcel would be 107,084, which is a FAR of 0.01. This FAR does not exceed the allowable FAR identified in the ECAP. Therefore, the project would not conflict with this provision of the ECAP and this would be considered a less than significant impact.

### c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

***No Impact*.** The East Alameda County Conservation strategy defines various conservation zones throughout the County based on sensitive species and habitats present in open space designated land. The project site is located in Conservation Zone 2 (Alameda County 2010). The conservation priorities identified for this zone include the protection of burrowing owl, willow scrub, California red-legged frog, vernal pool habitat, protection of extant populations of San Joaquin spearscale and Congdon's tarplant. The conservation priorities apply to those projects that would result in discretionary changes in land use or a change in land use designation from open space to any other land use. The proposed project site is located on Agriculture land and does not contain any of the aforementioned species or habitats. Further, the project would not result in any changes in land use or land use designations. Therefore, the County's mitigation program would not apply to the project and no impacts related to conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan would occur.

# 3.11 MINERAL RESOURCES

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XI. Mineral Resources. Would the project:** | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

The proposed project is located in the City of Livermore in the County of Alameda. Due to the high value of sand and gravel deposits in the vicinity of Livermore, the California Geological Survey (formerly the California Division of Mines and Geology) has mapped and classified the aggregate resources of the Livermore-Amador Valley. Portions of the Livermore planning area below the I-580 freeway have been classified as areas with significant mineral resources (Livermore 2009). No mineral resources of regional significance or mineral recovery sites have been identified on the project site (Livermore 2009).

## DISCUSSION

### a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

***No Impact***. The project site is not located within a mapped mineral resource zone (Livermore 2009). No loss of availability of a known mineral resource that would be of value to the region and the residents of the state would occur. Further, there would be no change in use of the project site and the project would not preclude extraction of mineral resources in the future. Therefore, no impacts would occur.

### b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

***No Impact***. The project site is located within lands covered by the East County Area Plan. The project site is part of the City of Livermore planning area and, therefore, is also contained in the City of Livermore's General Plan and the South Livermore Valley Area Plan. Neither of these plans has included the project site as a locally important mineral resource recovery site. Therefore, no impacts would occur.

# 3.12 NOISE

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XII. Noise. Would the project result in:** | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards? | | | | |
| Short-Term Construction Source Noise | ☐ | ☐ | ☒ | ☐ |
| Long-Term Operational Source Stationary Noise | ☐ | ☐ | ☐ | ☒ |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

Existing conditions are governed by the presence of noise-sensitive receptors, the location and type of noise sources, and overall ambient levels. Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where a quiet setting is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, schools, historic sites, cemeteries, and recreation areas are also generally considered sensitive to increases in exterior noise levels. Places of worship and transit lodging, and other places where low interior noise levels are essential are also considered noise-sensitive. Those noted above are also considered vibration-sensitive land uses in addition to commercial and industrial buildings where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance.

The project site is located in eastern Alameda County in the Livermore Valley. Existing noise- and vibration-sensitive land uses in the project vicinity primarily include offsite residences located over 1,000 feet to the west, east, and north of the project site.

The existing noise environment in the project area is primarily influenced by transportation noise from vehicle traffic on the local roadway system (e.g., Tesla Road and South Livermore Avenue). Other noise sources that contribute to the existing noise environment include agriculture activities, and to a much lesser extent

residential and recreational areas (e.g., landscape maintenance activities, dogs barking, and people talking). Transportation and agriculture-related sources noted above are also considered sources of vibration in the project area.

Various private and public agencies have established noise guidelines and standards to protect citizens from potential hearing damage and other adverse physiological and social effects associated with noise. Applicable policies and regulations are contained in the Environmental Health and Safety section of the East Alameda County Area Plan and Title 6-Health and Safety section of the Alameda County Municipal Code.

**COUNTY OF ALAMEDA MUNICIPAL CODE**

## Title 6- Health and Safety Chapter 6.60-Noise

### *6.60.040 - Exterior noise level standards.*

It is unlawful for any person at any location within the unincorporated area of the county to create any noise or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the exterior noise level when measured at any single- or multiple-family residential, school, hospital, church, public library or commercial properties situated in either the incorporated or unincorporated area to exceed the noise level standards as set forth in Table 3.12-1 below:

**Table 3.12-1 Receiving Land Use-Single or Multiple-Family Residential, School, Hospital, Church or Public Library Properties Noise Level Standards, dB(A)**

| Cumulative # of Minutes in any one hour time period | Daytime (7 a.m. to 10 p.m.) | Nighttime (10 p.m. to 7 a.m.) |
|---|---|---|
| 30 | 50 | 45 |
| 15 | 55 | 50 |
| 5 | 60 | 55 |
| 1 | 65 | 60 |
| 0 | 70 | 65 |

Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).
Source: County of Alameda Municipal Code 2010

### *6.60.070 – Special Provisions or exceptions*

**(E) Construction.** The provisions of this chapter shall not apply to noise sources associated with construction, provided said activities do not take place before seven a.m. or after seven p.m. on any day except Saturday or Sunday, or before eight a.m. or after five p.m. on Saturday or Sunday.

## DISCUSSION

### a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

### c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

### d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

#### *Short-Term Construction Source Noise*

***Less-than-Significant Impact***. Construction noise levels in the vicinity of the proposed project would fluctuate depending on the particular type, number, and duration of usage for the varying equipment. The effects of construction noise largely depend on the type of construction activities occurring on any given day, noise levels generated by those activities, distances to noise sensitive receptors, and the existing ambient noise environment in the receptor's vicinity. Construction generally occurs in several discrete stages, each phase requiring a specific complement of equipment with varying equipment type, quantity, and intensity. These variations in the operational characteristics of the equipment change the effect they have on the noise environment of the project site and in the surrounding community for the duration of the construction process.

To assess noise levels associated with the various equipment types and operations, construction equipment can be considered to operate in two modes, mobile and stationary. Mobile equipment sources move around a construction site performing tasks in a recurring manner (e.g., loaders, graders, dozers). Stationary equipment operates in a given location for an extended period of time to perform continuous or periodic operations. Operational characteristics of heavy construction equipment are additionally typified by short periods of full-power operation followed by extended periods of operation at lower power, idling, or powered-off conditions.

Additionally when construction-related noise levels are being evaluated, activities that occur during the more noise-sensitive evening and nighttime hours are of increased concern. Because exterior ambient noise levels typically decrease during the late evening and nighttime hours as traffic volumes and commercial activities decrease, construction activities performed during these more noise-sensitive periods of the day can result in increased annoyance and potential sleep disruption for occupants of nearby residential uses.

The site preparation phase typically generates the most substantial noise levels because of the onsite equipment associated with grading, compacting, and excavation are the noisiest. Site preparation equipment and activities include backhoes, bulldozers, loaders, and excavation equipment (e.g., graders and scrapers). Erection of large structural elements and mechanical systems could require the use of a crane for placement and assembly tasks, which may also generate louder noise levels.

The proposed project would involve the construction of an approximate 50,000 sq. ft. building. Construction of this type generally requires certain noise producing equipment such as the ones listed in Table 3.12-2. It is expected that maximum noise levels would be associated with site preparation activities using excavators and graders. Noise emission levels at 50 feet from these types of construction equipment are shown in Table 3.12-2 below.

| Table 3.12-2 Typical Reference Noise Emission Levels from Construction Equipment | |
|---|---|
| **Equipment Type** | **Reference Level ($L_{max}$ dBA) @ 50 feet** |
| Crane | 85 |
| Loader | 80 |
| Telehandler | 85 |
| Backhoe | 80 |
| Excavator | 85 |
| Grader | 85 |
| Asphalt Paver | 85 |
| Roller | 85 |
| Manlift | 85 |

Notes:
Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture-specified noise levels for each piece of heavy construction equipment.
Source: FHWA 2006

Based on the information provided in Table 3.12-2 and accounting for typical usage factors of individual pieces of equipment and activity types along with standard attenuation rates, onsite construction-related activities could result in hourly average noise levels of approximately 84 dBA $L_{eq}$ (88 dBA $L_{max}$) at 50 feet and approximately 49 dBA $L_{eq}$ (53 dBA $L_{max}$) at the nearest sensitive receptors (e.g., residences located 1,100 feet from the acoustical center of the project site).

These modeled noise levels could exceed the daytime standard of 50 dBA if the excavator and grader were used simultaneously for a continuous period of 30 minutes in any one hour during the day. The modeled noise levels would also exceed the nighttime performance standards defined by the County of Alameda in the Municipal Code Title 6 Noise.

However, Title 6 of the County's Municipal Code, exempts construction related noise, provided that construction activities do not take place before seven a.m. or after seven p.m. on any day except Saturday or Sunday, or before eight a.m. or after five p.m. on Saturday or Sunday. As stated in the project description, construction activities would be limited to the daytime hours between 7:00 A.M. and 7:00 P.M. Monday through Friday and 8:00 A.M. and 5:00 P.M. Saturday and Sunday, and, thus, consistent with the limitations of the Municipal Code. Therefore, short-term onsite construction source noise would not result in the exposure of persons to or generation of noise levels in excess of applicable standards, or a substantial temporary increase in ambient noise levels in the project vicinity above levels existing without the project. This impact would be less than significant.

### *Long-Term Operational Source Stationary Noise*

***No Impact***. The proposed project would not result in the operation or construction of any new stationary noise sources. Because the proposed building would not create any additional stationary noise sources and there would be no long-term operational noise associated with the proposed project there would be no impact.

## b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

***Less-than-Significant Impact***. Construction of the proposed project may result in varying degrees of temporary groundborne vibration and noise, depending on the specific construction equipment used and activities involved. Groundborne vibration and noise levels associated with various types of construction equipment and

activities are summarized in Table 3.12-3. Based on the information provided in the project description and on the types of construction activities associated with the proposed project (e.g., site preparation and building erection) it is expected that maximum groundborne vibration and noise levels would be associated with the use of trucks to haul materials to and from the construction site.

**Table 3.12-3 Representative Groundborne Vibration and Noise Levels for Construction Equipment**

| Equipment | PPV at 25 feet (in/sec)[1] | Approximate $L_v$ (VdB) at 25 feet[2] |
|---|---|---|
| Blasting | 1.13 | 109 |
| Large Dozer | 0.089 | 87 |
| Caisson Drilling | 0.089 | 87 |
| Trucks | 0.076 | 86 |
| Rock Breaker | 0.059 | 83 |
| Jackhammer | 0.035 | 79 |
| Small Dozer | 0.003 | 58 |

[1] Where PPV is the peak particle velocity
[2] Where Lv is the root mean square velocity expressed in vibration decibels (VdB), assuming a crest factor of 4.
Source: FTA 2006

According to Federal Transit Administration, levels associated with the use of trucks are 0.076 inches per second (in/sec) and 86 vibration decibels (VdB) at 25 feet. Based on FTA's recommended procedure for applying a propagation adjustment to these reference levels, construction-related project activities would not result in levels at the nearest sensitive receptor (i.e., residences located 1,100 feet from the acoustical center of the project site ) that exceed Caltrans's recommended level of 0.2 in/sec PPV with respect to the prevention of structural damage for normal buildings or FTA's maximum acceptable level of 80 VdB with respect to human response for residential uses (i.e., annoyance). Long-term operation of the proposed project would not result in any major sources of vibration. Thus, implementation of the proposed project would not result in the exposure of existing offsite sensitive receptors to excessive groundborne vibration levels. Therefore, this impact would be less than significant.

### e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

### f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

***No Impact***. The nearest publicly owned airport is the Livermore Municipal Airport (636 Terminal Circle Livermore, CA 94551) located approximately 4.5 miles to the northwest of the project site. The Meadowlark Field 4300 Greenville Rd Livermore, CA 94550) is privately owned airstrip approximately 2.5 miles to the east of the project site. The Livermore Municipal Airport has a Noise Abatement program that has identified noise sensitive areas and included them in the Livermore Airport Municipal Airport Pilot Information Guide (Livermore Airport 2008). According to this guide, the proposed project site has not been identified. Because of the distance of the project site from surrounding airports, the project would not expose workers to excessive noise levels and no impact would occur.

# 3.13 POPULATION AND HOUSING

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XIII. Population and Housing. Would the project:** | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | ☒ |
| b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

The California Department of Finance, Demographic research unit estimates that the population in the County of Alameda was 1,521,157 as of January 1, 2011 (DOF 2011).

## DISCUSSION

### a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

***No Impact***. The proposed project does not include any new homes or employment opportunities that could increase population directly or indirectly. Rather, the proposed project would serve existing viticulture operations onsite. Therefore, the project would not require any new infrastructure that could lead to direct or indirect population growth and no impact would occur.

### b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?

***No Impact***. Construction and operation of the proposed project would not result in displacement of existing housing. Therefore, no impact would occur.

### c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

***No Impact***. Construction and operation of the proposed project would not result in displacement of people. Therefore, no impact would occur.

# 3.14 PUBLIC SERVICES

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XIV. Public Services. Would the project:** | | | | |
| a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: | | | | |
| Fire protection? | ☐ | ☐ | ☐ | ☒ |
| Police protection? | ☐ | ☐ | ☐ | ☒ |
| Schools? | ☐ | ☐ | ☐ | ☒ |
| Parks? | ☐ | ☐ | ☐ | ☒ |
| Other public facilities? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

The Alameda County Fire Department (ACFD) has 28 fire stations that provide fire services to the unincorporated areas of the Alameda County. The nearest fire station that provides service to the project site is Fire Station #8 (1617 College Avenue, Livermore, CA 94550), located two miles northwest of the project site.

The project site is located in Beat 4 of the City of Livermore Police Department service area (Livermore 2011). The department is a full-service, municipal law enforcement agency, headed by one Chief, one Lieutenant and is comprised of two divisions: Operations and Support Services. The nearest police station is located at 1110 South Livermore Avenue Livermore, CA 94550 approximately one mile from the site.

The project site lies within the boundaries of the Livermore Valley Joint Unified School District (LVJUSD). The District operates nine elementary schools, two K-8 schools, three middle schools, two comprehensive high schools, two continuation high schools, and an adult education center (LVJUSD 2011). The nearest schools to the project site are Vineyard Independent Study (1401 Almond Ave. Livermore CA 94550), located approximately three miles north of the site, and East Avenue Middle School (3951 East Ave. Livermore, CA 94550) located approximately 2.5 miles north of the site.

The East Bay Regional Park District manages 1,745 square miles of park land throughout Alameda and Contra Costa County. The proposed project is located in the Livermore Valley in eastern Alameda County. Shadow Cliffs Regional Park is the nearest County Park located approximately 6.5 miles to the west of the project site. Other County parks in the area include Bushy Peak approximately 13 miles north of the project site and Del Valle Regional Park approximately 9 miles south of the project site.

## DISCUSSION

### a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

***No Impact***. The proposed project is not anticipated to have an adverse impact on emergency, police, or fire services during project construction or operation because the project is not an employment or resident generating land use that would increase demands for these services. No new or expanded public service facilities or services would be required. Therefore, no impact would occur.

# 3.15 RECREATION

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XV. Recreation. Would the project:** | | | | |
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☒ |
| b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

Shadow Cliffs Regional Park is the nearest County Park located approximately 6.5 miles to the west of the project site. Other County parks in the area include Bushy Peak approximately 13 miles north of the project site and Del Valle Regional Park approximately 9 miles south of the project site.

## DISCUSSION

### a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

***No Impact***. The proposed project involves the construction of a new administration/warehouse building on the Concannon Vineyard property. No increased employment would be required. Further, no housing is proposed. Therefore, the project would not result in increased use of existing parks or other recreational facilities and no impact would occur.

### b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

***No Impact***. As described in item a) above, there would be no new employment opportunities or residential land uses that would increase demand for recreational facilities. Therefore, no impact would occur.

# 3.16 TRANSPORTATION/TRAFFIC

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XVI. Transportation/Traffic. Would the project:** | | | | |
| a) 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 including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | ☐ | ☐ | ☒ | ☐ |
| c) 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? | ☐ | ☐ | ☐ | ☒ |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ |
| e) Result in inadequate emergency access? | ☐ | ☐ | ☒ | ☐ |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | ☐ | ☐ | ☐ | ☒ |

## ENVIRONMENTAL SETTING

Regional access to the project area is provided by Interstate 580, a major east–west route interstate highway that connects eastern Alameda County to the western portion of the County and Interstate 680, a north–south interstate highway that connects Alameda County with Contra Costa County to the north.

The three major local roadways that provide access to the project area include Concannon Boulevard, South Livermore Avenue, and Tesla Road. Concannon Boulevard is a 4-lane east-west arterial road and truck route that runs along the southern portion of Livermore beginning at Isabel Avenue on the east and merging into South Livermore Avenue at the southwest corner of the City of Livermore. South Livermore Avenue is 4-lane north-south main arterial that runs through the City of Livermore from the north to the south. In the southern portion of Livermore, South Livermore Boulevard becomes 2 lanes and changes into Tesla Road, a 2-lane east-west road in rural Alameda County. The proposed project is located at the convergence of South Livermore Boulevard and Tesla Road.

## DISCUSSION

### a) 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 including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

***Less-than-Significant Impact***. Implementation of the project would result in a temporary increase in vehicle traffic along Concannon Boulevard and Tesla Road associated with short-term construction-related activities. A maximum of 35 construction workers would commute to the site on a daily basis during the 2 month peak construction period. On average approximately 20 construction workers would commute to the site on a daily basis over the 8-month construction period. Therefore, the project would result in a maximum of 70 construction worker trips per day during peak construction activity and 40 worker trips per day during normal construction activity. Because the project site is relatively flat and the soil is suitable to be used as fill, no hauling of soil is anticipated for the construction of the proposed building (NATS 2008).

As of April 2009, traffic volumes on South Livermore Avenue at Tesla Road are 15,443 average daily trips (ADT) and on Concannon Boulevard at South Livermore Avenue are 14,022 ADT. (Bello, pers. comm. 2011). The proposed project's construction-related trips would result in a minor increase (less than 1%). in traffic along local roadways and this increase would only occur for a short period of time during construction activities. Therefore, impacts associated with short-term traffic increases attributable to project construction would be less-than-significant.

No new employees would be required. As such, the project would not directly or indirectly increase traffic on local roadways. Further, the purpose of the project is to eliminate the need for offsite storage facilities. This will reduce the number of existing truck trips to and from Concannon Vineyard to deliver supplies and products. Overall, operational traffic would be the same as existing conditions or slightly reduced. Therefore, impacts associated with long-term increases in operational traffic attributable to the project would be less than significant.

### b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

***Less-than-Significant Impact***. As described in a) above, short-term traffic impacts would be minor and only related to construction activities for approximately 8 months. Over the long-term, proposed traffic volumes would be indistinguishable from existing traffic conditions because no new employees would be generated from the proposed project. Furthermore, the proposed project does not include any residences or public buildings that could increase traffic to and from the site. Therefore, this impact would be less than significant.

### c) 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?

***No Impact***. The nearest publicly operated airport is the Livermore Municipal Airport (636 Terminal Circle Livermore, CA 94551) located approximately 4.5 miles to the northwest of the project location. The nearest private air transport facility is the Meadowlark Field (4300 Greenville Rd Livermore, CA 94550) located approximately 2.5 miles to the east of the project site. The proposed project does not include any structures of

significant height or include any activities that would impair operations or air safety of these private air transport facilities. Therefore, no impact to air traffic patterns would occur.

### d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

***Less-than-Significant Impact***. The proposed project includes the construction of a new administrative/warehouse building within the developed core of an existing winery. The building would not change or alter existing roadways on- or offsite. No other changes to existing roadways would occur. Therefore, the project would not increase hazards due to a design feature or incompatible use. This would be a less-than-significant impact.

### e) Result in inadequate emergency access?

***Less-than-Significant Impact***. All construction activity would remain onsite and would not require the closure of any nearby roadways at any time during construction. The project would provide points of emergency access to and from the site consistent with County policies. Therefore, impacts related to inadequate emergency access would be less than significant.

### f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

***No Impact***. The project would not generate the need for alternative transportation because no new employment generating uses are proposed. Therefore, the project would not conflict with adopted policies, plans, or programs supporting alternative transportation and no impact would occur.

# 3.17 UTILITIES AND SERVICE SYSTEMS

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. Utilities and Service Systems. Would the project:** | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☒ | ☐ | ☐ |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☒ | ☐ | ☐ |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☒ | ☐ | ☐ |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☒ | ☐ |
| e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments? | ☐ | ☐ | ☐ | ☒ |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

## ENVIRONMENTAL SETTING

### WASTEWATER AND SEWER

All wastewater (winery process and sanitary wastewater) for the existing facilities on the Concannon Vineyard property is handled through an existing process wastewater facility or an onsite sanitary septic system.

The existing process wastewater system consists of an existing sump and screen treatment system and subsurface disposal system. The applicant is currently in process of securing a Waste Discharge Requirement (WDR) permit from the San Francisco Bay RWQCB for the existing process wastewater facility.

Sanitary wastewater is currently collected and treated by an onsite septic system that discharges effluent to the adjacent vineyards where it percolates to underlying soils.

### STORM DRAINAGE

Concannon Vineyard currently has a dedicated French drain storm water system for the existing structures on the property and retains all of the stormwater runoff on the property. The stormwater runoff is collected through the French drain system which diverts the runoff to soils beneath the property.

### WATER SUPPLY

Water for Concannon Vineyard is provided by the California Water Service Company (Cal Water). Cal Water provides water service to the City Livermore through the use of local groundwater pumped from 12 wells and surface water purchased from Alameda County, Zone 7 Water Agency.

Water is used throughout the winery for winemaking processes including sanitation, grape crushing, barrel and equipment rinsing, racking, filtering, and bottling. Water is also used for domestic purposes by staff and visitors for irrigation of landscaping, restrooms, and general housekeeping. The existing operations on Concannon Vineyard result in the use of approximately 200,000 to 300,000 gallons of water per month during non-grape crush season and up to 500,000 gallons per month during grape crush season. Water use varies highly throughout the year due to the high amount of water consumed during crushing season (August through October). On an average year, Concannon Vineyard uses approximately 1,500,000 gallons of water for all of the winery processes (Kennedy/Jencks 2011).

### SOLID WASTE DISPOSAL

Concannon Vineyard currently operates its own solid waste compaction and recycling facilities on the project site. The solid waste facility is used to compact material and recycle used supplies from the vineyard. Once compacted and sorted, all material are hauled offsite to offsite disposal facilities.

## DISCUSSION

### a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

***Less Than Significant with Mitigation Incorporated***. The proposed building would be connected to the existing process wastewater facility onsite in the event of any product spills and to periodically clean the warehouse floor. Minor amounts of process wastewater would be generated and adequate capacity would be available in the existing system to accommodate the wastewater generated by the project (Kennedy/Jenks 2011). Currently, the onsite process wastewater treatment facility is operating without a Waste Discharge Requirement (WDR) permit from the QWQCB and therefore it is uncertain if the facility is meeting all of the requirements established by the RWQCB. Additionally, the proposed sanitary septic system would also need to meet all County design and treatment requirements prior to its installation and operation.

Because the applicant does not currently hold the necessary permits from the RWQCB for the process wastewater facility, this would be considered potentially significant impact. Implementation of Mitigation UTIL-1 would reduce the project's potential for exceedence of any waste water treatment requirements of the RWQCB to a less-than-significant level.

### Mitigation Measure UTIL-1

*The following requirements shall be met by the project applicant prior to issuance of any grading permits:*

- *All applicable waste discharge requirements and permits from the San Francisco RWQCB shall be secured for the existing process waste water treatment facility.*
- *The proposed septic system design and capacity shall be approved by Alameda County.*

› *All appropriate permits shall be obtained for the construction and installation of the proposed septic system.*

### *Significance after Mitigation*

Implementation of Mitigation Measure UTIL-1 would ensure that all required permits are secured. Therefore, all appropriate wastewater treatment requirements would be met for the process wastewater facility and the proposed building and this impact would be reduced to a less-than-significant level.

### b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

***Less-than-Significant with Mitigation Incorporated***. As described in a) above, the proposed building would be connected to the existing process wastewater facility on the site and a new septic system for sanitary sewer waste would be constructed. The project also includes connection to the property's existing water distribution system. No new or expanded offsite water or wastewater facilities would be required. The construction of the water supply connection and the septic tank and leach field have been evaluated throughout this IS. As described herein, the project would result in less-than-significant impacts with mitigation incorporated.

### c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

***Less-than-Significant with Mitigation Incorporated***. The construction of the proposed building would include a new stormwater drainage system that would collect all the storm water runoff onsite and would allow it to percolate to underlying soils. No new or expanded offsite storm water drainage facilities would be required. The environmental effects of the proposed stormwater drainage system have been evaluated throughout this IS. As described herein, the project would result in less-than-significant impacts with mitigation incorporated.

### d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

***Less-than-Significant Impact***. The proposed building would receive its' water supply from the California Water Services Company (Cal Water). A general water demand estimate for a factory or commercial building is 15-35 gallons per day (gpd), per employee (DOH 2009). As mentioned above in a), the proposed building would primarily be used for storage of existing supplies and materials and therefore water demand would be primarily required for domestic use as opposed to manufacturing or processing uses. The proposed building would provide office space for a maximum of 12 employees. While no new employees would be hired with implementation of the project and existing employees currently in overcrowded conditions in the existing administration building would move to the new administration/warehouse building, on a worst-case basis this analysis assumes that the administration/warehouse building would support 12 new employees on a 24 hours per day/7 days per week schedule. The proposed building would generate demand for a maximum of approximately 153,300 gallons per year or 0.5 acre foot of water per year (35 gallons X 12 employees x 365 days per year). The Alameda County Urban Water Management Plan estimates that by the year 2035 water demand for all industrial uses within the County would increase from 896 afy, the current water usage for industrial uses within the County, to 1,455 afy (Alameda County 2010b). The project would not result in a substantial demand for water supplies such that Cal Water would not be able to adequately serve the project in addition to its other customers. No new water entitlements would be required. This would be a less-than-significant impact.

### e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

***No Impact***. The project would not require wastewater treatment services from the County of Alameda because wastewater would be collected and processed onsite with the use of an existing process wastewater facility and the construction of a new sanitary septic system. Therefore, no impact would occur related to wastewater treatment services.

### f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

***Less-than-Significant Impact***. Project construction activities would generate minimal solid waste related to excess construction materials and material removed during site clearing. The quantity of solid waste is not anticipated to affect the capacity of local landfills, and disposal of all waste would comply with applicable regulations. As a result, landfill and solid waste impacts would be less than significant.

### g) Comply with federal, state, and local statutes and regulations related to solid waste?

***Less-than-Significant Impact***. Refer to f) above.

# 3.18 MANDATORY FINDINGS OF SIGNIFICANCE

| Environmental Issues | Potentially Significant Impact | Less-than-Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XVIII. Mandatory Findings of Significance.** | | | | |
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☒ | ☐ | ☐ |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | ☐ | ☒ | ☐ | ☐ |
| c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☒ | ☐ | ☐ |

Authority: Public Resources Code Sections 21083, 21083.5.
Reference: Government Code Sections 65088.4.
Public Resources Code Sections 21080, 21083.5, 21095; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

## DISCUSSION

### a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

***Less-than-Significant with Mitigation Incorporated***. As discussed in the Cultural Resources, Geology and Soils, and Hydrology and Water Quality sections of this Initial Study, the proposed project would result in potentially significant impacts as a result of construction of the administrative/warehouse building that would have the potential to degrade the quality of the environment. However, adoption and implementation of mitigation measures described in this Initial Study would reduce these individual impacts to less-than-significant levels.

Concannon Vineyards is a California designated a California State Historic Landmark due to its economic and historical contribution to the Livermore Valley. The proposed project would not conflict with this designation and would not alter or damage any of the existing structures of historical importance. Although no documented paleontological resources are located at the project site, including important examples of the major periods of California history or prehistory, the potential exists to encounter previously undiscovered cultural material or paleontological resources during construction-related ground disturbing activities. However, adoption and

implementation of Mitigation Measure CUL-1, CUL-2, and CUL-3 would reduce these potential impacts to less-than-significant levels.

No significant biological resources impacts would occur. Therefore, the project would not reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of an endangered, rare, or threatened species.

### b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

***Less-than-Significant with Mitigation Incorporated***. Cumulative environmental effects are multiple individual effects that, when considered together, would be considerable or compound or increase other environmental impacts. Individual effects may result from a single project or a number of separate projects and may occur at the same place and point in time or at different locations and over extended periods of time.

The purpose of the proposed project is to provide a multi-purpose building that provides sufficient storage and office space to meet existing operational needs and eliminate the need for mobile storage units on the project site. The proposed project would comply with the development limitations of Concannon Vineyard's Agreement with the Tri-Valley Conservancy and would be consistent with the goals and policies in the Livermore Valley Area Plan related to the preservation of valuable agriculture and vineyard lands.

In addition, the building would be located in an area that minimizes impacts to existing vineyards and operations and avoids sensitive environmental resources. The construction and operation will not result in any increase in numbers of permanent workers/employees. Implementation of the mitigation measures proposed in this Initial Study would reduce the project's impacts to a less-than-significant level, further reducing the project's contribution to environmental impacts to less than cumulatively considerable.

### c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

***Less-than-Significant with Mitigation Incorporated***. The proposed project includes the construction of an approximate 50,000 square foot administrative/warehouse building on the Concannon Vineyard property. As described in the Geology and Soils section of this Initial Study, construction on expansive soils can result in differential ground movement, which can cause damage to building foundations and risk to human life. However, implementation of Mitigation Measure GEO-1 described in this Initial Study would reduce this impact to a less-than-significant level. No other human safety impacts would occur.

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# 5 REPORT PREPARATION

## 5.1 ALAMEDA COUNTY (LEAD AGENCY)

Jana Beatty-Weldon ..... Senior Planner

## 5.2 ASCENT ENVIRONMENTAL, INC. (CONSULTANT)

Amanda Olekszulin ..... Principal-in-Charge/Project Manager
Linda Leeman..... Senior Wildlife Biologist
Lisa Kashiwase ..... Natural Resource Analyst
Dimitri Antoniou ..... Environmental Planner
Amber Giffin ..... Document Production Specialist

# Appendix A

Air Quality and
Greenhouse Gas Emissions Data

**5/23/2011 10:18:22 AM**

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: H:\Concannon\Air Quality\ConcannonBuilding.urb924

Project Name: Concannon Building

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 | PM2.5 Dust | PM2.5 Exhaust | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2011 TOTALS (lbs/day unmitigated) | 6.01 | 43.77 | 26.73 | 0.00 | 10.02 | 2.71 | 12.73 | 2.09 | 2.50 | 4.59 | 4,476.85 |
| 2012 TOTALS (lbs/day unmitigated) | 5.67 | 40.97 | 25.86 | 0.00 | 10.02 | 2.49 | 12.50 | 2.09 | 2.29 | 4.38 | 4,477.03 |

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 0.19 | 0.83 | 2.23 | 0.00 | 0.01 | 0.01 | 969.25 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 0.05 | 0.05 | 0.58 | 0.00 | 0.10 | 0.02 | 57.09 |

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SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 0.24 | 0.88 | 2.81 | 0.00 | 0.11 | 0.03 | 1,026.34 |

**5/23/2011 10:18:31 AM**

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: H:\Concannon\Air Quality\ConcannonBuilding.urb924

Project Name: Concannon Building

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 1/11/2011-11/29/2011 Active Days: 231 | 1.12 | 8.58 | 4.81 | 0.00 | 0.00 | 0.55 | 0.55 | 0.00 | 0.50 | 0.50 | 915.63 |
| Building 01/11/2011-08/22/2012 | 1.12 | 8.58 | 4.81 | 0.00 | 0.00 | 0.55 | 0.55 | 0.00 | 0.50 | 0.50 | 915.63 |
| Building Off Road Diesel | 1.11 | 8.51 | 4.68 | 0.00 | 0.00 | 0.54 | 0.54 | 0.00 | 0.50 | 0.50 | 893.39 |
| Building Vendor Trips | 0.00 | 0.07 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.68 |
| Building Worker Trips | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.57 |
| Time Slice 11/30/2011-12/27/2011 Active Days: 20 | 3.98 | 32.07 | 17.84 | 0.00 | 10.01 | 1.72 | 11.73 | 2.09 | 1.58 | 3.67 | 3,264.92 |
| Building 01/11/2011-08/22/2012 | 1.12 | 8.58 | 4.81 | 0.00 | 0.00 | 0.55 | 0.55 | 0.00 | 0.50 | 0.50 | 915.63 |
| Building Off Road Diesel | 1.11 | 8.51 | 4.68 | 0.00 | 0.00 | 0.54 | 0.54 | 0.00 | 0.50 | 0.50 | 893.39 |
| Building Vendor Trips | 0.00 | 0.07 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.68 |
| Building Worker Trips | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.57 |
| Fine Grading 11/30/2011-01/11/2012 | 2.86 | 23.50 | 13.03 | 0.00 | 10.00 | 1.17 | 11.18 | 2.09 | 1.08 | 3.17 | 2,349.29 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 10.00 | 0.00 | 10.00 | 2.09 | 0.00 | 2.09 | 0.00 |
| Fine Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.03 | 0.06 | 1.07 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 101.97 |

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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 12/28/2011-12/30/2011<br>Active Days: 3 | **6.01** | **43.77** | **26.73** | **0.00** | **10.02** | **2.71** | **12.73** | **2.09** | **2.50** | **4.59** | 4,476.85 |
| Asphalt 12/28/2011-01/11/2012 | 2.03 | 11.70 | 8.89 | 0.00 | 0.01 | 0.99 | 1.00 | 0.00 | 0.91 | 0.92 | 1,211.93 |
| Paving Off-Gas | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 1.83 | 11.26 | 6.91 | 0.00 | 0.00 | 0.98 | 0.98 | 0.00 | 0.90 | 0.90 | 979.23 |
| Paving On Road Diesel | 0.02 | 0.34 | 0.11 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 54.25 |
| Paving Worker Trips | 0.06 | 0.10 | 1.87 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 178.46 |
| Building 01/11/2011-08/22/2012 | 1.12 | 8.58 | 4.81 | 0.00 | 0.00 | 0.55 | 0.55 | 0.00 | 0.50 | 0.50 | 915.63 |
| Building Off Road Diesel | 1.11 | 8.51 | 4.68 | 0.00 | 0.00 | 0.54 | 0.54 | 0.00 | 0.50 | 0.50 | 893.39 |
| Building Vendor Trips | 0.00 | 0.07 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.68 |
| Building Worker Trips | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.57 |
| Fine Grading 11/30/2011-01/11/2012 | 2.86 | 23.50 | 13.03 | 0.00 | 10.00 | 1.17 | 11.18 | 2.09 | 1.08 | 3.17 | 2,349.29 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 10.00 | 0.00 | 10.00 | 2.09 | 0.00 | 2.09 | 0.00 |
| Fine Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.03 | 0.06 | 1.07 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 101.97 |

**5/23/2011 10:18:31 AM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 1/2/2012-1/11/2012 Active Days: 8 | 5.67 | 40.97 | 25.86 | **0.00** | **10.02** | 2.49 | 12.50 | **2.09** | 2.29 | 4.38 | **4,477.03** |
| Asphalt 12/28/2011-01/11/2012 | 1.91 | 11.04 | 8.67 | 0.00 | 0.01 | 0.93 | 0.94 | 0.00 | 0.85 | 0.85 | 1,212.04 |
| Paving Off-Gas | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 1.72 | 10.64 | 6.84 | 0.00 | 0.00 | 0.91 | 0.91 | 0.00 | 0.84 | 0.84 | 979.23 |
| Paving On Road Diesel | 0.02 | 0.30 | 0.10 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 54.25 |
| Paving Worker Trips | 0.05 | 0.09 | 1.73 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 178.56 |
| Building 01/11/2011-08/22/2012 | 1.04 | 7.94 | 4.69 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.45 | 0.45 | 915.63 |
| Building Off Road Diesel | 1.03 | 7.87 | 4.56 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.45 | 0.45 | 893.39 |
| Building Vendor Trips | 0.00 | 0.06 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.68 |
| Building Worker Trips | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.57 |
| Fine Grading 11/30/2011-01/11/2012 | 2.72 | 22.00 | 12.50 | 0.00 | 10.00 | 1.07 | 11.08 | 2.09 | 0.99 | 3.08 | 2,349.35 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 10.00 | 0.00 | 10.00 | 2.09 | 0.00 | 2.09 | 0.00 |
| Fine Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.03 | 0.05 | 0.99 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.04 |
| Time Slice 1/12/2012-8/7/2012 Active Days: 149 | 1.04 | 7.94 | 4.69 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.45 | 0.45 | 915.63 |
| Building 01/11/2011-08/22/2012 | 1.04 | 7.94 | 4.69 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.45 | 0.45 | 915.63 |
| Building Off Road Diesel | 1.03 | 7.87 | 4.56 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.45 | 0.45 | 893.39 |
| Building Vendor Trips | 0.00 | 0.06 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.68 |
| Building Worker Trips | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.57 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/8/2012-8/22/2012 Active Days: 11 | 2.06 | 7.94 | 4.70 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.45 | 0.45 | 916.85 |
| Building 01/11/2011-08/22/2012 | 1.04 | 7.94 | 4.69 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.45 | 0.45 | 915.63 |
| Building Off Road Diesel | 1.03 | 7.87 | 4.56 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.45 | 0.45 | 893.39 |
| Building Vendor Trips | 0.00 | 0.06 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.68 |
| Building Worker Trips | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.57 |
| Coating 08/08/2012-09/05/2012 | 1.02 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.21 |
| Architectural Coating | 1.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Coating Worker Trips | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.21 |
| Time Slice 8/23/2012-9/5/2012 Active Days: 10 | 1.02 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.21 |
| Coating 08/08/2012-09/05/2012 | 1.02 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.21 |
| Architectural Coating | 1.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Coating Worker Trips | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.21 |

Phase Assumptions

Phase: Fine Grading 11/30/2011 - 1/11/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 2

Maximum Daily Acreage Disturbed: 0.5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 12/28/2011 - 1/11/2012 - Default Paving Description

Acres to be Paved: 0.5

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/11/2011 - 8/22/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 8/8/2012 - 9/5/2012 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

**5/23/2011 10:17:49 AM**

Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name: H:\Concannon\Air Quality\ConcannonBuilding.urb924

Project Name: Concannon Building

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 | PM2.5 Dust | PM2.5 Exhaust | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2011 TOTALS (tons/year unmitigated) | 0.18 | 1.38 | 0.77 | 0.00 | 0.12 | 0.08 | 0.20 | 0.02 | 0.08 | 0.10 | 145.12 |
| 2012 TOTALS (tons/year unmitigated) | 0.12 | 0.80 | 0.48 | 0.00 | 0.04 | 0.05 | 0.09 | 0.01 | 0.05 | 0.05 | 91.17 |

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (tons/year, unmitigated) | 0.02 | 0.15 | 0.26 | 0.00 | 0.00 | 0.00 | 176.63 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (tons/year, unmitigated) | 0.01 | 0.01 | 0.11 | 0.00 | 0.02 | 0.00 | 9.95 |

**5/23/2011 10:17:49 AM**

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (tons/year, unmitigated) | 0.03 | 0.16 | 0.37 | 0.00 | 0.02 | 0.00 | 186.58 |

**5/23/2011 10:18:08 AM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: H:\Concannon\Air Quality\ConcannonBuilding.urb924

Project Name: Concannon Building

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2011 | 0.18 | 1.38 | 0.77 | 0.00 | 0.12 | 0.08 | 0.20 | 0.02 | 0.08 | 0.10 | 145.12 |
| Building 01/11/2011-08/22/2012 | 0.14 | 1.09 | 0.61 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.06 | 0.06 | 116.28 |
| Building Off Road Diesel | 0.14 | 1.08 | 0.59 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.06 | 0.06 | 113.46 |
| Building Vendor Trips | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.74 |
| Building Worker Trips | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.09 |
| Fine Grading 11/30/2011-01/11/2012 | 0.03 | 0.27 | 0.15 | 0.00 | 0.12 | 0.01 | 0.13 | 0.02 | 0.01 | 0.04 | 27.02 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.12 | 0.02 | 0.00 | 0.02 | 0.00 |
| Fine Grading Off Road Diesel | 0.03 | 0.27 | 0.14 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 25.84 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.17 |
| Asphalt 12/28/2011-01/11/2012 | 0.00 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.82 |
| Paving Off-Gas | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 0.00 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.47 |
| Paving On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 |
| Paving Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2012 | 0.12 | 0.80 | 0.48 | 0.00 | 0.04 | 0.05 | 0.09 | 0.01 | 0.05 | 0.05 | 91.17 |
| Asphalt 12/28/2011-01/11/2012 | 0.01 | 0.04 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.85 |
| Paving Off-Gas | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 0.01 | 0.04 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.92 |
| Paving On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.22 |
| Paving Worker Trips | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.71 |
| Building 01/11/2011-08/22/2012 | 0.09 | 0.67 | 0.39 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 76.91 |
| Building Off Road Diesel | 0.09 | 0.66 | 0.38 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 75.04 |
| Building Vendor Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.15 |
| Building Worker Trips | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.72 |
| Fine Grading 11/30/2011-01/11/2012 | 0.01 | 0.09 | 0.05 | 0.00 | 0.04 | 0.00 | 0.04 | 0.01 | 0.00 | 0.01 | 9.40 |
| Fine Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.04 | 0.01 | 0.00 | 0.01 | 0.00 |
| Fine Grading Off Road Diesel | 0.01 | 0.09 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.99 |
| Fine Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fine Grading Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 |
| Coating 08/08/2012-09/05/2012 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| Architectural Coating | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Coating Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |

Phase Assumptions

Phase: Fine Grading 11/30/2011 - 1/11/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 2

Maximum Daily Acreage Disturbed: 0.5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 12/28/2011 - 1/11/2012 - Default Paving Description
Acres to be Paved: 0.5
Off-Road Equipment:
4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/11/2011 - 8/22/2012 - Default Building Construction Description
Off-Road Equipment:
1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 8/8/2012 - 9/5/2012 - Default Architectural Coating Description
Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250