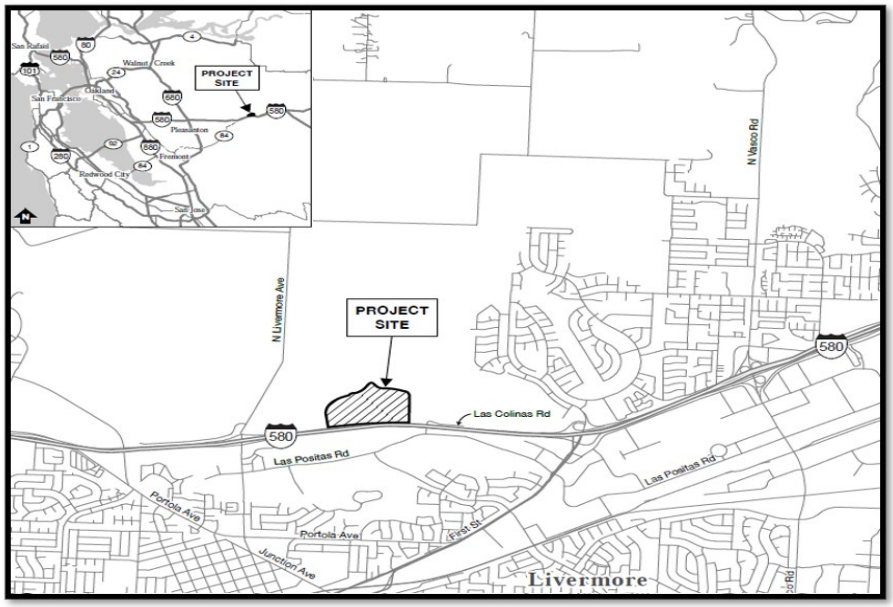
MONTE VISTA MEMORIAL GARDENS

Response to Comments Document
Final Environmental Impact Report
SCH No. 2020069045
November 2022



Prepared for:

Alameda County Community Development Agency
224 Winton Ave Room 111
Hayward, CA 94544

Prepared by:

RCH GROUP

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224 Winton Ave Room 111
Hayward, CA 94544

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In Association with:

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CHAPTER 1
INTRODUCTION

A. PURPOSE OF THE FINAL ENVIRONMENTAL IMPACT REPORT

The Monte Vista Memorial Gardens Draft Environmental Impact Report (SCH #2020069045) was released for public review and comment in January 2022. After completion of a Draft Environmental Impact Report (Draft EIR), the California Environmental Quality Act (CEQA) requires the Lead Agency to consult with and obtain comments from public agencies that have legal jurisdiction with respect to the proposed project, and to provide the general public with opportunities to comment on the Draft EIR. CEQA also requires the Lead Agency to respond to significant environmental issues raised in the review and consultation process. The Lead Agency for the Monte Vista Memorial Gardens EIR is the Alameda County Planning Department.

The Monte Vista Memorial Gardens Draft EIR (SCH#2020069045) was released for a 45-day public review and comment period beginning January 13, 2022 and ending February 28, 2022. The Draft EIR was made available to responsible agencies, trustee agencies, state agencies with jurisdiction by law, and interested parties and individuals. The County held a public meeting on February 7, 2022, to receive verbal comments on the Draft EIR. This document has been prepared to respond to agency and public comments received on the Draft EIR. Together with the Draft EIR, this document constitutes the Final EIR for the project.

The Final EIR is an informational document prepared by the Lead Agency that must be considered by decision-makers before approving or denying a proposed project. As specified in CEQA Guidelines (Section 15132), the Final EIR shall consist of (a) the Draft EIR or a revision of the Draft; (b) comments and recommendations received on the Draft EIR either verbatim or in summary; (c) a list of persons, organizations, and public agencies commenting on the Draft EIR; (d) the responses of the Lead Agency to significant environmental points raised in the review and consultation process; and (e) any other information added by the Lead Agency.

B. REPORT ORGANIZATION

Chapter 2 of this document contains a list of persons who submitted written comments, and a list of persons who provided oral comments at the public hearing on February 7, 2022. Chapter 3 of this document contains copies of written comments and oral comments received during the comment period and responses to those comments. Several issues were addressed by multiple commenters and are answered by "Master Responses," which consolidate information on the subjects to ensure a more comprehensive response. Each comment is numbered in the margin of the comment letter. Responses to all written comments are found in the page immediately

following the letter. The written comments and responses are referenced by letter and comment number; the written comment letters are coded A through N and the comments within are coded numerically. For example, the first comment in the first comments letter (from Caltrans) is referenced as A-1. The oral comments are categorized numerically. For the example, the first oral comment (from Commissioner Jefferey Moore) is referenced as 1-1. Responses to the oral comments are directly after the last oral comments. Chapter 4 of this document contains changes to the Draft EIR. Text changes to the DEIR are shown in underline for additions and ~~strikethrough~~ for deletions. Text changes are organized sequentially according to the page in the Draft EIR on which the text is changed.

C. PROJECT OVERVIEW

Figure 1 is the regional location map, **Figure 2** is the Mitigated Project Alternative site plan and **Figure 3** and **Figure 4** show the conceptual elevations. The County has determined, based on the comments, that the preferred site plan would be the Mitigated Project Alternative site plan. This is discussed further in Master Response 1. For reader convenience, an overview of the Project is below, followed by **Table 1** from the Draft EIR. **Table 1** includes all the impacts evaluated in the Draft EIR, the recommended Mitigation Measures, and the determination of impact significance.

Monte Vista Memorial Gardens (MVMG or the "Project") is a proposed memorial park project that would include a funeral home, interment (burial) areas and associated services, including a crematorium and mortuary. MVMG would provide memorial services for the Tri-Valley region where there are over 1,200 deaths per year with about 750 cremations and 300 burials done locally. The mission of the MVMG is to provide services for the final needs of present and future Tri-Valley residents. MVMG would be the first public cemetery developed in Alameda County in over 110 years and would accommodate the needs of several multi-cultural communities. The cemetery would include an area specifically designed for the Jewish community, with appropriate burial services, practices, and artwork for Jewish residents.

Project development would occur in two phases. Once approved, the Phase I buildout of the Project would occur over approximately 5 years. Phase II buildout would occur over approximately 100 years. Phase II would be developed in subphases based on future demand and other development and regulatory factors. Permitting would begin for Phase II following approval of the CUP from Alameda County. Phase I would have approximately 1,308 Jewish burial sites and 800 non-denominational burial sites. With the lakes, Phase II would have approximately 8,300 Jewish burial sites and 73,500 non-denominational burial sites. For the Mitigated Alternative (without the lakes), Phase II would have approximately 8,300 Jewish burial sites and 87,100 non-denominational burial sites. The total estimates for Phase II are 81,800 burial sites with the originally proposed Project. The Mitigated Alternative would have an estimated 95,400 burial sites, an increase of about 17 percent above the originally proposed Project (due to the removal of the permanent lakes). The burial sites include a variety of single and double vaults and cremated remains in-ground and above-ground (Kahn, 2022).

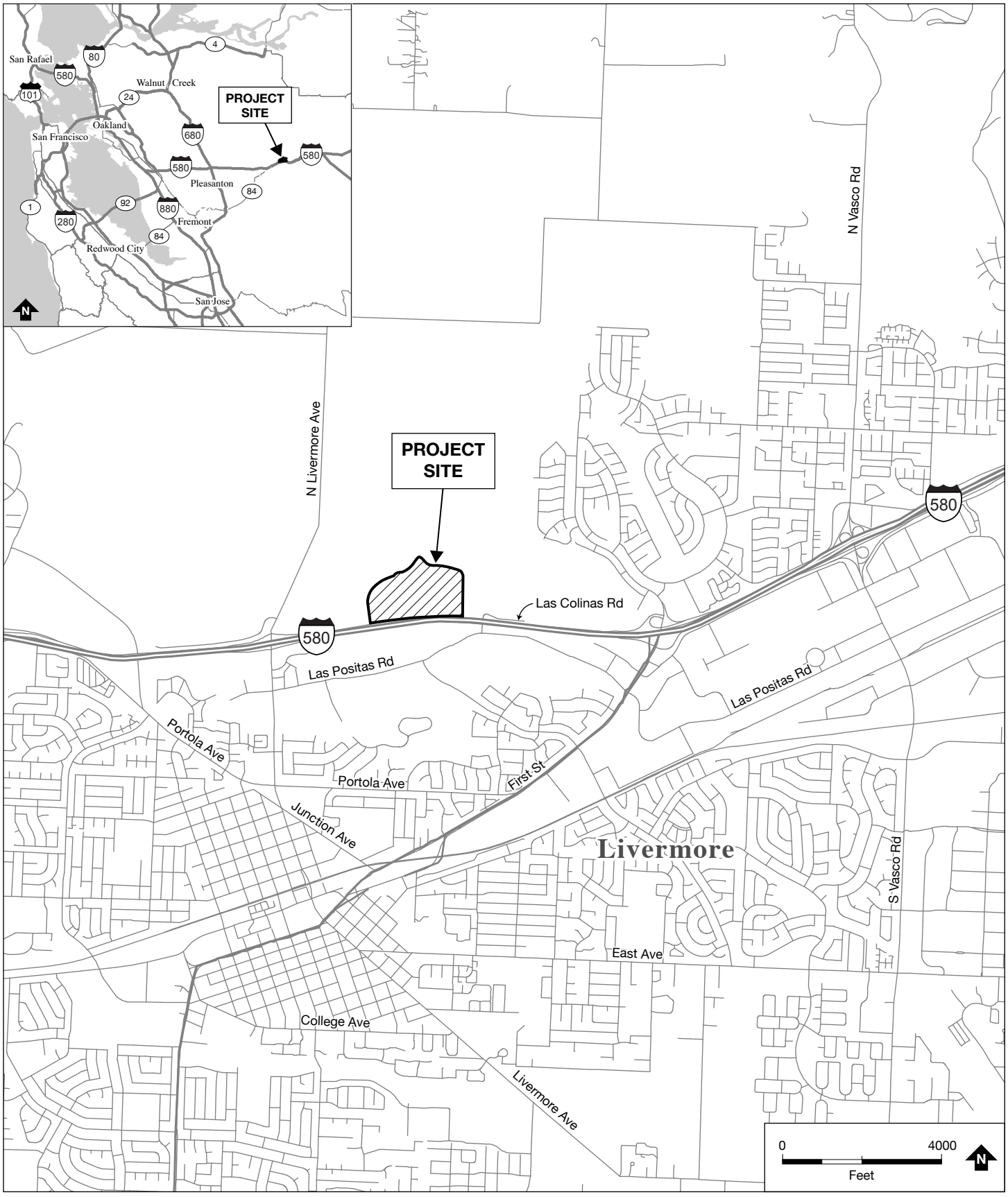
SIGNIFICANT ENVIRONMENTAL EFFECTS: The Project would have significant impacts in the following environmental areas:

- Air Quality (air pollution from ground disturbing construction activities)
- Biological Resources (sensitive species, seasonal wetlands and "other waters of the United States", and local policies.
- Cultural Resources (cultural and/or tribal cultural resources and human remains)
- Geologic, soils and seismic (earthwork and proposed lakes)
- Hydrology and Water Quality (construction effects, operation of proposed lakes). The Mitigated Alternative would eliminate the proposed lakes and the operational impacts of the lakes.

All of these impacts can be reduced to less than significant levels after mitigation is implemented. The Mitigated Alternative eliminates the lakes, and thus the impacts related to the proposed lakes.

D. REFERENCES

Kahn, Ron. 2022. CEO/Manager*, Magen David Memorial Investment Group, LLC.* Email Correspondence with Paul Miller, RCH Group, on September 9, 2022.



Source: RCH Group 2021

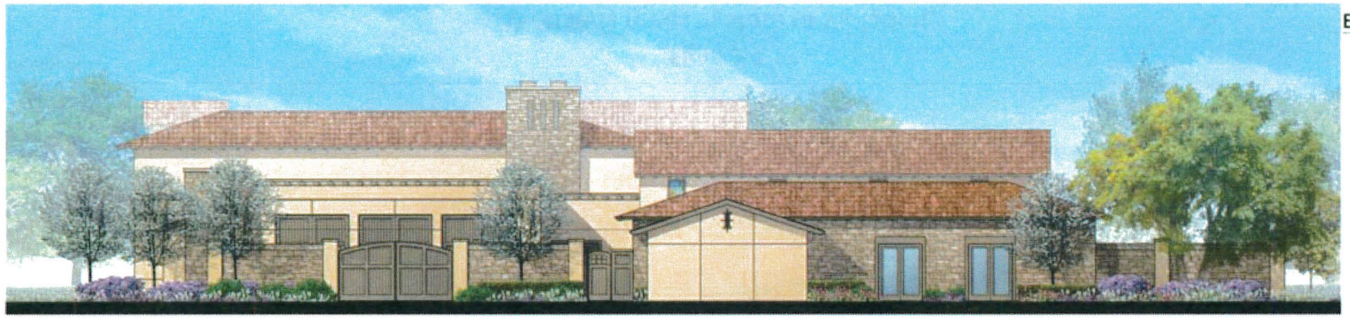
Figure 1
Regional Location

C&R-5

Source: Camp & Camp Associates, 2022

Figure 2
Mitigated Alternative Site Plan

RCH GROUP
planning & environmental consulting



Exterior Materials

Roof:	High Barrel Concrete Tile by Eagle Roofing Santa Barbara & Santa Cruz (50/50 Blend)
Fascia:	Copper Gutter o/ 6x8 Rafter Tails
Barge:	6x8 Rake Board
Walls:	Smooth Trowel Finish Stucco Mineret Bluffstone Veneer by Eldorado Stone
Windows:	Insulated Metal Frame w/ Dual Pane Glass
Doors:	Insulated Metal Frame w/ Dual Pane Glass Insulated Metal
Garage Door:	Insulated Metal Roll-up
Accents:	Stone Wall Cap & Frieze Block Metal Expansion Joints W/ 1" Reveal @ Stucco Copper Leaders & Downspouts Fabricated Metal Trellis & Arbors Stucco Finished Pilaster @ Garden Walls Composite Timber & Wood Gates

South Elevation

East Elevation

0 40

Feet

C&R-6

Source: Edward C. Novak, Architect 2018

Figure 3

South and East Conceptual Elevations

RCHGROUP

planning & environmental consulting

Exterior Materials

Roof:	High Barrel Concrete Tile by Eagle Roofing Santa Barbara & Santa Cruz (50/50 Blend)
Fascia:	Copper Gutter o/ 6x8 Rafter Tails
Barge:	6x8 Rake Board
Walls:	Smooth Trowel Finish Stucco Mineret Bluffstone Veneer by Eldorado Stone
Windows:	Insulated Metal Frame w/ Dual Pane Glass
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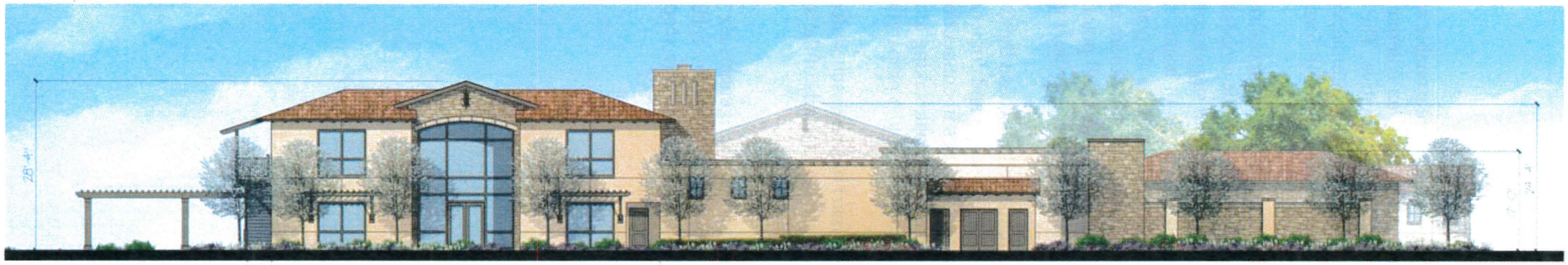
Garage Door:	Insulated Metal Roll-up
Accents:	Stone Wall Cap & Frieze Block Metal Expansion Joints W/ 1" Reveal @ Stucco Copper Leaders & Downspouts Fabricated Metal Trellis & Arbors Stucco Finished Pilaster @ Garden Walls Composite Timber & Wood Gates

North Elevation



West Elevation

0 40

Feet

C&R-7

Source: Edward C. Novak, Architect 2018

Figure 4

North and West Conceptual Elevations

RCH GROUP
planning & environmental consulting

TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.1 AESTHETICS/VISUAL			
Impact 3.1.1: The Project would not affect any scenic vista.	None required.	LS	LS
Impact 3.1.2: The Project would alter the existing visual character of the Project site and its surroundings.	None required.	LS	LS
3.2 AIR QUALITY			
Impact 3.2.1: The Project could conflict with the BAAQMD's 2017 Clean Air Plan.	None required.	LS	LS
Impact 3.2.2: Project construction activities could result in a cumulatively considerable net increase of emissions of criteria air pollutants and precursors.	**Mitigation Measure 3.2.2:** The Applicant shall require the following BAAQMD recommended basic construction mitigation measures during Project construction: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. • A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action with 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.	S	LSM
Impact 3.2.3: Project operational activities could result in a cumulatively considerable net increase of emissions of criteria air pollutants and precursors.	None required.	LS	LS
Impact 3.2.4: Project operational activities could expose sensitive receptors to substantial concentrations of TACs.	None required.	LS	LS
Impact 3.2.5: Project operations could generate odors that could adversely affect a substantial number of people.	None required.	LS	LS

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TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.3 BIOLOGICAL RESOURCES			
Impact 3.3.1: The Project could impact animal species identified as a candidate, sensitive, or special status, either directly or through habitat modification.	**Mitigation Measure 3.3.1a: Pre-Construction Surveys** The Project applicant/construction contractor shall retain a qualified biologist to confirm presence or absence of species of special concern within two weeks of planned construction. **Mitigation Measure 3.3.1b: Construction Employee Environmental Awareness Training** The Project applicant/construction contractor shall retain a qualified biologist to conduct environmental awareness training for construction crews before project implementation. The awareness training shall be provided to all construction personnel and shall brief personnel on the need to avoid effects on sensitive biological resources (i.e., special status animal and plant species, wetlands and other waters, and active bird nests). The education program shall include a brief review of the special-status species with the potential to occur in the Project area (including their life history, habitat requirements, and photographs of the species). The training shall identify the portions of the Project area in which the species may occur, as well as their legal status and protection. The program also shall cover the relevant permit conditions and mitigation measures that must be followed by all construction personnel to reduce or avoid effects on these resources during project implementation through completion. The training shall emphasize the role that the construction crew plays in identifying and reporting any special-status species observations to the on-site biologist. Training shall identify the steps to be taken if a special-status species is found within the construction area (i.e., notifying the crew foreman, who would call the designated biologist). An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions shall be provided to each crew member. The crew foreman shall be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs shall be conducted for appropriate new personnel as they are brought on the job. **Mitigation Measure 3.3.1c: San Joaquin Kit Fox** An intensive survey for active San Joaquin kit fox dens will be conducted by a qualified biologist within and surrounding the proposed construction area no less than 14 days and no more than 30 days prior to construction. The USFWS and the CDFW would be immediately contacted if this/these survey(s) determine that the San Joaquin kit fox does occupy construction areas or within the vicinity (200 feet) of ground disturbing activities, either by direct observation or identification of active den site(s). In addition, all ground disturbing work within 200 feet of any active den(s) shall be postponed until the USFWS and/or CDFW provide guidance regarding how to proceed.	S	LSM

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TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.3 BIOLOGICAL RESOURCES (cont.)			
Impact 3.3.1 (cont.)	**Mitigation Measure 3.3.1d: San Joaquin Coachwhip and other Special-Status Reptiles and Amphibians** The MVMG Project area will be intensively surveyed for evidence of these reptile and amphibian species within 30 days prior to construction. As appropriate, based on survey results, temporary fencing designed to prevent the entry of San Joaquin coachwhip shall be installed around the perimeter of all areas proposed for construction. The exclusion fencing shall be installed so that its bottom is buried into the ground 12" and 24" is exposed above ground. Following installation of this temporary fencing, a qualified biologist shall conduct a pre-ground disturbing activities survey to locate any San Joaquin coachwhip within the enclosed area. Any special-status reptiles or amphibians encountered within the fenced area would be captured and trans-located by the qualified biologist to similar suitable habitat on the Project site, in areas not adversely affected by Project activities. **Mitigation Measure 3.3.1e: Vernal Pool fairy shrimp and longhorn fairy shrimp** Prior to construction, U.S. Fish & Wildlife Service protocol-level (dry- and wet-season) vernal pool crustacean surveys shall be conducted by a qualified biologist to definitively determine presence or absence of these listed large branchiopods on-site. If no listed large branchiopods are found on-site, and this conclusion is confirmed by the USFWS, no further mitigation would be required. If, however, listed large branchiopods are found, assumed to be present (without surveys), or determined by the USFWS to be on-site, the Project applicant shall mitigate the loss of potential habitat in coordination with the USFWS as part of a Clean Water Act, Section 404 permitting process to provide for preservation of off-site lands that provide habitat for listed large branchiopods according to USFWS required mitigation ratio requirements. **Mitigation Measure 3.3.1f: California Red-Legged Frog** A qualified biologist shall conduct California red-legged frog protocol surveys to determine presence/absence of the species if concluded necessary by the USFWS, in accordance with the USFWS guidance (*USFWS Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog*), which requires up to eight surveys within potential habitat – six surveys within the breeding season (October 1 – June 30) and two surveys during the non-breeding season (July 1 – September 30). A qualified biologist shall conduct presence/absence surveys prior to ground-disturbing activities during the species' active season (October 1 – June 30). The Project shall immediately notify the USFWS, CDFW and Alameda County if any individuals or their signs are observed during these surveys. If found on-site, impacts to this species would be minimized and mitigated by erecting temporary exclusion fencing – with the bottom edge buried into the ground around all proposed work area. A qualified biologist (approved by the USFWS and California Department of Fish and Game [CDFG]) shall then relocate California red-legged frogs from within work areas to approved relocation areas.		

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TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.3 BIOLOGICAL RESOURCES (cont.)			
Impact 3.3.1 (cont.)	**Mitigation Measure 3.3.1g: California Tiger Salamander** A qualified biologist shall conduct presence/absence surveys prior to ground-disturbing activities and during construction during the species' active/breeding season – starting October 15 or when rain occurs. The Project would immediately notify the USFWS, CDFW and Alameda County if any individuals or their sign are observed during these surveys. If surveys conducted determined the species to be present, mitigation shall be implemented to meet State and Federal resource agency requirements. This mitigation could be achieved through the purchase of credits at a USFWS-approved mitigation bank, or through the placement of a conservation easement over occupied California tiger salamander habitat. The Natural Resources Conservation District, through the Alameda County Conservation Partnership, provides opportunities for in-lieu fee payments to fund restoration/preservation of California tiger salamander habitat in Alameda County. **Mitigation Measure 3.3.1h: Swainson's hawk** A preconstruction nesting bird survey shall be conducted on-site within 15 days prior to construction if construction associated with the Project would commence between March 1st and September 1st ("the nesting season"). The survey shall include all on-site trees and trees with ¼ mile of the Project site. If disturbance associated with the Project would occur outside of the nesting season, no surveys shall be required. If Swainson's hawk are identified as nesting on or near the Project site, a non-disturbance buffer of 250-feet shall be established or as otherwise prescribed by a qualified ornithologist. The buffer shall be demarcated with painted orange lath or via the installation of orange construction fencing. Disturbance within the buffer shall be postponed until a qualified ornithologist has determined that the young have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed. **Mitigation Measure 3.3.1i: Special-Status Bird Species** A qualified biologist would conduct nesting bird surveys within 30 days of initiation of ground disturbing activities within suitable habitat (and within the appropriate nesting season) throughout the Project site to avoid impacts to nesting birds associated with construction. If an active nest is located, all clearing and construction within a buffer as designated appropriate by a biological monitor, shall be postponed until the nest is vacated and juveniles have fledged, and there is no evidence of a second attempt at nesting, as determined by a qualified biologist. Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing. Construction personnel should be instructed on the sensitivity of the area. Additional surveys would then be conducted if ground-disturbing activities are delayed due to active bird nesting, until the qualified biologist determines that the young associated with an active nest have fledged.		

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TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.3 BIOLOGICAL RESOURCES (cont.)			
Impact 3.3.1 (cont.)	**Mitigation Measure 3.3.1j: Burrowing Owl** There are numerous mammal burrows that can act as habitat for this species within the Study Area. A pre-construction burrowing owl survey is recommended within 14-days prior to any site disturbance to ensure no subsequent occupation of, or adverse impacts to potential habitat on the parcel. Therefore, prior to issuance of grading permits, it is recommended that: Four preconstruction site surveys shall be conducted by a qualified biologist. At least one site visit shall occur between 15 February and 15 April. The remaining three survey visits shall occur at least three weeks apart, between 15 April and 15 July (the peak of breeding season), with at least one visit after 15 June. A preconstruction survey by a qualified biologist is conducted. If possible, a winter survey should be conducted between December 1 and January 31 (when wintering owls are most likely to be present) and the nesting season survey should be conducted between April 15 and July 15 (the peak of breeding season). Surveys conducted from two hours before sunset to one hour after, or from one hour before to two hours after sunrise, are preferable. The survey techniques shall be consistent with the CDFW Staff Report survey protocol (2012) or most recently adopted guidance and include a 260-foot-wide (buffer) zone surrounding the Study Area. Repeat surveys shall also be conducted not more than 30 days prior to initial ground disturbance to inspect for re- occupation and the need for additional protection measures. If no burrowing owls are detected during preconstruction surveys, then no further mitigation is required. If active burrowing owl burrows are identified, Project activities shall not disturb the burrow during the nesting season (February 1–August 31) or until a qualified biologist has determined that the young have fledged, or the burrow has been abandoned. A no disturbance buffer zone of 160-feet is required to be established around each burrow with an active nest until the young have fledged the burrow as determined by a qualified biologist. If destruction of the occupied burrow is unavoidable during the non-breeding season, September 1 – January 31, passive relocation of the burrowing owls shall be conducted. Passive relocation involves installing a one-way door at the burrow entrance, encouraging owls to move from the occupied burrow. No permit is required to conduct passive relocation; however, this process shall be conducted by a qualified biologist and in accordance with CDFW guidelines. In addition, to offset the loss of foraging and burrow habitat on the Project site, a minimum of 6.5 acres of foraging habitat (calculated on a 300-ft foraging radius around the burrow) per pair or unpaired resident bird, shall be acquired and permanently protected at a location acceptable to the CDFW. **Mitigation Measure 3.3.1k: Western Spadefoot Toad** A qualified biologist shall survey areas of suitable habitat for western spadefoot toad on the Project site, including ruts or small pools within on-site grassland, as well seasonal depressions. The survey shall be conducted during the active season of western spadefoot toad (which corresponds with the rainy season). The survey results shall be submitted to the CDFW and Alameda County prior to construction.		

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TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.3 BIOLOGICAL RESOURCES (cont.)			
Impact 3.3.1 (cont.)	If surveys result in the observation of western spadefoot toad within Project impact areas in on-site grassland, observed individuals and/or eggs shall be removed from Project impact areas (with the prior approval of the CDFG) and be relocated to pre-determined suitable habitat in an appropriate area that would not be impacted. **Mitigation Measure 3.3.1l: American Badger** A qualified biologist shall conduct preconstruction surveys within on-site suitable habitat for American badger burrows within grassland habitat prior to any ground disturbing activities, including grading, construction, or site preparation activities within 30 days of proposed Project activities. If badgers are observed within Project impact areas in or within 200 feet of on-site grassland, observed individuals shall be captured, removed from Project impact areas through humane exclusion from burrows (with the prior approval of the CDFW), and relocated to suitable habitat in an appropriate area that will not be impacted. This relocation area would preferably be on-site but may also include off-site lands approved CDFW and Alameda County that contains suitable grassland habitat. All ground-disturbing work within 200 feet of the active burrow(s) shall be temporarily postponed if the American badger is observed breeding and denning on-site until direction from CDFW provides guidance regarding how to proceed.		
Impact 3.3.2: The Project could impact plant species identified as a candidate, sensitive, or special status.	**Mitigation Measure 3.3.2:** During the appropriate blooming/flowering season prior to construction, a qualified botanist shall conduct special-status plant species presence/absence surveys within areas proposed for grading or modification, in accordance with *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities* (California Department of Fish and Game 2018) to determine which special-status plants with the potential to occur on-site are evident and identifiable on-site Survey results shall be submitted to the CDFW and Alameda County. If any sensitive plant species are observed during the presence/absence surveys, and it is determined that such plants would be impacted by Project activities, MVMG, CDFW, and the USFWS (if the species is also on the federal list of sensitive species) would be consulted to determine appropriate measures to ensure the protection of the species and its habitat. Such mitigation should include avoidance or, if avoidance is not possible, relocation of affected plants to a mitigation site located in similar habitat within the Project site, in an area where no impacts are expected to occur. The relocation site should be in an area that is protected from impacts through human disturbance by fencing during the season that special-status plant species would be evident and identifiable—i.e., during their blooming season.	S	LSM
Impact 3.3.3: The Project could impact wetlands and "other waters of the United States".	**Mitigation Measure 3.3.3a:** The Project shall avoid all impacts to the 2.1 acres of on-site wetlands. This would include establishing appropriate development setbacks from Project uses and Arroyo Las Positas and the uses that could affect the seasonal wetlands.	S	LSM

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TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.3 BIOLOGICAL RESOURCES (cont.)			
Impact 3.3.3 (cont.)	**Mitigation Measure 3.3.3b:** A Section 404 permit from the U.S. Army Corps of Engineers and a Section 401 water quality certification from the Regional Water Quality Control Board may be required if there are any activities affecting wetlands. The Project shall communicate with the San Francisco Bay Regional Water Quality Control Board (RWQCB) to determine whether CA Dredge & Fill Procedures (aka Waste Discharge Requirement; WDR) permitting would be required and with the California Department of Fish & Wildlife to inquire about a possible 1602 Lake & Streambed Alteration Agreement (LSAA) for the proposed bridges. Any resource permitting with these agencies could also require mitigation of wetland habitat loss through purchase of equivalent wetland credits at an approved Mitigation Bank within the Project's service area.		
Impact 3.3.4: The Project could conflict with local policies or ordinances protecting biological resources.	None required for Phase I. Implement Mitigation Measures for Phase II recommended for Impact 3.3.1, Impact 3.3.2, and Impact 3.3.3.	S	LSM
3.4 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES			
Impact 3.4.1: The Project could either directly or indirectly result in impacts to cultural resources or Tribal Cultural Resources.	**Mitigation Measure 3.4.1a:** If any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, all work within 50 feet of the resources shall be halted and a qualified archaeologist shall be consulted to assess the significance of the find according to *CEQA Guidelines* Section 15064.5. If any find is determined to be significant, representatives from the County and the archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation. All significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the County shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, proposed Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) would be instituted. Work may proceed on other parts of the Project site outside the 50-foot area while mitigation for historical resources or unique archaeological resources is being carried out. **Mitigation Measure 3.4.1b:** In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie adjacent remains until the Alameda County Coroner has determined that the remains are not subject to any provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. The Coroner shall make	S	LSM

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TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.4 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES (cont.)			
Impact 3.4.1 (cont.)	his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the Alameda County Coroner determines that the remains are not subject to his or her authority and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC). After notification, the NAHC will follow the procedures outlines in Public Resources Code Section (PRC) 5097.98 that include notifications of the most likely descendants (MLDs), and recommendations for the treatment of the remains. The MLDs will have 48 hours after notification by the NAHC to make their recommendations (PRC Section 5097.98).		
3.5 GEOLOGY, SOILS AND SEISMICITY			
Impact 3.5.1: The Project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	**Mitigation Measure 3.5.1a:** The Project Applicant shall implement all recommendations outlined in ENGEO's Geotechnical Exploration Report, including but not limited to construction monitoring recommendations, earthwork recommendations, and foundation recommendations. The Project Applicant shall also implement any recommendations provided by future Supplemental Geotechnical Exploration Report(s) during development of the Project. **Mitigation Measure 3.5.1b:** ***Removed in Final EIR. Not required for Mitigated Alternative as previously proposed lakes are not included in the Mitigated Alternative.***	S	LSM
Impact 3.5.2: The Project could create impacts to topsoil or soil erosion.	**Mitigation Measure 3.5.2:** The Project stormwater system design shall locate and protect all stormwater outfalls to ensure proper stability and erosion protection. This may include energy dissipators, armoring, bio-revetments/gabions, and other erosion and slope protection features.	S	LSM
Impact 3.5.3: The Project could result in liquefaction, landslides, lateral spreading.	None required.	LS	LS
Impact 3.5.4: The Project is located on Expansive Soils.	**Mitigation Measure 3.5.4:** As described in ENGEO's Geotechnical Exploration Recommendations (2018), building damage due to volume changes associated with expansive soils shall be reduced by: (1) using a rigid mat foundation that is designed to resist the settlement and heave or expansive soil, (2) deepening the foundations to below the zone of moisture fluctuation and/or (3) using a layer of select fill below building locations. Successful performance of structures on expansive soils requires special attention during construction and it is imperative that exposed soils be kept moist prior to placement of concrete for foundation construction. Building-specific geotechnical reports shall include provisions to address expansive soils. These reports shall be reviewed and approved by the County prior to issuance of any building permits.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.5 GEOLOGY, SOILS AND SEISMICITY (cont.)			
Impact 3.5.5: The Project could directly or indirectly destroy a unique paleontological resource.	**Mitigation Measure 3.5.5:** In the event a paleontological or other geologically sensitive resource (such as fossils or fossil formations) are identified during any phase of project construction, all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist. The paleontologist shall notify the appropriate representative at the Counter of Alameda who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant, the County shall implement measures, which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code Section 21083.2.	S	LSM
3.6 GREENHOUSE GAS EMISSIONS			
Impact 3.6.1: The Project could generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	None required.	LS	LS
Impact 3.6.2: The Project could conflict with the County's Climate Action Plan, BAAQMD's Clean Air Plan, or CARB's 2017 Scoping Plan.	None required.	LS	LS
3.7 HAZARDS, HAZARDOUS MATERIALS AND WILDFIRE			
Impact 3.7.1: Project construction activities would use construction materials and fuels considered hazardous, and regular landscape maintenance of the Project site would likely involve the use of hazardous chemicals. Spills or accidents involving hazardous chemicals could occur and result in potential health and environmental impacts.	None required.	LS	LS
Impact 3.7.2: The Project could result in an increased risk in wildfires.	None required.	LS	LS
3.8 HYDROLOGY AND WATER QUALITY			
Impact 3.8.1: The Project could degrade surface or groundwater quality[LAC1][NB2].	**Mitigation Measure 3.8.1a:** The Project applicant shall file an NOI to comply with the Construction General Permit with the San Francisco Bay RWQCB prior to each phase of construction. Individual SWPPPs shall be prepared for each NOI and shall detail the treatment measures and BMPs to control pollutants that shall be implemented and complied with during the construction and post-construction phases of the project. The SWPPPs are subject to approval by the San Francisco Bay RWQCB, which makes the final determination on which BMPs are required for the Project.	S	LSM

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.8 HYDROLOGY AND WATER QUALITY (cont.)			
Impact 3.8.1 (cont.)	**Mitigation Measure 3.8.1b:** Prior to the issuance of grading permits for the Project, the Project applicant shall submit a Stormwater Control Plan to Alameda County for review and approval. The Stormwater Control Plan shall identify pollution prevention measures and practices to prevent polluted runoff from leaving the Project site. The plan shall be implemented to the satisfaction of Alameda County prior to issuance of grading permits. **Mitigation Measure 3.8.1c:** Prior to the issuance of grading permits for the Project, the Project applicant shall submit a final drainage plan as prepared by a qualified civil engineer to Alameda County for review and approval. The approved plan shall be incorporated into the Project design and constructed to the satisfaction of Alameda County. **Mitigation Measure 3.8.1d:** ***Removed in Final EIR. Not required for Mitigated Alternative as previously proposed lakes are not included in the Mitigated Alternative.***		
Impact 3.8.2: The Project could potentially decrease groundwater supplies.	None required.	LS	LS
Impact 3.8.3: The Project could increase risk of flood hazards or provide sources of polluted runoff.	None required.	LS	LS
3.9 LAND USE, PLANNING AND AGRICULTURE			
Impact 3.9.1: The Project would conform to the ECAP and Agricultural Zoning Land Use Designation Requirements.	None required.	LS	LS
Impact 3.9.2: The Project would result in a loss of Agricultural Land.	None required.	LS	LS
Impact 3.9.3: The Project would conflict with Alameda County General Plan and ECAP Policies.	None required.	LS	LS
3.10 NOISE			
Impact 3.10.1: Construction and operation of the Project could increase noise levels at sensitive off-site residential receptors.	None required.	LS	LS
3.11 TRANSPORTATION			
Impact 3.11.1: The Project would generate vehicle miles travelled (VMT) that could conflict or be inconsistent with State CEQA *Guidelines* §15064.3, subdivision (b).	None required.	LS	LS

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

TABLE 1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES (Continued)

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.11 TRANSPORTATION (cont.)			
Impact 3.11.2: The Project could conflict with the City of Livermore General Plan for a connector road to Redwood Road and Springtown Boulevard and the plans for a Private High School north of the Project Site.	None required.	LS	LS
Impact 3.11.3: The Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	None required.	LS	LS
3.12 PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS			
Impact 3.12.1: The Project could require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, which could cause significant environmental effects.	None required.	LS	LS
Impact 3.12.2: The Project could have water demands greater than water supplies.	None required.	LS	LS
Impact 3.12.3: The Project could have an impact on a wastewater treatment provider.	None required.	LS	LS
Impact 3.12.4: The Project could generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure and would comply with federal, state and local management statutes and regulations related to solid waste.	None required.	LS	LS
3.13 ENERGY			
Impact 3.13.1: Project construction or operation could result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.	None required.	LS	LS
Impact 3.13.2: The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	None required.	LS	LS

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

CHAPTER 2
LIST OF PERSONS COMMENTING

A. WRITTEN COMMENTS

A list of persons that provided written comments on the Draft EIR is provided in **Table C&R-1**.

TABLE C&R-1. LIST OF WRITTEN COMMENTERS ON THE DRAFT EIR

Letter ID	Agency/Company	Commenter
A	California Department of Transportation	Mark Leong
B	California Department of Fish and Wildlife	Erin Chappell
C	San Francisco Bay Regional Water Quality Control Board	Brian Wines
D	Zone 7 Water Agency	Elke Rank
E	Alameda County Department of Environmental Health	Tyler Hinson
F	City of Livermore	Steve Stewart
G	Mission Peak Conservancy	Kelly Abreu
H	Friends of Livermore	David Rounds
I	Friends of Open Space and Vineyards	Tamara Reus
J	Magen David Memorial Gardens	Ron Kahn
K	Individual	David Grossbaum
L	Individual	Donna Cabanne
M	Individual	Donna Cabanne
N	Individual	Jean King

B. ORAL COMMENTS

A list of persons that provided oral comments on the Draft EIR during the public meeting on February 7, 2022, is provided in **Table C&R-2**.

TABLE C&R-2. LIST OF ORAL COMMENTERS ON THE DRAFT EIR

Commenter ID	Commenter
1	Jeffrey Moore, Planning Commissioner
2	Dimitris Kastriolis, Planning Commissioner
3	Andy Kelley, Planning Commissioner
4	Larry Ratto, Planning Commissioner
5	Marc Crawford, Planning Commissioner
6	Ron Kahn, Applicant
7	Jean King
8	Rabbi Raleigh Reznik
9	Mike Frederick
10	Kelly Abreu, Mission Peak Conservancy

CHAPTER 3
COMMENTS AND RESPONSES

A. INTRODUCTION TO THE COMMENTS AND RESPONSES

This chapter includes copies of the comment letters received regarding the Draft EIR that was published January 13, 2022. Fourteen written comments were received by February 28, 2022, and a resubmitted comment from the City of Livermore was received after the comment deadline, on April 29, 2022. Oral testimony was received during the public meeting on February 7, 2022. Each comment letter is followed by responses to the comments. The responses emphasize issues related to the adequacy of the Draft EIR in identifying and analyzing the possible environmental impacts of the Project and possible approaches for avoiding or mitigating these impacts. These comments will be considered by decision-makers as they decide whether to certify the EIR and approve the Project. Each written comment letter is assigned a corresponding letter of the alphabet and the written comments are shown with numbered brackets which correlate to responses to the comments immediately following each written comment letter. Each oral comment is numerically assigned a corresponding number and are shown with numbered brackets that correlate to the responses to the oral comments.

B. MASTER RESPONSES

MASTER RESPONSE 1: MITIGATED ALTERNATIVE

Several comments contend that the lakes cause significant hydrology impacts (Comments D-2, D-5, L-11, H-16, I-16, M-1, M-2, M-9, M-10). Other comments contend that the lakes cause significant biological impacts (Comments B-13, C-11, H-9, I-16, M-6). Comment H-10 notes that the Draft EIR did not address Project consequences of the absence of lakes if they would not be developed. After review of the comments, the Lead Agency has proposed an alternative that would meet most of the basic objectives of the applicant and include features discussed in the comments from the commenting agencies, organizations and individuals. This alternative will be referred to as the "Mitigated Alternative" and includes features from the Project Description and other alternatives. State CEQA *Guidelines* §15126.6(a) require an evaluation of comparative effects of a range of reasonable alternatives to a project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. The Mitigated Alternative site plan is shown in **Figure FEIR-1**. The County has determined that the preferred Project is the Mitigated Project Alternative site plan. The Mitigated Alternative removes the concerns about the lakes (the upper and lower lakes and man-made perennial creek that connected the lakes; see **Figure 2-2** in the Draft EIR), as these primary water features have been removed. Comment C-8 requested that the walkway transiting the mitigation wetlands be designed to avoid the mitigation wetlands. To address this concern, the

walkway is removed in the Mitigated Alternative. **Figure FEIR-2** shows the location of the wetlands in relation to the Mitigated Alternative site plan. The County considers the Mitigated Alternative the environmentally superior alternative and recommends it be adopted as the Project.

Alternative Description

The Mitigated Alternative would include all applicable mitigation measures identified in the Draft EIR, would eliminate, or alter aspects of the proposed Project that would have the greatest likelihood of causing significant impacts, and would include other, beneficial project components not contained in the proposed Project (the applicant's original proposal evaluated in the Draft EIR). The description of the Mitigated Alternative follows.

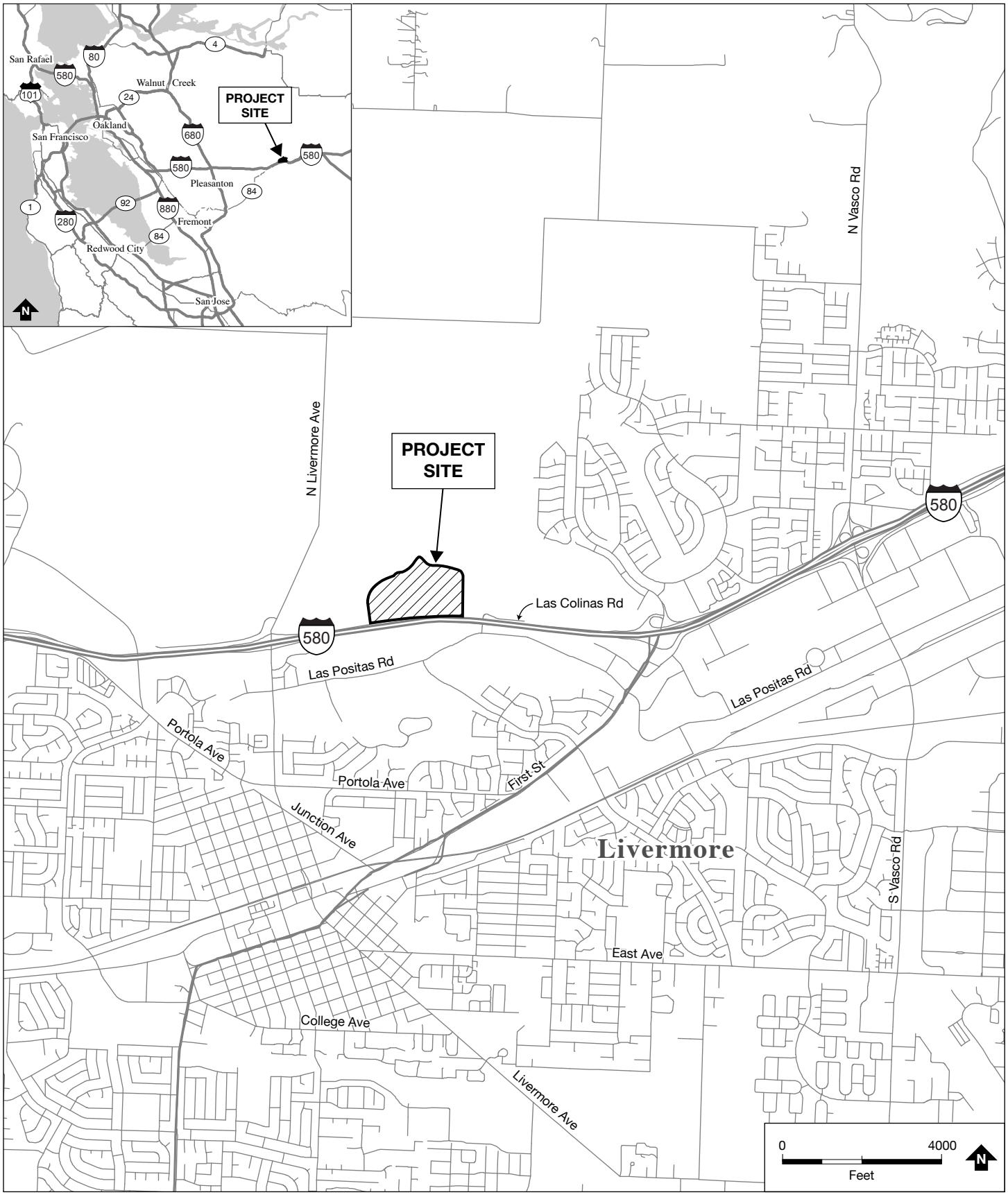
The upper and lower lakes and connecting man-made perennial creek would not be developed and landscaping areas would be reduced to include as much interment area as possible to support the Project objectives. The Mitigated Alternative would not substantially alter the Project footprint. Phase I of the Project would be developed identically to the Project, with a funeral home and entry plaza, single-story pavilion building, access road, parking lot, two interment areas (burial lots), and landscaping. Phase II of the Project would reduce landscaped areas to include more interment area and remove the lakes and man-made perennial creek as stated above.

The landscaping and irrigation of the Project would be more sensitive to current water conditions to further conserve water. All planting would be irrigated with an automatic water conserving irrigation system in compliance with the County of Alameda and State of California water efficient landscape ordinance, a statewide water conservation law for new and renovated landscapes and ordinance for Alameda County[1]. To minimize the inefficient use of water, the Project landscaping would use drought tolerant and low water use plants for the largest landscaped areas. Furthermore, to protect against overwatering, the landscaping would include irrigation plans and water scheduling that groups plants with similar water needs based upon specific plant water use requirements.

Daily, monthly, and annual water usage estimates were prepared for the Mitigated Alternative by RMA Irrigation and added as **Appendix J** of the Final EIR. The analysis determined that the Mitigated Alternative would substantially reduce total water usage through the removal of the lakes and man-made perennial creek and the use of advanced landscaping techniques and native vegetation. Page 3.12-6 of the Draft notes that water usage of the Project would be 241 acre-feet (AF) per year. The Mitigated Alternative would reduce this annual water usage to approximately 86 AF per year at full build-out of Phase II (1.3 AF per year from Phase I and 84.5 AF per year from the full buildout of Phase II).

The 2.6 acres of wetland surge area (wetlands buffer area) west of Arroyo Las Positas would be avoided and would be able to receive surface level runoff in very large storm events. The wetland surge area would not eliminate the existing seasonal wetlands (identified in the Draft EIR, Appendix D, page 12), but would be a buffer area adjacent to the existing seasonal wetlands in this area. As discussed above, the walkway transiting the mitigation wetlands area would be removed in the Mitigated Alternative.

[1] http://www.acgov.org/cda/planning/landuseprojects/welo_ordinance.htm



Source: RCH Group 2021

Figure 1
Regional Location

Source: Camp & Camp Associates, 2022

Figure 2
Mitigated Alternative Site Plan

The removal of the lakes would result in a lower water retention level at the Project Site and the loss of the 10.04 AF additional stormwater detention capacity from the proposed lower lake. The proposed stormwater drainage and infrastructure (including a lower retention basin) for the Mitigated Alternative would capture post-development peak runoff to ensure it would not exceed pre-development peak runoff and reduce/eliminate hydromodification impacts to Arroyo Las Positas.

MASTER RESPONSE 2: CONSISTENCY WITH CITY OF LIVERMORE POLICIES

Several comments claim that the Project is inconsistent with the City of Livermore Urban Growth Boundary Initiative (UGB Initiative) and the City of Livermore Scenic Corridor Policy. Other comments contend that the environmental analysis understates or does not accurately display scenic resource impacts (comments F-9, F-10, F-11, F-12, F-15, L-1, M-17, M-18, M-20).

A primary purpose of the UGB Initiative is to preserve open spaces from intensive, urban, nonagricultural development. The MVMG Cemetery Project would cluster buildings together to preserve most of the Project site for the cemetery burial areas and adjacent open space. Cemeteries are classified as a Conditionally Permitted Use in Agricultural Districts under Alameda County Zoning Ordinance Section 17.06.35. This is the only zoning district within unincorporated Alameda County that allows cemeteries with a Conditional Use Permit. Furthermore, the Project is abutting, but outside of the City of Livermore Urban Growth Boundary and is not subject to the City's General Plan and zoning, but rather to the Alameda County General Plan. Therefore, the impact analyses in the Draft EIR focus on conformance with the County's plans, policies, and zoning. However, for thoroughness of analysis the Draft EIR and this master response assess consistency with the UGB Initiative and the City of Livermore Scenic Corridor Policy.

The City of Livermore General Plan establishes permissible land uses for property within the City limits, as well as for property surrounding the city, in case such property is ever annexed to the City. County Measure D was enacted to protect open space lands outside of the urban areas, including agriculture. The UGB Initiative was enacted to ensure that the lands outside of the City of Livermore Urban Growth Boundary would retain their County Measure D protections if they are annexed to the City of Livermore. The Project site is zoned as an agricultural district and cemeteries are a conditional use in agricultural districts with a Conditional Use Permit.

City of Livermore Urban Growth Boundary Initiative

Project Size

In Comment F-3 the City of Livermore determines that the Project exceeds the 20-acre cemetery size limit set forth in the UGB Initiative. The Draft EIR acknowledges that the Project footprint would exceed the 20-acre limit established for North Livermore in the UGB Initiative, and the Draft EIR includes an alternative that would be consistent with this limit as indicated by page 5.6 of the Draft EIR:

> "The Reduced Project Footprint Alternative would limit the Project site to 20 acres, which is consistent with the North Livermore Urban Growth Boundary Initiative."

Development Envelope

The City of Livermore determined that the Project appears to be consistent with the 2-acre development envelope provision of the UGB (comment F-4).

The UGB Initiative does not prohibit public facilities or other infrastructure that have no excessive growth-inducing effect on the East County area and have permit conditions to ensure that no service can be provided beyond that consistent with development allowed by the UGB Initiative. The Project does not have a growth inducing effect on the East County area and if granted a CUP would be consistent with the zoning.

Maximum Floor Area

Comment F-5 is noted, the maximum aggregate floor area for all floors in buildings on a parcel may not exceed 1 percent of the parcel's area or 20,000 square feet, whichever is less. According to Draft EIR Table 2-2, Building Specifications, the total building area will be approximately 19,623 square feet. Therefore, the Project is consistent with this provision in the Initiative.

In Comment F-5, the City of Livermore determined that the Project appears to be consistent with the floor area ratio provision of the UGB Initiative.

Scenic Corridor Policy

Comments F9, F-10, F-11, F-12, F-15, L-1, M-17, M-18, M-20 partially or fully center around scenic resource concerns. Most of the Project Site is within Scenic Corridor Zone I, which limits grading to areas of 10 percent slope or less within 2,000 feet of the I-580 center line. As noted above, the Project is not required to comply with City of Livermore policies, including the grading policies associated with the I-580 Scenic Corridor. Regardless, the graded areas of the Project are consistent with the 10 percent slope limitation. Comment F-12 expresses concern that the Project would obscure views of Arroyo Las Positas from I-580, contrary to Goal CC-4 of the City's General Plan Community Character element. While the Project is not required to comply with the City's General Plan, this response addresses those concerns.

To show views from I-580, additional simulations have been added (**Figures FEIR-3** and **FEIR-4**), which show that from both eastbound and westbound I-580, the Project buildings would partially block some of the views of the surrounding hillsides but not the ridgelines.

The existing views of the Arroyo from I-580 at this location are minimal and fleeting at highway speeds. The Arroyo is not visible from eastbound I-580 because it is below the level of the roadway. The Project site is visible from eastbound I-580 for approximately 30 seconds. Views from westbound I-580 are also fleeting and the Project site is visible for approximately 17 seconds because views that are not immediately adjacent to the Project site are blocked by overpasses and intervening topography. The views of Arroyo Las Positas are close views that pass quickly rather than distant views that would be visible for longer times from passing vehicles. The buildings and trees of Phase I would partially block part of the view of` the Arroyo, but this impact would not be significant. Furthermore, the Projects visual impacts along the I-580 Scenic Corridor and with respect to scenic ridgelines are addressed in the discussion of Impact 3.1.1, on page 3.1-9 of the Draft EIR and shown visually on **Figure 3.1-4**.

Existing View

Proposed View

Source: RCH Group, 2022

Figure FEIR-3
I-580 Eastbound Photosimulation

Existing View

Proposed View

Source: RCH Group, 2022

Figure FEIR-4
I-580 Westbound Photosimulation

MASTER RESPONSE 3: ALAMEDA COUNTY ZONING, EAST COUNTY AREA PLAN AND MEASURE D

Some comments contend that the Project is inconsistent with provisions in Alameda County Measure D (Measure D) of the East County Area Plan (ECAP). These comments partially or primarily center around the contention that the Project is inconsistent with Measure D land use restrictions (written comments H-1, H-17, H-18, H-19, I-3, I-4, I-5, I-6, I-7, I-8, I-9, I-10, L-1, M-16, M-17, M-18, M-19, M-20, and verbal comments 7-2 and 9-1). The ECAP land use restrictions are described on page 3.9-2 of the Draft EIR. Some comments focus upon the 2-acre development envelope provision of County Measure D (comments H-18, H-19, I-5, I-6, I-7, I-8, I-9, M-19).

County Zoning Considerations

The existing zoning of the Project Site is "A" Agricultural, which is defined by Zoning Ordinance Section 17.06.010, as follows:

> "Established to promote implementation of general plan land use proposals for agricultural and other nonurban uses, to conserve and protect existing agricultural uses, and to provide space for and encourage such uses in places where more intensive development is not desirable or necessary for the general welfare."

Cemeteries are classified as a Conditionally Permitted Use in Agricultural Districts under Zoning Ordinance Section 17.06.35 as follows:

> "17.06.035 – Conditional Uses – Planning Commission.
>
> The following are conditional uses and shall be permitted in an A district only if approved by the planning commission, sitting as a board of zoning adjustments, as provided in Section 17.54.135 and 17.06.010:
>
> Sanitary landfill not to include processing salvaged material;
>
> Flight strip;
>
> Cemetery;
>
> Composting facility."

This is the only zoning district within unincorporated Alameda County where cemeteries are permitted with a Conditional Use Permit. Therefore, even though cemeteries are not explicitly referenced as permitted in agriculturally designated lands in the ECAP, they are included as such uses in the zoning ordinance, which implements the ECAP, which implements land use restrictions in Measure D. The proposed structures and infrastructure on the site are associated with the cemetery use, so the EIR considers those part of the overall cemetery land use. Policies in a General Plan reflect a range of competing interests, and the County must be allowed to weigh and balance the General Plan's policies when applying them. A final determination as to whether buildings associated with the cemetery uses conform with Measure D land use goals and restrictions would be made by the County Planning Commission upon consideration of Project approval and, if appealed, by the Board of Supervisors. The County has approved other cemeteries under similar land use conditions.

Measure D and the ECAP

The primary purpose of Measure D is to preserve open spaces from intensive, urban, nonagricultural development. The MVMG Cemetery Project would cluster buildings together to preserve the open space. The Project is abutting, but outside of the City of Livermore's Urban Growth Boundary and is not subject to the City's General Plan and zoning, but rather to the Alameda County General Plan. There is not an independent requirement for consistency with Measure D. The Draft EIR evaluates consistency of the Project with the General Plan and Zoning Ordinance, including those changes made by Measure D.

Description and assessment of the Alameda County General Plan and ECAP policies (including Measure D) is provided in Section 3.1 of the Draft EIR, as applicable to the Project Site's aesthetic impacts, including ECAP policies 105, 106, 107, 108, 112, 114, 115, 116, 117, 118, 119, and 120. Section 3.9 of the Draft EIR provides General Plan and Zoning Ordinance consistency analysis and describes and assesses ECAP policies (including Measure D) that are applicable to the land use of the Project Site including ECAP policies 71, 74, and 79. **Table 3.9-1** of the Draft EIR addresses specific land use policy compliance of the project. As noted on page 3.9-1 of the Draft EIR:

> "The parcel that includes the Project site is designated as Large Parcel Agriculture (LPA) in the East County Area Plan (ECAP). According to the Alameda County Zoning Map, the entire parcel is zoned "A" Agricultural (Alameda County, 2021a)."

The ECAP discusses large parcel agricultural as follows:

> **"Large Parcel Agriculture** requires a minimum parcel size of 100 acres, except as provided in Programs 40 and 41. The maximum building intensity for non-residential buildings shall be .01 FAR (floor area ratio) but not less than 20,000 square feet. Where permitted, greenhouses shall have a maximum intensity of .025. One single family home per parcel is allowed provided that all other County standards are met for adequate road access, sewer and water facilities, building envelope location, visual protection, and public services. Residential and residential accessory buildings shall have a maximum floor space of 12,000 square feet. Additional residential units may be allowed if they are occupied by farm employees required to reside on-site. Apart from infrastructure under Policy 13, all buildings shall be located on a contiguous development envelope not to exceed 2 acres except they may be located outside the envelope if necessary for security reasons or, if structures for agricultural use, necessary for agricultural use. Subject to the provisions of the Initiative, this designation permits agricultural uses, agricultural processing facilities (for example wineries, olive presses), limited agricultural support service uses (for example animal feed facilities, silos, stables, and feed stores), secondary residential units, visitor-serving commercial facilities (by way of illustration, tasting rooms, fruit stands, bed and breakfast inns), recreational uses, public and quasi-public uses, solid waste landfills and related waste management facilities, quarries, windfarms and related facilities, utility corridors, and similar uses compatible with agriculture. Different provisions may apply in the South Livermore Valley Plan Area, or in the North Livermore Intensive Agriculture Area."

The funeral home and pavilion buildings would be contiguous and cover approximately one acre of land on the Project site. Therefore, Phase 1 developments would be consistent with the 2-acre development envelope provision of Measure D.

The mausoleum and columbarium are not buildings as they would not house people, equipment, have electricity, or have water service. They are free standing structures for urns and ashes and would be built into walls that would be approximately 6 feet high (Kahn, 2022). Because they are not buildings, but adjunct structures built into landscape features that support the cemetery, the mausoleum and columbarium would not be subject to the 2-acre development envelope provision of the ECAP.

Areas of Special Environmental Concern

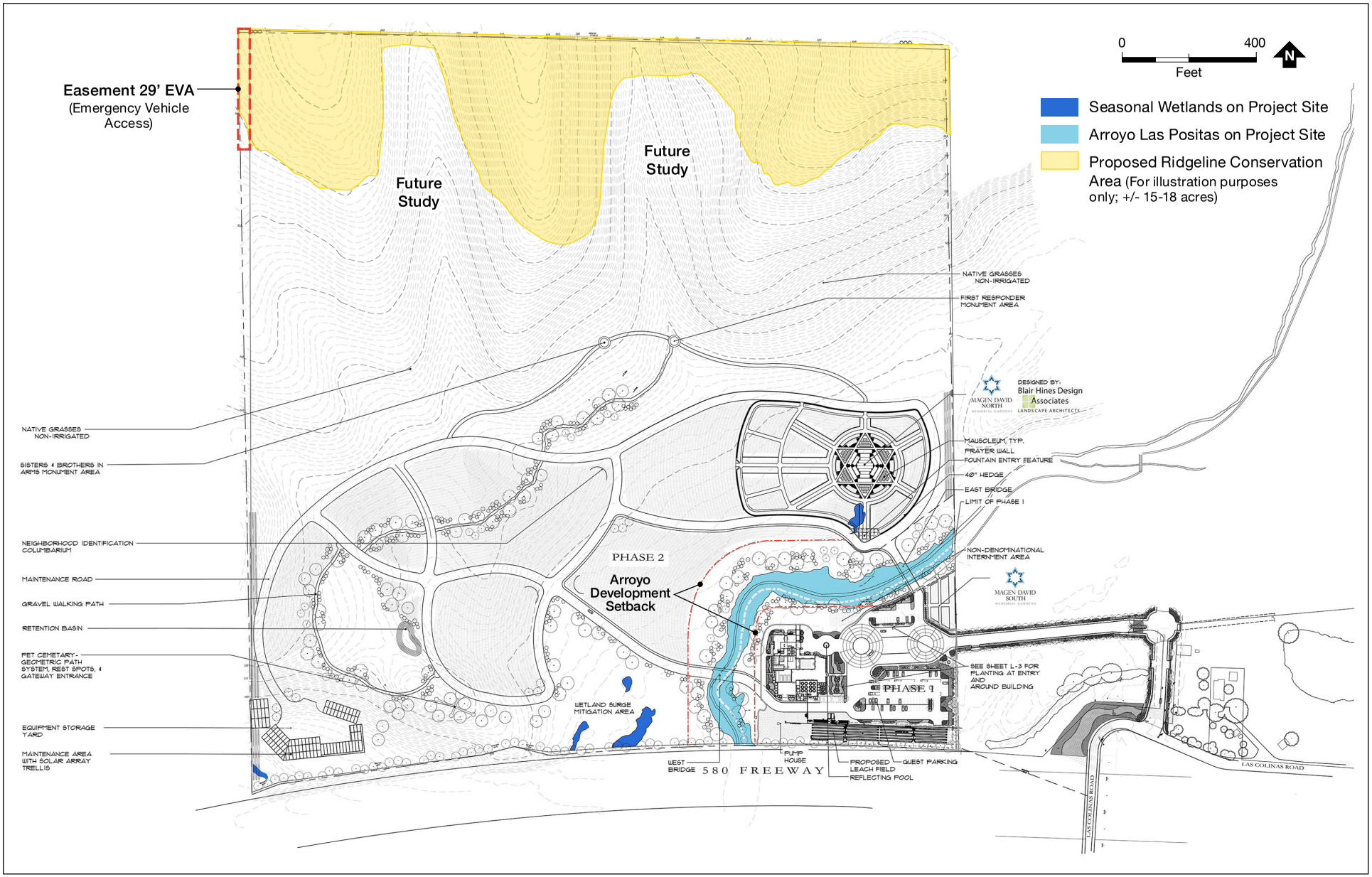
As indicated in Comment F-8, the City of Livermore recommends the Project comply with minimization, mitigation, and avoidance protocols identified in the East Alameda County Conservation Strategy (EACCS). The EACCS is a voluntary conservation strategy and is not an adopted or approved plan that requires a consistency determination under CEQA. All conservation on private lands is voluntary. As such, the Project site is not located within an adopted habitat conservation plan or natural community conservation plan area. Regardless, the mitigation measures set forth in this EIR are consistent with the EACCS guidance. Furthermore, as indicated on page 2-3 of the Draft EIR, outside of the Phase I and Phase II areas, the Project applicant would volunteer dedication of ridgetop open space conservation land. Currently the applicant's proposed plan is to volunteer up to approximately 15-18 acres for ridgeline preservation. **Figure FEIR-5** shows the three ridgeline preservation areas.

MASTER RESPONSE 4: BIOLOGICAL RESOURCES

Several comments were submitted on various topics related to biological resources. The topics included (1) lakes as an attractive nuisance for predators, (2) need for more detail on the wetland delineations and request for wetland delineations during a normal water year, and (3) concerns about special status species protection and habitat.

Removal of Proposed Lakes

Comments B-13, C-11, H-9, H-16 and I-16 identify concerns that the lakes would be an attractive nuisance for threatened amphibian species that could occur on the Project site. The comments note that the lakes could attract predator species such as the American bullfrogs (*Lithobates catesbeianus*), and human introduced species such as the red-eared sliders (*Trachemys scripta elegans*), goldfish (*Carassius auratus*) and pond koi. Comment B-13 notes several concerns regarding the artificial lakes proposed by the Project, and negative (nuisance) impacts to habitat or potential habitat for special status species including California tiger salamanders (*Ambystoma californiense*) and California red-legged frogs (*Rana draytonii*). While no sensitive species have been identified at the Project site, to address these concerns, the County has proposed a Mitigated Alternative that removes the permanent lakes and man-made perennial creek from the Project (see Master Response 1).



Source: Camp & Camp Associates; RCH, 2022

Figure FEIR-5
Proposed Ridgeline Conservation Area

RCH GROUP
planning & environmental consulting

Wetland Delineation

Comments C-12 through C-18 from the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) identify several concerns about the wetland delineation, that the comment assumed was conducted in October 2020. October 2020 was the end of the dry season in a drought year and some of the comments called for a follow-up wet-season delineation. However, the wetland delineation summarized in the Draft EIR was conducted on December 12, 2018 during a normal wet season. The field data sheets for the wetland delineation and supporting meteorological data have been added as **Appendix K** to the Final EIR. As indicated in the comments, a wetland delineation conducted late in the wet season of a year with normal rainfall ensures that the full extent of wetlands subject to regulation as waters of the State have been identified. The rainfall scenario was ideal in 2018 with above average rainfall in November 2018, and near average rainfall in December. Considering this, the December 12, 2018 delineation should ensure that the full extent of wetlands have been identified. Furthermore, the identified wetlands are all in the Phase 2 area that will not be developed for at least 5 years, that includes time for wetland permitting for any wetlands affected by the final Phase 2 design.

Seasonal Wetlands and Special Status Species

Comments C-29, C-30, C-31, F-7, H-5, I-16, M6 and M-21 identify concerns about special status species protection and habitat. As noted in the Draft EIR, there is no critical habitat mapped within the Project site (see **Figure 3.3-5** of the Draft EIR). While there is critical habitat for California red-legged frog, the California tiger salamander and the vernal pool fairy shrimp within five miles, the on-site studies have not identified any special status species on the Project site on Phase I or Phase II. Phase I of the Project does not include any habitat for special status species. Both Phase I and Phase II are constrained in providing sensitive species habitat because of the I-580 freeway barrier to the south that precludes immigration or emigration of wildlife to or from the south. The hills to the north and residential development to the east also represent barriers to the dispersal of special species of concern.

As identified in Response to Comment B-1, the Phase I development area is a highly disturbed once agricultural field that has been regularly disked over the past decade. While the Phase I area has no effective wildlife habitat, pre-construction surveys, animal exclusion fencing, and on-site construction monitoring should ensure there would be no incidental take of listed species. Phase I would avoid construction near the identified seasonal wetlands on the Phase II area and would avoid construction in Arroyo Las Positas.

The Phase II development, anticipated to occur five or more years after completion of Phase I, plans to avoid all existing seasonal wetlands on-site that could be considered habitat for listed species and would otherwise implement EIR mitigation measures to avoid any adverse impacts to listed species. As seen on **Figure FEIR-2** there is one isolated seasonal wetland immediately south of the Magen David area of Phase II. Final design of Phase II, with all permitting consideration, may require redesign of the roads to avoid this wetland or compliance with Mitigation Measure 3.3.3b if this wetland is filled or otherwise affected to require mitigation. The other seasonal wetlands on the southern portion of Phase II will be buffered and protected by the wetland surge mitigation area, as shown on **Figure FEIR-2**. This wetland surge area is not a new

wetland created during Project development; the Project would not develop the area next to the existing wetlands on the Project site and it would be filled naturally by rainfall. This wetland surge area would be an undeveloped buffer area around the existing wetlands.

_____

C. WRITTEN COMMENTS AND RESPONSES

Fourteen written comments were received by February 28, 2022, and a resubmitted comment from the City of Livermore was received after the comment deadline, on April 29, 2022. Each written comment letter is assigned a corresponding letter of the alphabet and the written comments are shown with numbered brackets which correlate to responses immediately following each written comment letter.

Letter A

California Department of Transportation

DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

February 25, 2022

SCH #: 2020069045
GTS #: 04-ALA-2020-00627
GTS ID: 19842
Co/Rt/Pm: ALA/580/11.45

Albert V. Lopez, Planning Director
County of Alameda
224 W. Winton Avenue, Room 111
Hayward, CA 94544

Re: Monte Vista Memorial Gardens – Draft Environmental Impact Report (DEIR)

Dear Albert V. Lopez:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the January 2022 Draft DEIR.

Project Understanding
The proposed project would include a funeral home with crematorium, burial lots, an entry plaza, internal roadways, parking, landscaping, and other associated infrastructure and improvement. This project is located directly adjacent to I-580.

Hydrology
The report does not include the analysis of the two proposed bridges across the regulatory floodway of Arroyo Las Positas with respect to how these bridges would impact the floodway. Bridge Hydraulic Analysis will be needed as the hydraulics analysis provided in this submittal only covers runoff from this project. 1

Construction-Related Impacts
Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, visit: https://dot.ca.gov/programs/traffic-operations/transportation-permits. 2

Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the State Transportation Network (STN). 2 cont.

Equitable Access
If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users. 3

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, or for future notifications and requests for review of new projects, please email LDR-D4@dot.ca.gov.

Sincerely,

Mark Leong

MARK LEONG
District Branch Chief
Local Development Review

c: State Clearinghouse

RESPONSES TO COMMENT LETTER A

Response to Comment A-1

Bridge foundation construction recommendations can be found on pages 27 through 31 of the Appendix F of the Draft EIR. The bridges would provide freeboard of at least one foot above the 500-year flood plain and thus would not impact the floodway.

Response to Comment A-2

Caltrans permit requirements for movement of oversized or excessive load vehicles are noted and would be considered during Project construction planning. Prior to construction Caltrans would be engaged for consultation and, if required, a Transportation Management Plan (TMP) would be prepared in coordination with Caltrans.

Response to Comment A-3

American Disabilities Requirements are noted and would be incorporated into the final Project design. Construction of the Project would not impede existing bicycle and pedestrian access. The County Road that would be used as access to the Project site is not currently used by pedestrians or bikes, so construction would not affect bicycle or pedestrian access.

Letter B

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

February 24, 2022

Albert Lopez, Planning Director
Alameda County Community Development Agency
224 W. Winton Avenue, Room 111
Hayward, CA 94544
Albert.lopez@acgov.org

Subject: Monte Vista Memorial Gardens Project Conditional Use Permit (PLN 2017-00194), Draft Environmental Impact Report, SCH No. 2020069045, City of Livermore, Alameda County

Dear Mr. Lopez:

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Environmental Impact Report (DEIR) for Monte Vista Memorial Gardens Project Conditional Use Permit (PLN 2017-00194) (Project). The Project includes construction of a funeral home with crematorium, internment area (burial lots), an entry plaza, internal roadways, parking, landscaping, new wetlands, lakes, and other associated infrastructure and improvements. The purpose of the DEIR is to evaluate the specific environmental effects of the Project.

CDFW submitted comments, dated July 21, 2020, on the Notice of Preparation (NOP) to inform Alameda County, as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project. CDFW is providing these comments on the DEIR and recommendations regarding those activities involved in the Project that are within CDFW's area of expertise and relevant to its statutory responsibilities (Fish & G. Code, § 1802), and/or which are required to be approved by CDFW (CEQA Guidelines, §§ 15086, 15096 & 15204).

CDFW ROLE

CDFW is a **Trustee Agency** with responsibility under the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

Letter B

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA Permit must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit. 1

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c), 21083; CEQA Guidelines, §§ 15380, 15064, & 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code section 2080. 2

Lake and Streambed Alteration

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et. seq., for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW will consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement (or Incidental Take Permit (ITP)) until it has complied with CEQA as a Responsible Agency. 3

PROJECT DESCRIPTION SUMMARY

Proponent: Monte Vista Memorial Investment Group, LLC (MVMIG)

Description and Location: The Project is located at 3656 Las Colinas Road, Livermore, CA in unincorporated Alameda County. Development of the Project would occur on approximately 47 acres in the southern portion of the ±104-acre parcel (Assessor's Parcel Number 099-0015-016-03) just north of the City of Livermore between the North Livermore Avenue and North First Street exits. The Project site topography consists of a relatively flat lowland valley area to the southeast and gently 4

sloping hills and valleys to the north and west. The valleys in the western portion of the Project site drain toward Arroyo Las Positas, which flows in a southwesterly direction.

The property bordering the Project site to the east of Arroyo Las Positas supports an existing residence and several roadways, while the area west of Arroyo Las Positas is undeveloped and is currently used for grazing and farming. The Project site is accessed on the southeastern corner of the property from Las Colinas Road that connects with Las Positas Road (south of Interstate 580 (I-580)). North of I-580, legally recorded easements provide access to the Project site via county roads.

The proposed Project includes a funeral home with crematorium, 24 acres of burial lots, an entry plaza, 6.8 acres of internal roadways and parking, 9.0 acres of landscaping, 2.9 acres of new wetlands, 2.5 acres of lakes, two bridges, and other associated infrastructure and improvements.

Phase I includes all development east of Arroyo Las Positas, and Phase II includes development west of Arroyo Las Positas. Once approved, the Phase I buildout of the Project would occur over approximately five years. Phase I development would be on the 6.8 acres of the Project site east of Arroyo Las Positas. Development on Phase I would include construction and operation of the funeral home and entry plaza, the single-story “Pavilion” building, the access road, the parking lot, two interment areas (burial lots), and landscaping.

4 cont.

Phase II development would be on the 40.3 acres of the Project site west of Arroyo Las Positas. Phase II buildout would occur over approximately 100 years. Development during Phase II would include construction and operation of the remaining interment areas (burial lots) and roads, new wetland features, lakes, and landscaping. The main cemetery with lakes, a flowing waterway, and monuments to the west of Arroyo Las Positas, would be accessed from the funeral home via two 24-foot-wide clear-span bridges designed for both pedestrian and vehicle use. These bridges would provide freeboard of at least one foot above the 500-year floodplain.

Phase II includes two proposed “lakes” or ponds connected by a perennial linear waterway (i.e., creek) that would be the primary landscape feature of the cemetery. A proposed wetland feature is also planned on the south side of the cemetery grounds near the southern property boundary on the north side of I-580. The burial area itself would have an extensive sub-drainage system draining to the lower lake feature to maximize onsite water re-use. The two lakes would be connected by a man-made perennial creek that would drain from the upper lake to the lower lake. The water would be re-circulated back to the upper lake via by a water pump. During summer months, an on-site groundwater well would supplement water in the upper lake’s pool, and during winter months the lakes would capture precipitation as surface water runoff from the remainder of the Project site west of the creek.

The Project site and the adjacent private property have had several violations caused by the MVMIG's representative over the past 8 years including a Notice of Violation (NOV) letter issued by CDFW and dated September 29, 2015 regarding the unlawful fill of wetlands and habitat for special-status species. CDFW recommends the EIR include a condition that all violations be resolved and cleared prior to Project approval. 4 cont.

COMMENTS AND RECOMMENDATIONS

CDFW offers the below comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

General Comments

The DEIR does not address the remaining 57 acres of the Property. Please note, Project study area is described in the DEIR as 103 acres although the property is 104 acres. In an October 6, 2020 conference call with CDFW staff Marcia Grefsrud, a representative of the Project stated the undeveloped annual grassland area was proposed to be converted to vineyard. If the remainder of the Project site will be converted to vineyards, this conversion should be fully disclosed and the impacts analyzed as part of the DEIR. The DEIR also states Phase II would be developed in subphases and build-out would occur over approximately 100 years, but the DEIR isn't clear on the timing of construction activities such as initial ground disturbing and site preparation, creation of aquatic features and landscaping. The DEIR should provide specific timing of Phase II development in order for CDFW to evaluate types of impacts (e.g., one-time initial impacts or sequential and cumulative on a temporal scale). The DEIR should then fully analyze all direct, indirect, and reasonably foreseeably impacts of future development activities on biological resources. 5

The DEIR, Appendix D Biological Resources and Wetland Assessment (BRWA) states "A Barnett Environmental biologist surveyed the Study Area in October 2020 for special status plant and wildlife species and their habitats that could be supported onsite." The term "Study Area" is not defined, but Figure 2 shows the Study Area includes 103 acres. The BRWA also does not provide details on number of site visits, staff, or methodology used in conducting any survey or delineation. This information should be provided in the BRWA. Please be advised that CDFW does not consider a one-day site visit as adequate to determine absence of any special-status species. 6

DEIR Section 2.7, Regulatory Requirements, Permits and Approvals, should state that the Project proponent will obtain state and federal incidental take permits prior to the start of construction. The County should also include a requirement that the Project proponent obtain a CESA ITP for each phase of the Project as a Condition of Approval of the Conditional Use Permit. 7

CDFW is concerned that the DEIR and Appendix D dismiss the potential for occurrence of 10 special-status plants based on lack of suitable habitat, such as saline soil habitat, alkali grasslands or alkali soil despite identifying salt grass flats in the southwestern portion of the Study Area. The DEIR, p. 3.3-18, and Appendix D Section 5.2 describes three special-status plants with a potential to occur but dismisses them because they were not observed during the October 2020 survey. The discussions for heartscale (*Atriplex cordulata*) and long-styled sand-spurrey (*Spergularia macrotheca* var. *longistyla*) state neither of these species were observed in "existing irrigation ditches during the field survey"; however, there are no irrigation ditches within the Study Area. Furthermore, as stated above in this letter, one site visit does not constitute a protocol-level survey and therefore does not confirm absence. CDFW recommends following guidance outlined in CDFW's *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities (March 2018)* https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959 . 8

The DEIR and Appendix D contain several errors regarding species status. For example, Appendix D states white-tailed kite (*Elanus leucurus*) is State threatened; however, it is also a State Fully Protected Species. Tricolored blackbird (*Agelaius tricolor*) is State listed as threatened, not endangered. Also, neither San Joaquin coachwhip (*Coluber flagellum* ssp. *ruddocki*) nor western pond turtle (*Emys marmorata*) are listed as federally or state threatened, but both are a State Species of Special Concern. 9

Streams and Wetlands

The DEIR p. 3.8-14 states that in addition to the proposed man-made lakes, the Project proposes to install a 2.6-acre seasonal wetland area west of Arroyo Las Positas along the southern boundary of the central portion of the Project site. Water in this wetland area would come from direct precipitation. The wetland would be designed to only receive supplemental surface runoff in the event of very large storm events, along with discharge from the lower lake during storm events. The water would be detained in this wetlands area and then discharged at 10-year and 100-year pre-development flows via a stabilized outfall structure into Arroyo Las Positas. The size of the proposed new wetlands is not clear; pp. ES-8, 2-13 and p. 3.8-14 state the wetland will be 2.6 acres, but Table 1, p.2-4 and Figure 2-2 states it will be 2.9 acres. The EIR should correct this discrepancy. 10

The DEIR and BRWA conflict regarding existing wetlands and streams on the Project site. The DEIR p. 3.8-7 states the "Phase II area of the Project site currently drains via surface runoff and shallow groundwater seepage via several ephemeral channels southward into Arroyo Las Positas." However, the BRWA, Table 1, does not include ephemeral streams and p. 10 states that the California Aquatic Resources Inventory (CARI) map, (Figure 3), "shows a number of other streams as well as a wide swath of vernal pools through the site" but the mapping "was not reflected by Barnett 11

Letter B

Environmental's (and earlier) wetland delineations of the site and clearly does not reflect current conditions." However, the Hydrologic Analysis, Appendix G, Figure 4, depicts what appear to be the same drainages as shown in the CARI map. These drainages appear to be at least a partial source of water to fill the proposed lakes. As mentioned above, work within ephemeral streams, and floodplains are subject to notification requirements pursuant to Fish and Game Code section 1600 et. seq. Construction of outfalls and bridges are also subject to the same notification requirements. The DEIR should analyze loss of the ephemeral drainages and potential for loss of vernal pools as depicted in the CARI map. CDFW recommends that the DEIR be revised to include an accurate description of all streams, drainages, wetlands and other waterbodies that could be impacted both directly and indirectly by the proposed Project, avoidance and minimization measures to offset those impacts and effective compensatory mitigation for all impacts that cannot be completely avoided. 11 cont.

In addition, the DEIR states the existing 2.1-acre of wetlands will not be impacted by the Project but, comparing Figure 3.3-4, Project Area Wetlands and Other Waters Of The U.S, to Figure ES-2 Site Plan shows SW-A no longer present (covered by roads and/or landscaping) and SW-B, SW-C, and SW-D replaced with a larger wetland bisected by a walkway. SW-E is not represented in the Site Plan and without a legend it is difficult to tell what the dark green dotting represents. The DEIR should be revised and provide a delineation conducted by a certified wetland delineator. 12

Construction of Lakes and Wetlands

The Project proposes to install artificial lakes and new wetlands. As noted in the CDFW NOP comment letter, artificial water bodies such as lakes, reservoirs, ornamental ponds, and bioretention basins can create an attractive nuisance for both the federally threatened and State Species of Special Concern California red-legged frog (*Rana draytonii*) and the federally and State threatened California tiger salamander (*Ambystoma californiense*). California tiger salamanders and California red-legged frogs have been documented to breed, or attempt to breed, in these aquatic features. This can result in amphibians becoming trapped or cause desiccation of eggs, larvae or adults. Conversely, the aquatic features could become suitable breeding habitat in an environment where the upland area no longer supports enough suitable habitat to maintain a viable population. Since California tiger salamanders rely on burrows constructed by fossorial mammals, as described above, the Project site will no longer provide suitable upland habitat post-construction. In addition, ornamental ponds, reservoirs and other perennial aquatic habitat can attract invasive non-native species such as American bullfrogs (*Lithobates catesbeianus*) as well as human introduced species such as red-eared sliders (*Trachemys scripta elegans*), goldfish (*Carassius auratus*) and pond koi. American bullfrogs present a significant threat to our native species such as California red-legged frog, California tiger salamander and western pond turtle through predation and resource competition. 13

Water Rights

Please be advised that capturing and storing surface water flow requires a water right. Riparian rights usually come with owning a parcel of land that is adjacent to a source of water. A riparian right entitles the landowner to use a correlative share of the water flowing past his or her property. Riparian rights do not require permits, licenses, or government approval, but they apply only to the water which would naturally flow in the stream. Riparian rights do not entitle a water use to divert water to storage in a reservoir for use in the dry season or to use water on land outside of the watershed.

All diverters of surface water, with certain exceptions, are required to file a Statement of Water Diversion and Use with the State Water Resources Control Board (SWRCB) (see Division 2 of Part 5.1 of the California Water Code). The requirement applies to water diverted under claim of riparian right and to appropriations initiated prior to December 19, 1914, the effective date of the California Water Commission Act. Small domestic use includes normal domestic use, plus incidental stockwatering of domestic animals and incidental irrigation of one-half acre or less of lawn, garden, and pasture at any single establishment, not exceeding 4,500 gallons per day by direct diversion or 10 acre-feet per annum by storage, the latter including incidental aesthetic, recreational, or fish and wildlife enhancement purposes. Refer to the SWRCB's booklet, “How to File an Application/ Registration to Appropriate Water in California” for specific information on filing for a permit or for registering a small domestic use appropriation. More information on water rights can be found here: https://www.waterboards.ca.gov/waterrights/publications_forms/forms/#:~:text=To%20access%20the%20online%20form,and%20return%20to%20complete%20later. 14

Anyone who intends to divert water from surface waters or subterranean streams flowing in known and definite channels, either (1) directly to use on land which is not riparian to the source, (2) to storage in a reservoir for later use on either riparian or non-riparian land, or (3) for direct use of water which would not naturally be in the source, should apply with the SWRCB for a permit or small domestic use registration as the first step toward securing an appropriative water right. Persons diverting water under riparian or pre-1914 claims of right, with certain exceptions, are required to file a Statement of Water Diversion and Use with the SWRCB.

The EIR should fully analyze all potential impacts of the diversion of surface water on flow downstream of the Project site in Arroyo Las Positas Creek. The EIR should also state that the Project proponent will notify CDFW, pursuant to Fish and Game Code section 1600 et. seq, regarding the diversion.

Western Pond Turtle

The DEIR and Appendix D state the western pond turtle has a low potential for occurrence given the "open grassland" on the Project site. However, the DEIR and Appendix D fails to mention two western pond turtle occurrences documented in the California Natural Diversity Database (CDFW 2022) in Arroyo Las Positas, less than 500 feet downstream of the Project site. In addition, Stebbins 2012 describes western pond turtle terrestrial habitat ranging from grassland and cropland to open forest. Basking sites include open bank areas, partially sunken logs, and emergent vegetation mats. In areas where pond turtles hibernate, they utilize the burrows of California ground squirrel (*Spermophilas beecheyi*) where the aquatic substrate is not appropriate for hibernation. Nests have been found over 328 feet (100 meters) from the water on hillsides. In a telemetry study conducted on western pond turtles (Rathbun *et al*. 1992), all six terrestrial locations where a radio-equipped female was found during the nesting season were in open, grassy areas with a southern exposure, which is typical for the species (Holland 1994). According to Holland (1994), nest distance from the watercourse ranges from as little as 9.8 feet (3 meters) to over 1,319 feet (402 meters) and hatchlings may remain in the nest over the winter and emerge in the spring. 15

Due to the proximity of documented western pond turtle occurrences to the Project site and presence of suitable nesting habitat within the Project footprint, CDFW recommends establishing a no-impact buffer of 1,400 feet from the top of the bank to the uplands on both sides of Arroyo Las Positas through the Project site.

East Alameda County Conservation Strategy

As discussed in the CDFW comment letter for the NOP, the Project site is located within the Conservation Zone 4 of the Eastern Alameda Conservation Strategy (EACCS). The EACCS mitigation guidance sections (Chapter 3) for grassland, California tiger salamander, western burrowing owl, California red-legged frog, San Joaquin kit fox, and American badger all include mitigation in the form of habitat conservation for the loss of species habitat when it cannot be avoided. 16

Several of the species potentially impacted by this Project are included as focal species in the EACCS, such as the California red-legged frog, California tiger salamander, western pond turtle, the federally endangered and State threatened San Joaquin kit fox (*Vulpes macrotis mutica*), western burrowing owl, and the State Species of Special concern American badger (*Taxidea taxus*). The EACCS mitigation guidance sections (Chapter 3), for grassland, California tiger salamander, western burrowing owl, California red-legged frog, San Joaquin kit fox, and American badger all include mitigation in the form of habitat conservation for the loss of species habitat when it cannot be avoided. To be consistent with the EACCS and to offset permanent habitat 17

Letter B

loss or conversion, the EIR should include permanent habitat conservation as an enforceable mitigation measure for these special-status species. 17 cont.

Pollinators

As noted in the CDFW NOP comment letter, urbanization continues to alter the landscape and changing habitats provide challenges for pollinators. It is more difficult for pollinators to thrive in areas where fewer nest sites and host plants are available, and artificial structures and traffic make foraging riskier and more difficult. The DEIR fails to include measures to increase use by pollinators such as preserving riparian areas, protecting native plant remnants and the planting of native species essential to the survival of bees and decrease use of herbicides and pesticides. The Project should be designed to optimize a balance between urban ornamental landscaping, drought resistant plants, and native plants. Bioswales can be planted with deep-rooted native flowers and grasses that capture and filter storm water, build topsoil, and provide abundant and healthy food for bees and other insects that provide critical services to our food and agricultural systems. CDFW recommends the EIR fully analyze the impacts of the Project on pollinators and include adequate and effective avoidance, minimization and mitigation measures. 18

DEIR Mitigation Measures

CEQA requires that, for each potentially significant impact identified in the DEIR, the CEQA document must discuss feasible measures or revisions in the proposed project made by, or agreed to by, the applicant to avoid or substantially reduce the project's significant environmental effects.

Under Cal. Code Regs. tit. 14 § 15370 “Mitigation” includes:

a) Avoiding the impact altogether by not taking a certain action or parts of an action.

b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

e) Compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements. 19

Mitigation Measure 3.3.1a: Pre-Construction Surveys

Mitigation Measure 3.3.1a: Pre-Construction Surveys, requires a qualified biologist to confirm presence or absence of species of special concern within two weeks of planned construction. CDFW considers this mitigation measure too vague and general. Depending on the time of year, some Species of Special Concern, such as western pond turtle, may be difficult to find during a pre-construction survey based on their life history and use of terrestrial habitat. The measure should provide details on number of surveys, methodology, timing, level of effort, and address the CEQA requirements listed above. 20

Mitigation Measure 3.3.1d: San Joaquin Coachwhip and other Special-Status Reptiles and Amphibians

Mitigation Measure 3.3.1d: San Joaquin Coachwhip and other Special-Status Reptiles and Amphibians, requires intensive surveys for reptiles (not amphibians) within 30 days prior to construction. Based on survey results an exclusion fence would be installed around the perimeter of the construction areas. If the temporary fencing is installed the site would be surveyed again for coachwhip and any special-status reptiles or amphibians encountered within the fenced area would be captured and trans-located by the qualified biologist to similar suitable habitat on the Project site, in areas not adversely affected by Project activities. It is unclear what is meant by “intensive surveys” and what would trigger the requirement to install temporary exclusion fencing. The measure should provide details on number of surveys, methodology, timing, level of effort, and address the CEQA measures listed above. As noted above, western pond turtles could be nesting or hibernating in the uplands. CDFW recommends that temporary exclusion fencing be installed around the perimeter of the Project site prior to ground disturbing activities and the site surveyed for special-status species, in accordance with the appropriate permits. 21

Mitigation Measure 3.3.1g: California Tiger Salamander

Mitigation Measure 3.3.1g: California Tiger Salamander, requires a qualified biologist to conduct presence/absence surveys prior to ground-disturbing activities and during construction during the species’ active/breeding season – starting October 15 or when rain occurs. This measure is unclear what is meant by “presence/absence”. CDFW considers Mitigation Measure 3.3.1g to be highly inadequate to detect California tiger salamander for several reasons. First, California tiger salamanders spend much of their lives in underground retreats, often in burrowing mammal (ground squirrel, pocket gopher, and other burrowing mammal) burrows (U.S. Fish and Wildlife Service (USFWS) 2004). California tiger salamanders are only known to be active on the surface of the terrestrial habitat 1) during juvenile dispersal into the uplands and adult breeding during fall and winter rain events and 2) when metamorphs emerge from the pond in the spring and summer (Searcy and Shaffer 2011). Salamanders migrate and 22

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disperse over land to and from breeding habitat. This is not a mass "one night" migration event but occurs over several months during both movement periods described above. Based on their life history, it is highly unlikely any salamanders would be found during a pre-construction survey, such as Mitigation Measure 3.3.1d, unless the surveys included actions such as, burrow excavation, pitfall traps and drift fencing over multiple seasons, as authorized under CESA. Further, immature salamanders may not migrate to a breeding pond and instead remain in the upland until they are sexually mature, which could be between 3-5 years, so they would be undetected even with a pitfall trap survey during the rainy season. Searcy and Shaffer 2011 used 15,212 capture events to estimate that 95% of California tiger salamanders are within 1867 meters (6125 feet) of their breeding pond. The Project site is within 1867 meters from at least four known or potential breeding ponds, so it is highly likely that California tiger salamanders are dispersed throughout the entire Project site. The DEIR should therefore assume presence of California tiger salamander over the entire Project site and the County should require, as a Condition of Approval, that the Project proponent obtain both federal and state take permits and provide compensatory mitigation for impacts to this species.

22 cont.

Mitigation Measure 3.3.1g also states mitigation could be achieved through the purchase of credits at a USFWS)\-approved mitigation bank or an in-lieu fee payment through the "Natural Resources Conservation District" and the Alameda County Conservation Partnership. CDFW considers this measure unclear and insufficient. Mitigation measures should include actions such as, preserving off-site habitat through either purchasing California tiger salamander habitat credits at a CDFW- approved conservation bank (see https://www.wildlife.ca.gov/Conservation/Planning/Banking/Approved-Banks), or by placing a conservation easement over lands providing habitat, including funding an endowment for managing the lands for the benefit of California tiger salamander in perpetuity, and preparation and implementation of a long-term management plan. There is no in-lieu fee program for California tiger salamander through the Natural Resources Conservation Service or the Alameda County Resource Conservation District. Further, in-lieu fee payments as contemplated in the DEIR would not meet the full mitigation threshold required by CESA.

23

Due to the potential presence of this CESA-listed species and the potential for Project-related take, including but not limited to, installation of exclusion fencing, grading, trenching, use of water trucks, and proposed construction of the lakes and wetlands, CDFW advises that the Project proponent obtain a CESA Permit (pursuant to Fish and Game Code Section 2080 et seq.) in advance of Project implementation. Issuance of a CESA Permit is subject to CEQA documentation; therefore, the CEQA document should specify impacts, mitigation measures, and fully describe a mitigation, monitoring and reporting program. Early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

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More information on the CESA permitting process can be found on the CDFW website at https://www.wildlife.ca.gov/Conservation/CESA. 24 cont.

Mitigation Measure 3.3.1j Burrowing Owl

CDFW considers Mitigation Measure 3.3.1j: Burrowing Owl confusing and recommends it be revised. The measure also appears to be referencing the "1995 Staff Report On Burrowing Owl Mitigation" which was replaced in 2012. As noted in our NOP comments, CDFW recommends that surveys be conducted following the methodology described in Appendix D: Breeding and Non-breeding Season Surveys of the 2012 CDFW Staff Report on Burrowing Owl Mitigation (Staff Report), which is available at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843.

Burrowing owl surveys should be conducted by a qualified CDFW-approved biologist. In accordance with the Staff Report, a minimum of four survey visits should be conducted within 500 feet of the Project area during the owl breeding season which is typically between February 1 and August 31. A minimum of three survey visits, at least three weeks apart, should be conducted during the peak nesting period, which is between April 15 and July 15, with at least one visit after June 15. Pre-construction surveys should be conducted no-less-than 14 days prior to the start of construction activities with a final survey conducted within 24 hours prior to ground disturbance.

Please be advised that CDFW does not consider exclusion of burrowing owls or "passive relocation" as a "take" avoidance, minimization or mitigation method, and considers exclusion as a significant impact. The long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of evicted or excluded owls is unknown. All possible avoidance and minimization measures should be considered before temporary or permanent exclusion and closure of burrows is implemented in order to avoid "take".

CDFW recommends the EIR include effective measures to avoid or minimize loss of burrowing owl foraging habitat, and mitigation for loss of breeding and foraging habitat that cannot be fully avoided. As described above, widespread burrowing mammal control as may be required in grassy areas such as cemeteries, may also pose threats to the burrowing owl. The East Alameda County Conservation Strategy Mitigation Guidance (p.3-66) for burrowing owl recommends mitigating the loss of habitat by protecting habitat in accordance with the mitigation guidelines outlined in Table 3-10 (BUOW-3) through acquiring parcels, through fee title purchase or conservation easement, where known nesting sites occur or where nesting sites have occurred in the previous three nesting seasons (BUOW-1 and BUOW-2). 25

Mitigation Measure 3.3.2 Special-Status Plants

Mitigation Measure 3.3.2 requires special-status plant species presence/absence surveys within areas proposed for grading or modification in accordance with *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities* (November 24, 2009. The current protocol, *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities* (March 2018), replaces the May 8, 2000 and the 2009 guidelines. While use of the protocols is not mandated under code or regulation, the purpose of the protocols is to facilitate a consistent and systematic approach to botanical field surveys and assessments of special status plants and sensitive natural communities so that reliable information is produced and the potential for locating special-status plants and sensitive natural communities is maximized; therefore, using the most recent version is highly recommended. Additionally, annual weather variance, including but not limited to the drought conditions may require the necessity for additional floristic surveys to be performed.

Botanical field surveys should be comprehensive over the entire Project area, including areas that will be directly or indirectly impacted by the Project. Adjoining properties should also be surveyed where direct or indirect Project effects could occur, such as those from fuel breaks, potential conversion of annual grassland to vineyard, herbicide application, invasive species, and altered hydrology. Surveys restricted to known locations of special-status plants may not identify all special-status plants and sensitive natural communities present, and therefore do not provide a sufficient level of information to determine potential impacts of the Project. 26

According to the referenced CDFW protocols, to meet adequate disclosure of potential impacts the following items should be included in the botanical survey reports prepared for the environmental review process.

1. A discussion of the potential for a false negative botanical field survey;
2. A discussion of how climatic conditions may have affected the botanical field survey results;
3. A discussion of how the timing of botanical field surveys may affect the comprehensiveness of botanical field surveys;
4. Any use of existing botanical field surveys and a discussion of their applicability to the Project;
5. The deposition locations of voucher specimens, if collected; and
6. A list of references used, including persons contacted and herbaria visited.

7. A discussion of the significance of special status plant populations in the project area considering nearby populations and total range and distribution;

8. A discussion of the significance of sensitive natural communities in the project area considering nearby occurrences and natural community distribution;

9. A discussion of project related direct, indirect, and cumulative impacts to special-status plants and sensitive natural communities;

10. A discussion of the degree and immediacy of all threats to special-status plants and sensitive natural communities, including those from invasive species;

11. A discussion of the degree of impact, if any, of the project on unoccupied, potential habitat for special-status plants; and

12. Recommended measures to avoid, minimize, or mitigate impacts to special-status plants and sensitive natural communities.

CDFW recommends that all reporting requirements in the CDFW protocols be disclosed in a more thorough impact analysis. The EIR should consider that the entire Project site is occupied by all special-status plant species that both historically occurred on or adjacent to the site and with the potential to occur on-site.

26 cont.

Mitigation Measure 3.3.2 also requires that if any sensitive plant species are found during “presence/absence” surveys and they would be impacted by Project activities, CDFW and USFWS would be consulted and mitigation such as avoidance or relocation within the Project site would occur. The avoidance measures as written in Mitigation Measure 3.3.2 are insufficient to ensure full avoidance from the Project's direct and indirect impacts. If the Project is to achieve full avoidance of indirect impacts to any individual special-status plants identified on-site, then Mitigation Measure 3.3.2 should be revised to include establishment of a buffer area by a qualified botanist. The buffer area should be of an area in size as to ensure that viable populations will persist into the foreseeable future, any seedbank is protected and will not be encroached upon by defensible space buffers, and that connectivity with nearby populations is maintained.

If the Project is unable to achieve full avoidance of impacts to special-status plants, then Mitigation Measure 3.3.2 as currently written fails to reduce these impacts to a level of less-than-significant. To reduce direct impacts to special-status plant species to a level of less-than-significant, CDFW recommends that Measure 3.3.2 be revised to require protection and management in perpetuity through a conservation easement an area equivalent to a 3:1 mitigation ratio (conserved area to impact area) for permanent loss of special-status plant habitats that are identified. A qualified botanist should calculate the area of permanent loss and their contemplation of seedbank and seed/plant dispersal should be included in the calculations. If the Project collects seeds and

replants off-site according to the recommendations by CDFW below then the mitigation ration may be reduced to 2:1. 26 cont.

Mitigation Measure 3.3.3a Wetlands

Mitigation Measure 3.3.3a requires the Project avoid all impacts to the 2.1 acres of on-site wetlands and establishing appropriate buffers and development setbacks. As noted above, based on Figure ES-2 all the existing wetlands on-site will be impacted by Project activities. CDFW agrees that impacts to wetlands should be avoided and appropriate development setbacks established. The EIR should accurately describe the wetlands that will completely avoided and development setbacks that will be implemented pursuant to Mitigation Measure 3.3.3a. 27

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs., tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089). 28

CONCLUSION

CDFW appreciates the opportunity to provide comments on the DEIR to assist the County in identifying and mitigating Project impacts on biological resources. CDFW recommends the County correct the issues identified in this letter to ensure the DEIR fully describes the Project and analyzes the Project's significant or potentially significant impacts on biological resources and especially on CESA-listed species and their habitats adequately. Furthermore, CDFW recommends the DEIR disclose and evaluate reasonably foreseeable cumulative impacts, such as change in adjacent land use and additional loss of terrestrial habitat for special-status species, and evaluate the indirect effects to special-status species from construction and operation of perennial lakes. Finally, CDFW recommends using the best available science to assess impacts to special-status plants, western pond turtle, California tiger salamander, and impacts to wetlands. 29

As noted above, issuance of an LSA Agreement or CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If these are not adequately addressed in the CEQA document, significant modification to the Project and mitigation measures may be required to obtain an LSA Agreement or CESA Permit. Therefore, to ensure significant impacts are adequately mitigated to less-than-significant levels, CDFW recommends incorporating additional mitigation measures to reduce impacts to less-than-significant levels into the final CEQA document. 30

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Questions regarding this letter or further coordination should be directed to Marcia Grefsrud, Environmental Scientist, at (707) 644-2812 or Marcia.Grefsrud@wildlife.ca.gov; or Brenda Blinn, Senior Environmental Scientist (Supervisory), at (707) 339-0334 or Brenda.Blinn@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erin Chappell
B77E9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

cc: Office of Planning and Research, State Clearinghouse, (SCH No. 2020069045)

Craig Weightman, CDFW Region 3 – Craig.Weightman@wildlife.ca.gov

Ryan Olah, USFWS – Ryan_Olah@fws.gov

Brian Wines, San Francisco Bay Regional Water Quality Control Board – Brian.Wines@waterboards.ca.gov

Frances Malamud-Roam, San Francisco District, U.S. Army Corps of Engineers - Frances.P.Malamud-roam@usace.army.mil

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RESPONSES TO COMMENT LETTER B

Response to Comment B-1

The Phase I development area is a highly disturbed once agricultural field that has been regularly disked over the past decade. While the Phase I area has no effective wildlife habitat, pre-construction surveys, animal exclusion fencing, and on-site construction monitoring should ensure no incidental take of listed species.

The Phase II development, anticipated to occur five or more years after completion of Phase I, would avoid all existing wetlands onsite that could be considered habitat for listed species and will otherwise implement EIR mitigation measures (including those mentioned above) to avoid any adverse impacts to any listed species. If any wetlands area cannot be avoided, the Project would need to implement Mitigation Measure 3.3.3b that would require purchase of credits at an approved Mitigation Bank or require equivalent on-site wetlands mitigation.

For discussion of biological resources, see Master Response 4.

Response to Comment B-2

Comment noted. The Biological Resources Report does not indicate that the Project would be likely to substantially restrict the range or reduce the population of a threatened or endangered species. Interstate 580 is an existing barrier to the range of any species expanding south from the Project site.

Response to Comment B-3

Comment noted. The Lake and Streambed Alteration (LSA Agreement) is identified under the Governmental Agency Approvals listed in the Draft EIR on page 2-15.

Response to Comment B-4

The comment provides a summary of the Project description. CDFW recommends the Draft EIR (published January 2022) include a condition that all violations be resolved and cleared prior to Project approval. Page 2-6 of the Draft EIR includes a requirement consistent with this comment:

> "Resolution of the Order would be required by the County prior to their project approval and issuance of any grading, building, or other construction-related permits."

The San Francisco Bay Regional Water Quality Board (RWQCB) accepted the May 20, 2022 Restoration, Mitigation, and Landscape Plans for 3680 Las Colinas Road in a signed letter to the Property Owners on June 13, 2022.

Response to Comment B-5

The Project as described in Chapter 2 of the Draft EIR does not include converting the remaining 57 acres from annual grassland to vineyard and thus the Draft EIR does not analyze conversion of the property to vineyard. The remaining 57 acres would not be affected by the Project and not modified by Project activity.

Page 2-4 of the Draft EIR indicates what is known about the timing:

> "Once approved, the Phase I buildout of the Project would occur over approximately 5 years….
>
> Phase II would be developed in subphases based on future demand and other development and regulatory factors. Permitting would begin for Phase II following approval of the Conditional Use Permit from Alameda County."

The timing and duration of Phase II subphases is speculative at this time and will rely upon permitting of various agencies including CDFW.

The Project Parcel is 104 acres.

Response to Comment B-6

Figures 3.3-1, **3.3-2**, **3.3-4** and **3.3-5** in the Draft EIR outline the Project site and show that various phases of the Project occur within a portion the larger Project Parcel.

The Biological Resources and Wetland Assessment (BRWA) (Appendix D of the Draft EIR) does not rely upon only a single, one-day site visit to determine absence of special-status species. Wetland delineations of the Project Area were performed in 2016, 2018 and 2020. Also, as mentioned in Appendix D, page 16, Barnett Environmental also performed a 2021 spring survey to examine elderberry shrubs for evidence of the valley elderberry longhorn beetles (VELB).

The Draft EIR (Appendix D, page 17) identifies the common wildlife identified during the field surveys in the autumn of 2020 and the spring of 2021:

> "Barnett biologists observed many common wildlife species on site during their autumn 2020 and spring 2021 field surveys, including: western fence lizards (*Sceloporus occidentali*), wild turkey (*Meleagris gallopav*), great egret (*Ardea alba*), red-tailed hawk (*Buteo jamaicensis*), Great-horned owl (*Bubo virginianu*), lesser goldfinch (*Carduelis psaltria*), American goldfinch (*Carduelis tristis*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), Northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), western scrub jay (*Aphelocoma californica*), rock pigeon (*Columba Iivia*), Black-tailed jackrabbit (*Lepus californicus*), California vole (*Microtus californicus*), Colombian black-tailed deer (*Odocoileus hemionus columbianus*), California ground-squirrel (*Spermophilus beecheyi*), desert cottontail (*Sylvilagus audubonii*), and coyote (*Canis latrans*)."

The Draft EIR also included a review of surveys for the California Tiger Salamander (Draft EIR, Appendix D, page 36):

> "Madrone Ecological Consulting performed a habitat assessment in 2021 in accordance with the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife in the *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander (*USFW and CDFW 2003). conducted protocol surveys in the seasonal wetlands in winter 2021 and found no sign of this species. During this habitat assessment, only one of six aquatic features on the study area and six offsite features within 1.24 miles had potential habitat for the California tiger salamander. Due to private property concerns, only the one onsite feature and two offsite features were surveyed. No California Tiger Salamander eggs, larvae, or adults were observed during the 2021 surveys. The biologists suggested that California Tiger Salamander may have chosen to forgo breeding this season due to the abnormally dry winter. There was only 5.62 inches of precipitation between November 2020 and May 2021 as compared to the average 12.25 inches for this time period. As a result, Madrone recommended additional surveys including one upland drift fence/pitfall trap survey and an additional larvae survey in order to determine the presence or presumed absence of this species in the Study Area."

The Draft EIR also includes additional surveys prior to ground-disturbing activities including surveys for California Tiger Salamander as described on page 3.3-34 of the Draft EIR.

Response to Comment B-7

The reason for phasing the Project (e.g., Phase I and II) is to develop the (Phase 1) portion of the site with no sensitive resources at this time, and base the subsequent Phase 2 development on need, allowing adequate time to permit these Phase II resources with the appropriate state and federal resource agencies.

No special-status species or their habitat occur on the Phase I Project area. It is a highly disturbed, historical agricultural field that continues to be routinely disked. Phase I has also been designed to completely avoid impacts to Arroyo Las Positas. Consequently, a FESA, Section 10 Incidental Take Permit should not be required for Phase I. To further ensure no incidental take of listed species, Phase I will include pre-construction surveys, animal exclusion fencing, and on-site construction monitoring.

Based on the results of additional surveys of Phase II during the appropriate seasons, the Project would obtain appropriate resource permits (including a CESA ITP) prior to construction.

Response to Comment B-8

Phase I has no rare plant habitat due to routine disking for weed management & fire control. In advance of Phase II, the Project will be required to follow CDFW protocols.

The comment is correct, there are no irrigation ditches on the Project site.

The last sentence in Item 1 on page 3.3-18 of the Draft EIR is revised as follows (new text is underlined, deleted text is in strikeout format):

> "However, no heartscale was observed ~~within existing irrigation ditches~~ during the Barnett Environmental October 2020 field survey."

The last sentence in Item 2 on page 3.3-18 of the Draft EIR is revised as follows (new text is underlined, deleted text is in strikeout format):

> "No long-style sand-spurrey were observed ~~within existing irrigation ditches~~ during the Barnett Environmental October 2020 field survey."

Based on the CDFW comment, the first sentence of Mitigation Measure 3.3.2 is revised on page ES-18 and page 3.3-36 of the Draft EIR as follows (new text is underlined, deleted text is in strikeout format):

> "**Mitigation Measure 3.3.2:** During the appropriate blooming/flowering season prior to construction, a qualified botanist shall conduct special-status plant species presence/absence surveys within areas proposed for grading or modification, in accordance with *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities* (California Department of Fish and Game 2018 ~~2009~~) to determine which special-status plants with the potential to occur on-site are evident and identifiable on-site."

Response to Comment B-9

Both the Draft EIR and Appendix D correctly identify the white-tailed kite (*Elanus leucurus*) as California fully protected.

The status of Tricolored blackbird (*Agelaius tricolor*) is State threatened not endangered. This is a lower level of concern/protection.

For the Tricolored blackbird the second column in **Table 3.3-2** of the Draft EIR (page 3.3-22) is revised as follows (new text is underlined, deleted text is in strikeout format):

> "None/CT ~~E~~/NA"

Item 3 on page 3.3-29 of the Draft EIR is revised as follows (new text is underlined, deleted text is in strikeout format):

> "Tricolored blackbird (*Agelauis tricolor).* The tricolored blackbird is a California threatened ~~endangered~~ species."

Both San Joaquin coachwhip (*Coluber flagellum* ssp. *ruddocki*) and Western Pond Turtle (*Emys marmorata*) are State Species of Special Concern. This is a lower level of concern/protection.

For the San Joaquin coachwhip the second column in **Table 3.3-2** of the Draft EIR (page 3.3-22) is revised as follows (new text is underlined, deleted text is in strikeout format):

"~~FE/CE/NA~~ None/CSC/NA"

Item 7 on page 3.3-28 of the Draft EIR (page 3.3-28) is revised as follows (new text is underlined, deleted text is in strikeout format):

"San Joaquin coachwhip (*Coluber flagellum ssp. ruddockis).* This whipsnake species is ~~listed as threatened by the U.S. Fish and Wildlife Service and by the state of~~ a California Species of Special Concern."

For the Western Pond Turtle the second column in **Table 3.3-2** of the Draft EIR (page 3.3-21) is revised as follows (new text is underlined, deleted text is in strikeout format):

"~~FE/CT/NA~~ None/CSC/NA"

Item 5 on page 3.3-28 of the Draft EIR (page 3.3-27) is revised as follows (new text is underlined, deleted text is in strikeout format):

"Western pond turtle (*Emys marmorota)*. This species is ~~listed as threatened by the U.S. Fish and Wildlife Service and by the state of~~ a California Species of Special Concern."

The first paragraph on page 3.3-32 of the Draft EIR is revised as follows (new text is underlined, deleted text is in strikeout format):

"Special status wildlife species that have the potential to occur on the Phase II site include: ~~According to the summary in **Appendix D Biological Resources Assessment (BRA)**, there are eight federal special wildlife species (~~San Joaquin kit fox, San Joaquin coachwhip, vernal pool fairy shrimp, longhorn fairy shrimp, California red-legged frog, the valley elderberry longhorn beetle, the western pond turtle, ~~and the~~ California tiger salamander~~)~~, ~~four special status state species (~~loggerhead shrike, white-tailed kite, Swainson's hawk, ~~and~~ tricolored blackbird~~)~~, ~~and four species of special concern (~~western burrowing owl, western spadefoot, grasshopper sparrow, and the American badger~~) that have the potential to occur on site~~. Protocol surveys for the California tiger salamander were conducted of one wetland in the Study Area in 2021 and found no sign of this species."

Response to Comment B-10

The size would be approximately 2.6 acres. The intent of the identified area is to be for natural drainage area to create a buffer area around the existing seasonal wetlands in the southern portion of Phase II. This 2.6-acre area is best described as a wetlands surge area that would be an undeveloped buffer area around the existing wetlands south of the area. This wetlands surge area would periodically be filled naturally by rainfall. It would not be a new wetland "installed" or "created" during Project development.

There following are several revisions to the Draft EIR to clarify the plan for the 2.6-acre wetlands surge area:

The following paragraph on pages ES-8 and 2-13 of the Draft EIR is revised as follows (new text is underlined, deleted text is in strikeout format):

> "In addition to the proposed man-made lakes, the Project proposes to avoid development in ~~install~~ a 2.6-acre wetlands surge ~~seasonal wetland~~ area west of Arroyo Las Positas, along the southern boundary of the central portion of the site. Water in this natural wetlands surge area would come from direct precipitation. The wetlands surge area would be designed to only receive supplemental surface runoff in the event of very large storm events, along with discharge from the lower lake during storm events. The water would be detained in this wetland~~s~~ surge area and then discharged at 10-year and 100-year predevelopment flows via a stabilized outfall structure into Arroyo Las Positas."

The following text on Figures ES-2 and 2-2 of the Draft EIR is revised as follows (new text is underlined, deleted text is in strikeout format):

> "WETLAND SURGE AREA ~~NEW WETLANDS~~ = ~~2.9~~ 2.6 ACRES"

The following text in Table 2-1 on page 2-4 of the Draft EIR is revised as follows (new text is underlined, deleted text is in strikeout format):

> "~~New Wetlands~~ Wetlands Surge Area 2.6 ~~2.9~~"

The following test on page 3.8-14 of the Draft EIR is revised as follows (new text is underlined, deleted text is in strikeout format):

> "In addition to the lakes, the Project would avoid development in ~~install~~ 2.6 acres of wetland~~s~~ surge area west of Arroyo Las Positas, along the southern boundary of the central portion of the Project site. Water in this natural wetlands surge area would come from direct precipitation. The wetland~~s~~ surge area would be designed to only receive supplemental surface runoff in the event of very large storm events, along with discharge from the lower lake during storm events. The water would be detained in this wetland~~s~~ surge area and then discharged at 10-year and 100-year predevelopment flows via a stabilized outfall structure into Arroyo Las Positas."

Response to Comment B-11

The ephemeral channels mentioned are not ephemeral streams. The on-site delineations did not find any evidence of recent water conveyance in the ephemeral channels. For further discussion see Response to Comment C-15. Some seasonal wetlands were identified in the area that vernal pools were shown on the CARI map, and seasonal wetlands are included in the Draft EIR.

Response to Comment B-12

See Master Response 4 for a discussion of the wetland delineation. As also discussed in Master Response 4, the seasonal wetlands would be avoided, they would not be replaced. All efforts will

be made to avoid SW-A in the final design for that area of Phase II development. If SW-A or any other wetlands area cannot be avoided, the Project would need to implement Mitigation Measure 3.3.3b that would require purchase of credits at an approved Mitigation Bank or require equivalent on-site wetlands mitigation. The other seasonal wetlands on the southern portion of Phase II would be buffered and protected by the wetlands surge area, as shown on **Figure FEIR-2**. Additionally, the Mitigated Alternative removes the walkway transiting the wetlands surge area, see Master Response 1.

Response to Comment B-13

Comment noted. The Mitigated Alternative is responsive to this comment by providing an alternative to eliminate the concerns regarding installation of artificial lakes. For details on the Mitigated Alternative see Master Response 1.

Response to Comment B-14

The Mitigated Alternative would remove the lakes and perennial creek from the Project which would substantially reduce Project surface water diversion. As indicated on page 2-6 of the Draft EIR, Phase I of the Project would include underground cisterns for collection of water run-off. Entrapped sediments would settle out in the cisterns and the waters would then pass through a natural bio filter system before discharging east to the creek. In Phase II some surface water may be retained in the retention pond, the purpose of the retention pond is to control surface water flows to Arroyo Las Positas. The final sizing, location, and operational plan for the retention pond would be determined as part of Phase II final design.

The applicant would comply with all applicable provisions of Sections 1600-1616 of the California Fish and Game Code as analyzed on page 3.3-4 of the Draft EIR.

Response to Comment B-15

Arroyo Las Positas has very steep banks in locations adjacent to the Project site, and it is highly unlikely that the western pond turtle would/could climb its banks to range across the Project site. The suggestion of a 1,400-foot buffer from the edge of the Arroyo Las Positas is therefore not appropriate for a species that has not been identified on the Project site and considering the site-specific characteristics of the very steep banks of Arroyo Las Positas in the area. From the location of 500 feet downstream, they would also have to go under the freeway, which serves as a man-made impediment for this species.

Response to Comment B-16

As indicated on page 2-3 of the Draft EIR,

> "Outside of Phase I and Phase II, the Project applicant would volunteer dedication of ridgetop open space conservation land in the study area, to be determined, consistent with the goals of the East County Conservation Strategy."

Project Conditions of Approval will include commitments regarding the land dedication.

Comment noted, see response to Comment B-17.

Response to Comment B-17

The Draft EIR provides measures to minimize impacts to special status species as identified in Mitigation Measures 3.3.1a – 3.3.1l (pages 3.3-32 to 3.3-36). See Master Response 3 for discussion of a ridgetop open space conservation area.

Response to Comment B-18

Comment noted. The Project would have minimal artificial structures and traffic. The Project would not remove riparian areas. The Project would include landscaping (including drought resistant, and native species) that could provide support to pollinators. See Master Response 1 (**Figure FEIR-1**) showing the proposed plant legend for the landscaping. The landscaping would include a variety of tree, shrub, and wetland plants.

Response to Comment B-19

Comment noted.

Response to Comment B-20

All pre-construction surveys would be based on Mitigation Measures, recommended Agency protocols, general guidance, and appropriate permits at the time of the construction. Phase II construction will be 5 years to 50+ years into the future.

Response to Comment B-21

Comment noted. See Response to Comment B-20.

Response to Comment B-22

There is no habitat for California tiger salamanders on Phase I of the Project site, therefore, there would no impact to the species in Phase I. See Appendix D of Appendix D of the Draft EIR (California Tiger Salamander Sampling 90-Day Report). Only one water feature of the six identified during a habitat assessment of on-site and off-site features within 1.2 miles of the Project retained water during the 2020-2021 surveys. The feature is located 0.1 miles west of the Project site and immediately north of I-580. No California Tiger Salamander eggs, larvae, or adults were observed during three field surveys conducted in accordance with the *Interim Guidance on Site Assessment and Field Surveys for Determining the Presence or a Negative Finding of the California Tiger Salamander*. Additional surveys for California tiger salamanders on the Phase II areas would be conducted according to Mitigation Measure 3.3.1g in the Draft EIR. If the species is determined to be present through additional surveys, then additional mitigation could be required. Absence would indicate no California tiger salamanders are located during any of the surveys.

It should be noted the City of Livermore environmental documents on adjacent properties did not assume presence of the California tiger salamander. Neither the Lassen Road Residential

Development Project nor Catholic High School projects assumed such presence. Nor did either of those projects even survey for the California tiger salamander, based on a review of those CEQA documents.

Response to Comment B-23

The timing of the Phase II development would allow for additional surveys identified in Mitigation Measure 3.3.1g in determining whether the species is present and development of mitigation measures that may be required to obtain an incidental take permit (ITP) if CESA species are present. See Response to Comment B-25, the phasing and gradual development of the Project would allow ample time for surveys and mitigation for any potential California tiger salamanders. As indicated on page 2-3 of the Draft EIR, outside of the Phase I and Phase II areas, the Project applicant would volunteer dedication of ridgetop open space conservation land.

Response to Comment B-24

Comment noted. It is anticipated that modifications to the mitigation measures may be required to obtain an incidental take permit (ITP) for CESA identified species for Phase II of the Project.

Response to Comment B-25

There is no habitat for burrowing owl on Phase I of the Project site, therefore, there would no impact to the species in Phase I. The second paragraph of Mitigation Measure 3.3.1j on pages ES-17, 3.3-34 and 3.3-35 of the Draft EIR is modified as follows (new text is underlined, deleted text is in ~~strikeout~~ format):

> "Four preconstruction site surveys shall be conducted by a qualified biologist. At least one site visit shall occur between 15 February and 15 April. The remaining three survey visits shall occur at least three weeks apart, between 15 April and 15 July (the peak of breeding season), with at least one visit after 15 June. ~~A preconstruction survey by a qualified biologist is conducted. If possible, a winter survey should be conducted between December 1 and January 31 (when wintering owls are most likely to be present) and the nesting season survey should be conducted between April 15 and July 15 (the peak of breeding season).~~ Surveys conducted from two hours before sunset to one hour after, or from one hour before to two hours after sunrise, are preferable. The survey techniques shall be consistent with the CDFW Staff Report survey protocol (2012) or most recently adopted guidance and include a 260-foot-wide (buffer) zone surrounding the Study Area. Repeat surveys shall also be conducted not more than 30 days prior to initial ground disturbance to inspect for re- occupation and the need for additional protection measures. If no burrowing owls are detected during preconstruction surveys, then no further mitigation is required."

The Project would have minimal structures that are clustered together within a 2-acre envelope to preserve open space at the site. Phase II of the Project would be gradually built out over 100 years and would disturb small portions of the site in small increments allowing ample time for surveys and mitigation for any potential burrowing owls. Furthermore, as indicated on page 2-3 of the Draft EIR, outside of the Phase I and Phase II areas, the Project applicant would volunteer

dedication of ridgetop open space conservation land. **Figure FEIR-5** shows the three ridgeline preservation areas.

Response to Comment B-26

The text of Mitigation Measure 3.3.2 on page ES-18 and page 3.3-36 of the Draft EIR is revised as follows (new text is underlined, deleted text is in ~~strikeout~~ format):

> "**Mitigation Measure 3.3.2:** During the appropriate blooming/flowering season prior to construction, a qualified botanist shall conduct special-status plant species presence/absence surveys within areas proposed for grading or modification, in accordance with *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities* (California Department of Fish and Game ~~2009~~ 2018) to determine which special- status plants with the potential to occur on-site are evident and identifiable on-site."

As part of Mitigation Measure 3.3.2 CDFW and the USFWS (if the species is also on the federal list of sensitive species) would be consulted if a sensitives plant species is determined to be present. Consultation could include a requirement for a buffer area. Furthermore, as indicated in Response to Comment B-25, outside of the Phase I and Phase II areas, the Project applicant would volunteer dedication of ridgetop open space conservation land.

Response to Comment B-27

See Response to Comment C-9.

Response to Comment B-28

Comment noted, fees will be due at time of the NOD.

Response to Comment B-29

Comment noted. The Mitigated Alternative would eliminate would remove the lakes and perennial creek, see Master Response 1. Resolution of the Water Board Abatement Order will include improvements to habitat directly east of the Project site (see Response to Comment B-4). Other proposed adjacent projects, the Catholic High School and the Lassen Residential project would not result in cumulative impacts with the MVMG Project, as revised by the Mitigated Alternative (that eliminates the proposed perennial lakes). With mitigation measures, the Catholic High School or the Lassen Residential project were determined to have less-than-significant impacts to biological resources.

Response to Comment B-30

Comment noted. The Mitigated Alternative is directly responsive to comments from the CDFW.

CALIFORNIA Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

San Francisco Bay Regional Water Quality Control Board

February 17, 2022

Sent via electronic mail: No hardcopy to follow

Alameda County Community Development Agency
ATTN: Albert Lopez, Planning Director (albert.lopez@acgov.org)
224 West Winton Avenue, Suite 110
Hayward, CA 94544

Subject: San Francisco Bay Regional Water Quality Control Board Comments on the *Draft Environmental Impact Report for the Monte Vista Memorial Gardens in Alameda County, California* (PLN 2017-00194)
SCH No. 2020069045

Dear Mr. Lopez:

San Francisco Bay Regional Water Quality Control Board (Water Board) staff appreciates the opportunity to review the *Draft Environmental Impact Report for the Monte Vista Memorial Gardens* (DEIR). The DEIR describes the proposed Monte Vista Memorial Gardens Project (Project) and the potential environmental impacts associated with implementing the Project.

Project Summary. The proposed Project is located at 3656 Las Colinas Road, Livermore, CA in unincorporated Alameda County. Development of the Project would occur on 47 acres in the southern portion of Assessor's Parcel Number 099-0015-016-03, just north of the City of Livermore, between the North Livermore Avenue and North First Street exits from I-580. The property bordering the Project site to the east of Arroyo Las Positas supports an existing residence and several roadways, while the area west of Arroyo Las Positas is undeveloped and is currently used for grazing and farming. The Project site is accessed on the southeastern corner of the property from Las Colinas Road.

The Project includes a funeral home with crematorium, burial lots, an entry plaza, internal roadways, parking, landscaping, new wetlands, lakes, and other associated infrastructure and improvements.

Access to the project is hampered by the lack of direct access to the site from an improved County or City right-of-way. An easement over County property (currently configured as an unnamed road) connecting the Project site to Las Colinas road will serve as the only access to the site. This County owned property lies between two

private properties in County jurisdiction which are subject to active Cleanup and Abatement Order No. R2-2017-1021, issued by the San Francisco Bay Regional Water Quality Control Board. A representative of the applicant has been named in said Order as a "Discharger" due to unauthorized fill placed into jurisdictional waters on these sites. Due to adjacencies of the privately owned properties and access to the site over County owned property, resolution of the Order will be analyzed as one of the EIR alternatives, and resolution of the Order will be required prior to project approval and issuance of any grading, building, or other construction-related permits. The applicant has acknowledged that their representative was a Discharger and had done so to facilitate access to the site.

On July 27, 2020, Water Board staff provided four comments on the Notice of Preparation (NOP) for the DEIR. We start our comments on the DEIR with follow up comments on those four comments and then provide comments on two other topics.

Summary of Comments. Water Board comments cover the following topics: improvements to the offsite portion of the Project's access road must not impact Water Board-required mitigation features on the property east of the Project Site; mitigation for impacts to wetlands at the Project site must be provided concurrently with the impacts; the DEIR lacks appropriately-sized setback buffers between land uses and wetlands that provide habitat for listed species; the assessment of impacts to jurisdictional waters at the Project site is based on a flawed delineation; the DEIR does not include proposed mitigation measures for impacts to waters of the State; the DEIR does not demonstrate that the Project has been designed to provide the water quality treatment and hydromodification mitigation required for compliance with the Municipal Regional Permit (MRP) for the management of stormwater runoff; the potential presence of aquatic special status species at the Project site has not been adequately assessed; and the leach field for the Project' septic system may be impacted by an existing channel and/or a proposed mitigation wetland. The missing information is sufficiently significant to require the preparation and circulation of a revised DEIR, rather than proceeding to a Final EIR at this time. 1

Comment 1. Cleanup and Abatement Order No. R2-2017-1021 remains unresolved.
Cleanup and Abatement Order No. R2-2017-1021 (CAO) was issued in 2017. The CAO required removal of unpermitted fill, restoration of waters of the State that were filled without permits, and the creation of compensatory mitigation for illegally filled wetlands. Three years after issuance of the CAO, the violations had not been resolved, and the Water Board issued a Notice of Violation (NOV) on August 6, 2020, for failure to respond to the CAO in a timely manner. To account for the temporal loss of wetlands associated with the three-year delay in restoring impacted wetlands and providing mitigation wetlands, the NOV increased the required amount of mitigation wetlands to be created at the Project site from 0.75 acres to 1.35 acres. If the Dischargers continue to defer compliance with the CAO, the required amount of mitigation may increase further. At this time, Water Board staff have reviewed a mitigation proposal that was submitted to the Water Board on February 2, 2022, and will provide comments to the Dischargers in February 2022. 2

The February 2, 2022, mitigation proposal would create all required mitigation wetlands on the properties located at Alameda County Assessor's Parcel Numbers (APNs) 902-0008-005-05 and 902-0008-005-09. As is described in Section 2.3.2 of the DEIR, access to the Project site will be via a County-owned property that runs between the properties at APNs 902-0008-005-05 and 902-0008-005-09. Text in Section 2.3.2 states that improvements to the access road (i.e., curbs, gutters, and lighting) could affect some areas of the adjacent wetlands. The loss of any wetlands along the access route will require mitigation. The DEIR should also note that any mitigation wetlands associated with the February 2, 2022, mitigation proposal, if that proposal is found to be acceptable by the Water Board, may not be impacted by improvements to the access road. All mitigation wetlands are to be preserved in perpetuity. 2 (cont.)

Comment 2. The EIR should assess the feasibility of creating self-sustaining mitigation wetlands at the Project site.
Figure 2 in the NOP indicated that mitigation wetlands were proposed to be created in an area of the Project site west of Arroyo Las Positas and immediately north of I-580. Our Comment 2 on the NOP requested that the DEIR assess the feasibility of creating self-sustaining wetlands in this area of the Project site. Mitigation wetlands must have a sufficiently large watershed to support the required acreage of mitigation wetlands, without anthropogenic management to provide the hydrology necessary to sustain the wetlands. 3

In the time since the circulation of the NOP, it appears that the Project no longer intends to provide mitigation wetlands on the Project site to resolve the outstanding CAO and NOV for unauthorized fill of waters of the State at the property located at APNs 902-0008-005-05 and 902-0008-005-09, which are adjacent to the southeast border of the Project site. However, some of the proposed seasonal wetlands on the Project site may be necessary to provide mitigation for the Project's impacts to waters of the State. As is discussed below under Comment 3, the wetland delineation summarized in the DEIR may not have identified the full extent of seasonal wetlands and other waters of the State at the Project site. Therefore, impacts to jurisdictional waters of the State are likely to be greater than indicated in the DEIR. The Project may need to provide onsite mitigation, since there currently are no mitigation banks with available wetland mitigation credits that include the Project site in their service area. 4

The DEIR states that the new wetlands are to be created in Phase 2 of the Project. Phase 1 of the Project would cover activities east of Arroyo Las Positas and would be implemented over five years. Phase 2 would be constructed west of Arroyo Las Positas and would be constructed over about 100 years. However, any impacts to waters of the State that occur in Phase 1 of Project implementation will require mitigation prior to or concurrent with the impacts. Therefore, mitigation wetlands for Phase 1 activities must be implemented in Phase 1. 5

Text in the discussion of Impact 3.8.3 states that 2.6 acres of wetlands will be created to the west of Arroyo Las Positas in Phase 2 of the Project. However, the delineation in the DEIR states that only 0.245 acres of seasonal wetlands are currently present to the 6

west of Arroyo Las Positas at the Project site. The DEIR does not explain how it will be possible to create 2.6 acres of seasonal wetlands at a site that currently only supports 0.245 acres of seasonal wetlands. 6 cont.

Text in Section 2.3.4 of the DEIR refers to a stabilized outfall structure from the new wetlands to Arroyo Las Positas. This outfall will impact the right (west) bank of Arroyo Las Positas and require compensatory mitigation. Text in Section 2.3.2 of the DEIR refers to treatment of runoff from impervious surfaces in Phase 1, prior to the discharge of the runoff to the east (left) bank of Arroyo Las Positas. Discharge of treated runoff from Phase 1 will require a new stabilized outfall to Arroyo Las Positas, which will require compensatory mitigation. 7

We also requested that the DEIR discuss the establishment of buffers around the mitigation wetlands to minimize impacts to the wetlands associated with the operation of the cemetery (e.g., pesticide or herbicide drift from managed areas of the cemetery, seed spread from landscaping at the cemetery, leach fields for septic systems). Figure 2 in the NOP indicated that a walkway may transit the area with the proposed mitigation wetlands. We requested that the walkway be designed to avoid the mitigation wetlands. Figure 2-2 in the DEIR continues to show a walkway through the proposed wetlands. 8

Mitigation Measure 3.3.3a, in the DEIR states that the Project **"**would include establishing appropriate development setbacks from Project uses and Arroyo Las Positas and the uses that could affect the seasonal wetlands." However, the DEIR does not propose sizes for appropriate setbacks. Therefore, the DEIR is unresponsive to Water Board comments on the NOP. At this time in the analysis of biological resources at the Project site, the Project proponent should have sufficient information to propose appropriate development setbacks to prevent impacts to the use of the proposed wetlands by listed species. The proposed setback dimensions, as well as the rationale for selecting setback dimensions, should be included in the DEIR so that stakeholders can assess the sufficiency of the proposed setbacks. 9

We also noted that a restrictive covenant (e.g., conservation easement or deed restriction) must be placed over the mitigation wetlands in perpetuity. We requested that the DEIR describe the restrictive covenant to be used at the Project site and the third party that will be responsible for holding the covenant. This request has not been addressed in the DEIR. 10

The Project summary provided with the NOP stated that the created wetlands would provide habitat for special status species. Special status species that may currently use the Project site include the California red-legged frog (CRLF) and the California tiger salamander (CTS). The Project proposes to create two artificial lakes and a water channel between the lakes as part of the Project's landscaping. Permanent water bodies provide habitat for bullfrogs and crayfish; these species prey on CRLF and CTS. We requested that the DEIR assess the compatibility of the proposed landscaping for the Project with the ability to sustain special status species in the created wetlands. The DEIR does not address this concern. 11

Comment 3. The EIR should include a wetland delineation for the entire Project site, including portions of Arroyo Las Positas that will be impacted by the new access bridges and any new stormwater outfalls to Arroyo Las Positas.
As we noted in our comments on the NOP, a wetland delineation was not available for the Project site at that time. To support the discussion of impacts to biological resources, we requested that a wetland delineation be prepared for the entire Project site, including any areas of Arroyo Las Positas that may be impacted by the new access bridges or new stormwater outfalls. We also requested that the DEIR include an evaluation of alternatives that would avoid impacts to waters of the State and that the DEIR provide mitigation for all unavoidable impacts to waters of the State. The NOP proposed two new bridges over Arroyo Las Positas to provide access to the cemetery. Bridges impact waters of the State via fill associated with abutments and piers, including any rock riprap armoring to protect abutments and piers from scour, and by shading waters of the State. We requested that the DEIR evaluate design options that use a single bridge over Arroyo Las Positas. The DEIR does not include the requested evaluation. 12

The DEIR included a wetland and other waters delineation, but it appears that the field work was conducted in October of 2020, which was at the end of the dry season following a drought year. A delineation conducted at that time is likely to miss seasonal wetlands that are present at the end of a typical water year. In addition, the Appendix on Biological Resources did not include the field forms on which data were collected during the delineation. Therefore, we are not able to peer review the data or assess whether or not a sufficient number of sample points were used in performing the delineation at the Project site. 13

Section IV.A.2.a of the *State Wetland Definition and Procedures for Discharges of Dredged and Fill Material to Waters of the State* states that Water Board staff may require, on a case-by-case basis, supplemental field data from the wet season to substantiate dry season delineations.

> 2. Additional Information Required for a Complete Application
>
> a. If required by the permitting authority on a case-by-case basis, supplemental field data from the wet season to substantiate dry season delineations, as is consistent with the 1987 Manual and Supplements.
>
> Generally, wet season delineations are more likely to be necessary in areas where wetland indicators are difficult to resolve. The ideal time to delineate a wetland is during the wet portion of the growing season of a normal climatic period. Otherwise, indicators provided in the Corps' delineation manuals must be relied on to identify wetland boundaries. Collection of supplemental information in certain situations is an accepted practice and is consistent with recommendations presented in the Corps regional supplements for wetland delineation, which recommends that practitioners return to the delineation site, if possible, during the "normal wet portion of the growing season" (Arid West Regional Supplement, pp. 58, 87, 104; Western Mountains, Valleys, and Coast Regional Supplement, pp. 66, 100) to resolve wetland indicators

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that were unresolved during the dry-season delineation. To avoid the risk of unanticipated project delays, applicants may consult with the appropriate Water Board regarding whether supplemental data may be necessary prior to submitting an application. 14 cont.

Appendix D, Biological Resources, to the DEIR provides more information on the wetland delineation used to prepare the DEIR. In Appendix D, Figure 5, Project Area Wetlands and "Other Waters of the U.S.", shows the extent of federal waters at the Project site. However, Figure 5 is based on an aerial photograph that includes channels that were identified in Figure 3, California Aquatic Resources Inventory (CARI) Wetland. These channels may consist of intermittent or seasonal channels. Even if the U.S. Army Corps of Engineers does not currently take jurisdiction over these features, they remain jurisdictional waters of the State. A wet season delineation should be performed to determine if the features visible in Figures 3 and 5 are waters of the State. If these features are waters of the State, the Project should be redesigned to avoid them or permittee-responsible mitigation should be provided for any impacts to these channels. Permittee-responsible mitigation for impacts to those channels will ideally be provided by the creation of channels. 15

The date of field work for the wetland delineation is not clearly stated in the DEIR, but the delineation appears to have been conducted in October of 2020. Unlike most wetland delineation reports, Appendix D did not include the field data sheets for the delineation; these data must be incorporated into a revised DEIR. At this time, the DEIR lacks sufficient data to support the alleged extent of wetlands and other waters at the Project site. 16

October of 2020 was the end of the dry season in a drought year. Therefore, seasonal wetland vegetation was not likely to be visible and the extent of wetlands would have been smaller than in a normal water year. For arid regions, we require that wetland delineations be conducted near the end of the wet season. Therefore, a wetland delineation must be conducted at the end of a normal wet season. Without this follow-up delineation, the data are insufficient to establish the full extent of wetlands and other waters at the Project site that may be impacted by Project implementation. In the absence of a valid delineation, the DEIR does not assess the full extent of Project impacts to jurisdictional waters of the U.S. and waters of the State. In addition, the wetland delineation in Appendix D does not appear to be sufficient to support the issuance of a Certification for impacts to waters of the State at the Project site. 17

The wetland delineation should be repeated late in the wet season of a year with typical rainfall to ensure that the full extent of wetlands subject to regulation as waters of the State have been identified. Without a wet-season delineation with a sufficient number of data points, it is not possible to establish with sufficient certainty that the Project will avoid impacts to waters of the State. This is especially appropriate at the Project site, since the DEIR acknowledges that the amount of wetlands delineated in the October 2020 delineation was less than the amount indicated by other sources of data for the Project site. During a site visit at the property immediately east of the southern portion of the Project site on January 4, 2017, Water Board staff observed a channel that 18

flowed southwest until reaching I-580 and then flowed directly west along I-580, until a confluence with Arroyo Las Positas at the I-580 bridge over Arroyo Las Positas. The downstream end of this channel does not appear to have been reviewed in the October 2020 delineation. 18 cont.

In our comments on the NOP, we noted that the required amount of mitigation for any unavoidable impacts to waters of the State depends on the similarity of the impacted waters to the waters in the mitigation proposal, the uncertainty associated with successful implementation of the mitigation project, and the distance between the site of the impact and the site of the mitigation water. In-kind mitigation for the fill of waters consists of the creation of new waters. If the mitigation consists of restoration or enhancement of waters, the amount of mitigation will be greater than if the mitigation consists of creation. 19

In our comments on the NOP, we noted that, In a CEQA document, a project's potential impacts and proposed mitigation measures should be presented in sufficient detail for readers of the CEQA document to evaluate the likelihood that the proposed remedy will actually reduce impacts to a less than significant level. CEQA requires that mitigation measures for each significant environmental effect be adequate, timely, and resolved by the lead agency. In an adequate CEQA document, mitigation measures must be feasible and fully enforceable through permit conditions, agreements, or other legally binding instruments (CEQA Guidelines Section 15126.4). Mitigation measures to be identified at some future time are not acceptable. It has been determined by court ruling that such mitigation measures would be improperly exempted from the process of public and governmental scrutiny which is required under the California Environmental Quality Act. 20

The proposed mitigation measure for impacts to jurisdictional waters in the DEIR is Mitigation Measure 3.3.3b.

> **Mitigation Measure 3.3.3b:** A Section 404 permit from the U.S. Army Corps of Engineers and a Section 401 water quality certification from the Regional Water Quality Control Board may be required if there are any activities affecting wetlands. The Project shall communicate with the San Francisco Bay Regional Water Quality Control Board (RWQCB) to determine whether CA Dredge & Fill Procedures (aka Waste Discharge Requirement; WDR) permittingwould be required and with the California Department of Fish & Wildlife to inquire about a possible 1602 Lake & Streambed Alteration Agreement (LSAA).
>
> Any resource permitting with these agencies could also require mitigation of wetland habitat loss through purchase of equivalent wetland credits at an approved Mitigation Bank within the Project's service area. 21

At this time, there are no approved mitigation banks offering seasonal wetland mitigation credits with a service area that includes the Project site. Therefore, permittee-responsible mitigation proposals should have been included in the DEIR. In the absence 22

of a detailed, permittee-responsible mitigation proposal, the information provided in the DEIR does not demonstrate that impacts to waters of the State resulting from Project implementation can be mitigated to less than significant levels. 22 cont.

Comment 4. The EIR should describe how the Project will comply with the stormwater management requirements of the Municipal Regional Permit (MRP) for the management of stormwater runoff.
As we noted in our comments on the NOP, projects requiring permits from the Water Board are required to provide documentation that they will provide stormwater runoff treatment and hydromodification mitigation that is consistent with the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit (MRP) for the management of stormwater runoff (Order R2-2015-0049; NPDES Permit No. CAS612008). The DEIR should describe how the Project will provide the required water quality treatment and the required mitigation for hydromodification impacts associated with the Project's new and recreated impervious surfaces. 23

We requested that the EIR identify the locations of stormwater management features and demonstrate that sufficient surface area has been set aside for the construction of the required stormwater treatment and hydromodification mitigation infrastructure. Figure 2 in the NOP identifies an area west of Arroyo Las Positas and north of I-580 as "seasonal wetlands/water quality treatment". In our comments on the NOP, we noted that water quality treatment areas must be maintained separately from mitigation wetlands. To facilitate their maintenance, stormwater treatment features installed for conformance with the MRP are not regulated as waters of the State. Since they are not waters of the State, they cannot provide mitigation for impacts to waters of the State. We requested that the DEIR indicate the locations on the Project site at which the proposed water quality treatment measures are to be constructed and the locations on the Project site at which mitigation wetlands will be established. The requested information was not provided in the DEIR. 24

The discussion of stormwater management for Phase 1 refers to collecting runoff from the parking lot in cisterns and then filtering the runoff in a biotreatment device prior to discharging the runoff to the east (left) bank of Arroyo Las Positas. However, sizing calculations and designs are not provided for the proposed treatment system. And the description of stormwater management in Phase 1 does not clearly state if all runoff from new impervious surfaces in Phase 1 will be collected in the proposed cisterns for treatment prior to discharge. In addition, the DEIR does not include a design or location for the proposed new outfall to Arroyo Las Positas. Please revise the DEIR to provide this information. In the discussion of post-construction stormwater treatment in Impact 3.8.1 of the DEIR, only treatment of runoff from the new parking lot is specifically mentioned. The DEIR should be revised to include treatment for runoff from all new or recreated impervious surfaces (e.g., roofs, bridges, sidewalks, and access roads) and to provide designs for the treatment measures proposed for runoff from these new impervious surfaces and the calculations used to determine the appropriate sizes of those treatment measures. The DEIR should include site maps that demonstrate that sufficient surface area has been set aside for compliance with the treatment requirements of the MRP for all new impervious surfaces. In addition, the DEIR has not 25 26

addressed the need to mitigate the hydromodification associated with the new impervious surfaces that will be created by the Project. The DEIR must be revised to address mitigation for hydromodification impacts associated with Project implementation. 26 cont.

In the discussion of Phase 2, the DEIR does not explain how stormwater treatment measures will be kept separate from created wetlands. The DEIR also lacks sizing calculations for the proposed Phase 2 stormwater treatment measures or designs for these measures, including required hydromodification mitigation for Phase 2's new impervious surfaces. The description of Phase 2 activities also does not include a design or location for the new stormwater outfall to the west (right) bank of Arroyo Las Positas. Please revise the DEIR to provide this information. 27

Finally, the discussion of changes in runoff rates as a result of Project implementation focusses exclusively on flood control issues associated with peak runoff events. The MRP requires that post-Project hydrographs match pre-Project hydrographs from 10 percent of the two-year storm to the 10-year storm event. Therefore, the DEIR does not address compliance with the hydrographic modification measures in the MRP. The DEIR should be revised to address this deficiency. 28

Comment 5. The DEIR should acknowledge that the Water Board is tasked with protecting beneficial uses of waters of the State that are identified in the Basin Plan, and these beneficial uses include the preservation of rare and endangered species.
In Section 3.3, Biological Resources, Section 3.3.1, Setting, includes a discussion of the Porter-Cologne Water Quality Control Act and the use of the basin plans required by the Porter-Cologne Water Quality Control Act to guide protection of waters of the State. The DEIR notes the water quality standards in the basin plans, but the text in Section 3.3.1 should be expanded to cover the beneficial uses assigned to waters of the State in the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan). The Basin Plan designates the following beneficial uses for Arroyo Las Positas: groundwater recharge, cold freshwater habitat, fish migration, preservation of rare and endangered species, spawning, warm freshwater habitat, wildlife habitat, contact water recreation, and non-contact water recreations (These beneficial uses are acknowledged in Section 3.8.1 of the DEIR). Therefore, any permits issued for the Project by the Water Board must support those beneficial uses, including supporting the special status species that are discussed in Impact 3.3.1 of the DEIR. 29

Table 3.3-2 in the DEIR acknowledges a high potential for occurrence of the California red-legged frog (CRLF) and the California tiger salamander (CTS) at the Project site, on the basis of habitat and CNDDB records of observations within five miles of the Project site. Western pond turtle (WPT) Longhorn Fairy Shrimp (LFS*)* are said to have a low potential for occurrence at the Project site, despite the presence of suitable habitat and CNDDB records of observations within five miles of the Project site. The alleged low potential for the presence WPT and LFS appears to have been based on a single site visit at the end of the dry season during a drought year (October of 2020). Further 30

studies of the presence of these species should be conducted during a normal wet season and used to update the discussion of these species in the DEIR. 30 cont.

Appendix D, Biological Resources, has its own Appendix D, which consists of the *California Tiger Salamander Sampling 90-Day Report* (Madrone Ecological Consulting, May 19, 2021). This report acknowledges that only one aquatic feature of the six aquatic features selected for inclusion in the sampling for CTS was not dry during the 2020-2021 wet season. Therefore, the 2020-2021 wet season was not a good season for conducting a CTS survey. To better assess the presence of CTS at the Project site, surveys should be conducted in a normal water year. 31

Comment 6. The proposed septic system appears to be close to an existing stream channel and a proposed mitigation wetland on the adjacent property.
In Section 3.8, Hydrology and Water Quality, the discussion of Impact 3.8.1: The Project could degrade surface or groundwater quality**,** describes the construction of the septic system for Phase 1 of the Project.

> Phase I would include installation of a septic system for wastewater. The Alameda County Department of Environmental Health coordinates with the San Francisco Bay RWQCB to permitOn-site wastewater treatment systems (OWTS's). Design for the septic system has been sent for review by the County and Final approval of the OWTS permit from the Alameda County Department of Environmental Health would be required prior to the construction of the on-site septic system proposed to support Phase I buildings. Approval of an OWTS permit would reduce potential impacts on water quality standards, waste discharge, or degradation of surface or groundwater quality to a less-than-significant impact.

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The location of the new leach field is illustrated in Sheets C-2.1 and C-2.2 in the combined sheets provided with the DEIR. The leach field will be constructed along the southern boundary of the Phase 1 portion of the Project site and extend to the eastern property boundary. On the adjacent property, which is the subject of the CAO and NOV discussed above in Comment 1, a channel flows to the southeast corner of the Phase 1 site and a 0.99-acre mitigation wetland is proposed to be created immediately to the east of the Phase 1 site. Some figures appear to show this channel passing under I-580 just to the east of the Phase 1 site, but during a rainy day site visit by Water Board staff on January 4, 2017, some flow from this channel appeared to be traveling north of I-580 to a confluence with Arroyo Las Positas at the I-580 bridge over Arroyo Las Positas. The DEIR should include an assessment of potential impacts of the existing channel and the proposed mitigation wetland on the functioning of the leach field.

Conclusion
In its present form the DEIR lacks an adequate discussion of impacts and proposed mitigation measures to support the issuance of Section 401 Water Quality Certification and Waste Discharge Requirements. The DEIR should be revised and re-circulated. Re-circulation is necessary to allow for review and comment on the Project's impacts 33

and proposed mitigation. The following areas require further evaluation in a revised DEIR.

- A wetland delineation of the complete Project site must be performed at the end of a normal wet season.
- An assessment of all Project impacts to waters of the State, including impacts associated with an improved access road, new bridges, new outfalls, and other improvements, must be based on the new, wet season delineation.
- Proposed permittee-responsible mitigation plans must be provided for all impacts to waters of the State identified on the basis of the new, wet season delineation
- The Project's potential impacts on aquatic special status species should be assessed in detail. This assessment should include the impact of permanent water bodies in the Project's proposed landscaping plan in providing habitat for non-native predators of CRLF and CTS. And the assessment should propose buffer widths between Project activities and wetlands that are intended to provide habitat for special status species; a rationale for the proposed buffer widths should be provided for agency and public review. Also, the presence of special status species should be assessed in a normal water year.
- Post-construction stormwater treatment measures, including sizing calculations for those measures, should be included for agency and public review.
- The potential impact of channels and wetlands at the adjacent property on the proposed septic leach field should be assessed.

33 cont.

Since an EIR should provide both proposed impacts and proposed mitigation measures for public review, the DEIR should be revised to include an appropriate delineation and detailed mitigation proposal for public review. Provision of this information in a Final EIR is inappropriate, since this information would not have been subject to public review before the Final EIR was adopted.

If you have any questions, please contact me at brian.wines@waterboards.ca.gov.

Sincerely,

Brian K. Wines

Brian Wines
Water Resources Control Engineer
South and East Bay Watershed Section

cc: State Clearinghouse (state.clearinghouse@opr.ca.gov)
CDFW, Marcia Grefsrud (marcia.grefsrud@wildlife.ca.gov)
USACE, Katerina Galacatos (Katerina.galacatos@usace.army.mil)
USACE, Frances Malamud-Roam (Frances.P.Malamud-Roam@usace.army.mil)

RESPONSES TO COMMENT LETTER C

Response to Comment C-1

This is a summary comment summarizing the contents of the rest of the comment letter. Responses to specific concerns are found in in Responses to Comments C-2 through C-32. The County disagrees that recirculation of the Draft EIR is required. The Final EIR includes clarifications and refinements; no significant new information implicating a new or substantially more severe impact is being added to the EIR.

Response to Comment C-2

See Response to Comment B-4.

Response to Comment C-3

The area north of I-580 is a wetlands surge area and not a new wetland created by the Project. The Project would not develop the area next to the existing wetlands on the Project site (shown in Figure FEIR-2), but it would be supported naturally by rainfall. This wetland surge area would be a buffer area around the existing wetlands north of I-580. It would not involve anthropogenic management and would be dry or wet based on seasonal rainfall. As shown in **Figure FEIR-2**, there is a seasonal wetland area by the proposed Magen David Memorial Gardens Cemetery. Project development of the Phase II area would not begin for at least five years and would include additional biological reviews that could affect Phase II final designs. Phase II final designs would avoid the existing wetland near the Magen David Memorial Gardens Cemetery.

Response to Comment C-4

The comment is correct, the Project no longer intends to create mitigation wetlands to resolve the outstanding CAO and NOV on adjacent properties. However, in the Mitigated Alternative, development of the Project site would include a 2.6-acre wetland surge area, see Response to Comment C-3.

As indicated in Responses to Comment C-16 the wetland delineation was performed during a normal wet season on December 12, 2018. A wetland delineation conducted late in the wet season of a year with normal rainfall ensures that the full extent of wetlands subject to regulation as waters of the State have been identified. **Figure 3.3-4** on page 3.3-15 of the Draft EIR reflects the summary details of the delineation. As indicated in Response to Comment C-3, if the wetlands area cannot be avoided the Project would need to implement Mitigation Measure 3.3.3b that would require purchase of wetland credits at an approved Mitigation Bank or require equivalent on-site wetland mitigation. While the comment indicates there are currently no available wetland mitigations credits in the service area, they could become available by the time of Phase II construction, at least five years in the future.

Response to Comment C-5

As indicated in the Draft EIR and shown in detail in **Figure FEIR-2**, there are no wetlands within the Phase I Project footprint. Therefore, Phase I of the Project would not have impacts to wetlands and no mitigation is required.

Response to Comment C-6

See Response to Comment B-10.

Response to Comment C-7

The Draft EIR acknowledges potential impacts from proposed outfall structures from the wetland surge area and includes mitigation measures to reduce those impacts. Mitigation Measure 3.3.3b mitigates for impacts to jurisdictional waters and indicates that a Section 404 permit from the U.S. Army Corps of Engineers and a Section 401 water quality certification from the Regional Water Quality Control Board (RWQCB) may be required if there are any activities affecting wetlands. Mitigation Measure 3.5.2 requires all outfall structures ensure stability and prevent erosion of the banks using energy dissipators, armoring, bio-revetments/gabions, and other erosion and slope protection features.

Response to Comment C-8

The area north of I-580 is a wetlands surge area and not a new wetland created by the Project. The Project would not develop the area next to the existing wetlands on the Project site, but it would be filled naturally by rainfall. This wetland surge area would be a buffer area around the existing wetlands north of I-580. In the Mitigated Alternative a walkway would not transit the wetland surge area, see **Figure FEIR-1**. For further details on the Mitigated Alternative, see Master Response 1.

Response to Comment C-9

The Draft EIR acknowledges impacts to wetlands and other waters of the United States as a potentially significant impact requiring mitigation. As indicated on page 3.3-37 of the Draft EIR, there are no Seasonal Wetlands in Phase I of Project development. As indicated in Response to Comment C-3, the 2.6-acre wetland surge area would be a substantial buffer for the existing wetlands. Final designs of the setbacks would be determined during Phase II of Project development. Mitigation Measure 3.3.3b mitigates for impacts to jurisdictional waters and indicates that a Section 404 permit from the U.S. Army Corps of Engineers and a Section 401 water quality certification from the Regional Water Quality Control Board (RWQCB) would be required if there are impacts to wetlands. Listed species were not observed using the wetlands as habitat.

Response to Comment C-10

As indicated in Response to Comment C-4 the Project is not proposing wetlands creation on-site. The Project intends to avoid the identified existing wetlands.

Response to Comment C-11

The Mitigated Alternative addresses the concerns of this comment by removing the lakes and the man-made stream. For further details on the Mitigated Alternative, see Master Response 1.

Response to Comment C-12

See Response to Comment C-16, the wetland delineation for the Project was performed on December 12, 2018 during a normal wet season. The two 24-foot-wide clear-span bridges would be designed to avoid effects on Arroyo Las Positas, thus avoiding impacts to the Arroyo and requirement for the Lake and Streambed Alteration (LSA) Agreement. Based on the final design, the LSA and other permits could be required, if the project activity substantially adversely affect fish and wildlife resources.

The Draft EIR considered the No Project Alternative, a Reduced Project Footprint Alternative, and an Access Road Coordination Alternative. A Mitigated Alternative has also been added in the Final EIR. These alternatives comprise a reasonable range of potentially feasible alternatives, and there is no requirement to consider every conceivable alternative to a project. The existing design includes two locations for crossing Arroyo Las Positas which could be helpful under certain emergency circumstances.

Response to Comment C-13

See Response to Comment C-16, the wetland delineation for the Project was performed on December 12, 2018 during a normal wet season.

Response to Comment C-14

See Response to Comment C-16, the wetland delineation for the Project was performed on December 12, 2018 during a normal wet season. Section IV.A.2 of the State Wetland Definition and Procedures for Discharges of Dredged and Fill Material to Waters of the State states:

> "For example, supplemental wet season delineation would not be required if the initial delineation was conducted during the wet season."

Therefore, a supplemental wet season delineation would not be required.

Response to Comment C-15

See Response to Comment C-16, the wetland delineation for the Project was performed on December 12, 2018, during a normal wet season.

The CARI map does not reflect current site conditions as indicated on page 11 of Appendix D of the Draft EIR:

> "A review of the National Wetlands Inventory (NWI; Figure 2) and California Aquatic Resources Inventory (CARI; Figure 3) map databases show very different scenarios for this site. While the NWI accurately shows the Arroyo Las Positas in the SE corner of the

> parcel, the CARI map shows a number of other streams as well as a wide swath of vernal pools through the site. This latter mapping was not reflected by Barnett Environmental's (and earlier) wetland delineations of the site and clearly does not reflect current conditions."

The California Aquatic Resources Inventory (CARI) is a Geographic Information System (GIS) dataset of wetlands, streams, and riparian areas and varies in accuracy in different areas. The dataset for CARI states (SFEI 2017):

> "The CARI dataset varies in detail and accuracy across the state, and represents different time periods for different areas. Users are advised to get familiar with the level of detail available for their area/s of interest to understand the potentially different levels of mapping details represented across their area/s of interest. Future releases of CARI will incorporate updated data sources as they become available."

CARI maps are based on topographic aerial mapping and are not intended to be a substitute for in-person field investigations. Additionally, field investigations can determine soil types and soil characteristics, while CARI maps lack that level of accuracy. Ground-truthing of the CARI map for this Project determined that the other channels and wide swath of vernal pools shown on the CARI map were not present at the Project site. Wetland delineations of the Project Area were performed in 2016, 2018 and 2020, see Response to Comment B-6. None of the incised drainage showed any evidence of recent water conveyance. Some seasonal wetlands were identified in the area that vernal pools were shown on the CARI map, and seasonal wetlands are included in the Draft EIR.

Figure 3.3-4 of the Draft EIR shows **Figure 5** of **Appendix D** with the Project site boundaries shown. Further study of Phase II will be required for Phase II permitting. Mitigation Measures are included in the EIR for any impacts to wetlands.

Response to Comment C-16

The field data sheets for the wetland delineation have been added as Appendix K of the Draft EIR. The wetland delineation was conducted on December 12, 2018, during a normal wet season. A wetland delineation conducted late in the wet season of a year with normal rainfall ensures that the full extent of wetlands subject to regulation as waters of the State have been identified. To clarify the date of the wetland delineation, the source on page 3.3-14 of **Table 3.3-1** of the Draft EIR is updated as follows (new text is <u>underlined</u>, deleted text is in ~~strikeout~~ format):

> "SOURCE: Barnett Environmental, 2021. <u>Wetland delineation performed on December 12, 2018.</u>"

Response to Comment C-17

See Response to Comment C-16.

Response to Comment C-18

As clarified in Response to Comment C-16, the wetland delineation reported in the Draft EIR was conducted during the wet season of a year with normal rainfall. The channel described was reviewed and was not wet at the time of the 2018 delineation. The channel described was probably due to the runoff from the I-580 HOV lane. The recently constructed HOV lane does generate runoff onto the Project site. Caltrans did not implement appropriate stormwater mitigation as part of the HOV lane construction, resulting in some runoff that during storm events that can cause water to flow as described in the comment.

Response to Comment C-19

Comment noted.

Response to Comment C-20

Comment noted.

Response to Comment C-21

Comment noted.

Response to Comment C-22

As indicated in Response to Comment C-3, if the wetlands area cannot be avoided and the Project would result in impacts to waters of the State the Project would need to implement Mitigation Measure 3.3.3b that would require purchase of wetland credits at an approved Mitigation Bank or require equivalent on-site wetland mitigation. While the comment indicates there are currently no available wetland mitigations credits in the service area, they could become available by the time of Phase II construction, at least five years in the future.

Response to Comment C-23

As indicated on page 3.8-8 of the Draft EIR the creation of impervious surfaces is not considered a significant environmental impact unless it would substantially alter the existing drainage of the site. As indicated on page 3.8-14 of the Draft EIR, the proposed stormwater infrastructure (cisterns and biofilter) has been designed to ensure that the post-development peak runoff would not exceed pre-development peak runoff. Stormwater would drain into cisterns and would not alter existing drainage runoff from on-site.

Phase II drainage is analyzed on page 3.8-14 of the Draft EIR. As Phase II of the Project is developed Mitigation Measure 3.8.1c would require the applicant to submit a final drainage plan prepared by a qualified civil engineer to the County for review and approval prior to construction. Mitigation Measures 3.8.1a, 3.8.1b, and 3.8.1c would ensure that the Project does not degrade surface or groundwater quality. Construction activities would be required to comply with NPDES regulations and would be required to implement construction Best Management Practices (BMPs) as set forth in a detailed SWPPP (Stormwater Pollution Prevention Plan). The SWPPP must describe the specific erosion control and stormwater quality BMPs being implemented to minimize pollutants in stormwater runoff and detail their placement and proper installation. The BMPs are

designed to prevent pollutants from coming into contact with stormwater and to keep all products of erosion and stormwater pollutants associated with construction activities from moving off-site into receiving waters. Alameda County would review and approve the stormwater control plan for the Project prior to grading permit approval.

Response to Comment C-24

The 2.6-acre wetland surge area is not a proposed wetland mitigation area, see Response to Comment C-3. It is proposed as a passive stormwater treatment feature and its location is shown in **Figure FEIR-1**. The Project does not propose mitigation wetlands.

As indicated on page 2-6 of the Draft EIR, Phase I stormwater would pass through a bio filter system discharging east of Arroyo Las Positas:

> "The parking area would be constructed of pervious paving materials and include underground cisterns for collection of water run-off. Entrapped sediments would settle out in the cisterns and the waters would then pass through a natural bio filter system before discharging east to the creek."

Mitigation measure 3.5.2 requires proper protection of stormwater outfalls including discharge points into the Arroyo.

Response to Comment C-25

See Response to Comment C-23.

Mitigation Measures 3.8.1b and 3.8.1c require the applicant to submit the final drainage plan and stormwater control plan to Alameda County for review and approval prior to grading permit approval.

Response to Comment C-26

See Response to Comment C-23 that includes a discussion of stormwater collection and treatment including Mitigation Measures 3.8.1a, 3.8.1b, and 3.8.1c.

Response to Comment C-27

See Response to Comment C-24 for stormwater treatment discussion. Mitigation Measures 3.3.3b and 3.5.2 would reduce potential environmental impacts from proposed outfall structures, see Response to Comment C-7. It is generally considered acceptable to base CEQA analyses on preliminary plans when it is generally accepted that the mitigations are feasible and will be implemented in the more-refined final plans.

Response to Comment C-28

As indicated in the Water Board NOP comments, projects requiring permits from the Water Board are required to provide documentation that they will provide stormwater runoff treatment and hydromodification mitigation that is consistent with the requirements of the National

Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit (MRP) for the management of stormwater runoff (Order R2-2015-0049; NPDES Permit No. CAS612008). This is a regulatory requirement and CEQA assumes compliance with regulations.

The project is of sufficient size to meet the regulatory requirements by installation of vegetative swales (such as the 2.6-acre wetlands surge area), cisterns, and retention basins.

Appendix G, page 5, in the Draft EIR includes 10-year and 100-year pre- and post-development peak flow results, it is understood that additional flow scenarios would be required for an MRP and the potential for other actions for stormwater treatment and hydromodification mitigation.

Regarding permeability, Appendix G, page 6 of the Draft EIR noted that:

> "It is our opinion that this estimate is considered conservative as the infiltration potential for soil within the burial areas and new landscaping will increase due to the disturbance of soil."

Response to Comment C-29

As the comment acknowledges that discussion is already included in the Draft EIR on page 3.8-3 as follows:

> "The Project is under the jurisdiction of the San Francisco Bay RWQCB, which established regulatory standards and objectives for water quality in its Water Quality Control Plan for the San Francisco Bay, and is also known as the "Basin Plan". The San Francisco Bay RWQCB identifies beneficial uses for aquatic ecosystems and underground aquifers as they provide many different beneficial benefits to the people of the State (San Francisco Bay Water Board, 2021). The Water Board is charged with protecting all of the beneficial uses from pollution and nuisance that may occur as a result of waste discharges in the region.
>
> Beneficial uses from Arroyo Las Positas can be classified to include groundwater recharge, cold freshwater habitat, fish migration and spawning, preservation of rare and endangered species, wildlife habitat, water contact recreation, noncontact water recreation (San Francisco Bay Water Board, 2010)."

Response to Comment C-30

See Response to Comment B-6.

Response to Comment C-31

See Response to Comment B-6. Additional California tiger salamander surveys are anticipated for Phase II permitting.

Response to Comment C-32

For discussion of the channel see Response to Comment C-18. The design and placement of the septic system would require approval and permitting prior to construction, see Response to Comment E-2.

Response to Comment C-33

This is a summary of all previous concerns brought up in the comment letter. See Responses to Comments C-1 through C-32. The County disagrees that recirculation of the Draft EIR is required. The Final EIR includes clarifications and refinements; no significant new information implicating a new or substantially more severe impact is being added to the EIR.

ZONE 7 WATER AGENCY
Delivering Quality, Reliability and Safety

100 North Canyons Parkway
Livermore, CA 94551
(925) 454-5000

Letter D

February 28, 2022

Alameda County Planning Department
224 W. Winton Avenue, Room 111
Hayward, CA 94544
ATTN: Albert V. Lopez, Planning Director
Sent by e-mail to: albert.lopez@acgov.org

Re: Monte Vista Memorial Gardens EIR

Zone 7 Water Agency (Zone 7, or Zone 7 of the Alameda County Flood Control and Water Conservation District) has reviewed the referenced document in the context of Zone 7's mission to "Deliver safe, reliable, efficient, and sustainable water and flood protection services" within the Livermore-Amador Valley. Below are our comments for your consideration.

Livermore Valley Groundwater Basin

As the designated Groundwater Sustainability Agency (GSA) for the Livermore Valley Groundwater Basin (DWR 2-10) (the Basin), Zone 7 Water Agency is responsible for sustainably managing the Basin in compliance with the Sustainable Groundwater Management Act (SGMA). On December 15, 2021, the Zone 7 Board of Directors adopted the updated Alternative Groundwater Sustainability Plan (Alternative GSP) for the Basin. Pursuant to the Zone 7 Sustainable Groundwater Management Ordinance (Ordinance No. 2017-01), unsustainable extraction or wasteful use of groundwater is expressly prohibited.

The proposed Project is located within Upland Management Area of the Basin, and it is subject to provisions of the Alternative GSP, as well as to oversight by Zone 7 as the GSA for the Basin. The Project's construction and operation should be consistent with the Alternative GSP and Zone 7's Sustainable Groundwater Management Ordinance, as well as the State's Water Recycling Policy (and associated orders), the State's storm water protection measures, and Alameda County's Water Wells Ordinance. Many of these documents can be found on Zone 7's website; https://www.zone7water.com. 1

1. **Impacts to Groundwater Supply - Upland Management Area Water Budget.** The EIR states that groundwater supply would exceed irrigation demand in Phase 1 of the Project, and that in Phase 2 of the Project, groundwater in the creek and lake 2

system would be recirculated, resulting in a less than significant impact to groundwater supply. Additional data is needed to support this finding. 2 cont.

Wells in the Upland Management Area are generally completed within semi-consolidated to consolidated bedrock units, have relatively low yields, and are predominantly for domestic use by de minimis extractors (defined as less than 2 acre-feet per year extraction). Per the Alternative GSP, this area "provides only very limited groundwater supply for domestic and agricultural uses. The total groundwater storage of the Upland Management Area is unknown because it consists of semi-consolidated bedrock of highly-variable Specific Yields and of unknown thickness." (Alternative GSP, Section 2.3.7.2). Groundwater elevations in the Upland Management Area change little over time, indicating that storage also remains relatively constant over time, as variations in groundwater inflow volumes (e.g., from rainfall) are balanced by a corresponding change in basin overflow into the gaining streams and/or subsurface outflow into the Main Basin. (Alternative GSP Section 9.3.1.2). Some of the precipitation that falls on the Upland Area leaves the area as runoff and contributes to streams in the Fringe Area and the Main Basin. 3

The Project's proposed annual extraction of 241 acre-feet is significant when compared to the other uses in the Upland Management Area, and the surrounding groundwater conditions in which it will occur. This region remains in balance under current conditions; however, it is not clear that an extraction of this volume could be recouped by the limited existing natural recharge in the management area. Moreover, the precipitation and groundwater outflow from the Upland Management Area helps to replenish the Main Basin under existing conditions, and so a reduction in either supply has the potential to impose impacts on the Main Basin as well. Additional data and/or mitigation measures should be provided to demonstrate that the actual effect on groundwater supply in the Upland Management area will in fact be less than significant.

2. **Impacts to Groundwater Supply – Impacts to Neighboring Wells**. As shown on attached Figure 2, a number of supply wells exists within one mile radius of the project well. The proposed Project has the potential to significantly alter the hydrology of the Upland Management Area where these wells operate. The hydrogeologic impacts to local groundwater users and reduction in recharge to the main basin should be thoroughly analyzed and mitigated. This impact analysis shall include conducting pumping tests to determine areal and time drawdowns of groundwater level in neighboring wells and groundwater modeling to analyze impact of the proposed 4

pumping. If the project plans to replace or add wells, pumping from these planned wells should also be analyzed. 4 cont.

3. **Impacts to Groundwater Supply – Reductions in Available Recharge.** According to the Project description, Phase 2 includes two proposed "lakes" or ponds connected by a man-made perennial linear waterway (i.e., creek) that would drain from the upper lake to the lower lake. (Figure ES-2). The water would be re-circulated back to the upper lake via by a water pump. The lakes would be supplied with groundwater during summer months, and with precipitation during winter months.[1] As described, the lakes are ornamental landscaping features that may provide aesthetic benefits to the property. However, their operation must occur within the parameters set by the property's well permits, the Zone 7 Sustainable Groundwater Management Ordinance, and existing law. 5

   In addition to the proposed man-made lakes, the Project proposes to install a 2.6-acre seasonal wetland area west of Arroyo Las Positas, along the southern boundary of the central portion of the site. Water in this wetland area would come from direct precipitation. The wetland would be designed to only receive supplemental surface runoff in the event of very large storm events, along with discharge from the lower lake during storm events. The water would be detained in this wetlands area and then discharged at 10-year and 100-year predevelopment flows via a stabilized outfall structure into Arroyo Las Positas. Currently, surface runoff from precipitation events contributes to groundwater recharge via Arroyo Las Positas. Reducing that recharge source by collecting it into the proposed lakes, and by constraining it to 10-year and 100-year predevelopment flows into Arroyo Las Positas has the potential to cause significant adverse impacts to recharge in the main Basin. 6

4. **Impacts to Groundwater – Water Quality/High Water Levels.** Figure 1, below, shows historical high depth to shallow groundwater based on data collected from Zone 7's monitoring network. According to water level measurements from wells located closest to the project area, the depth to water is shallow with historical high measurements ranging from approximately 1 to 17 feet below surface. Please review the water level data for the project to verify that high water levels will not conflict with 7

[1] As noted above, the existing well on the property is permitted for irrigation uses. Zone 7's Sustainable Groundwater Management Ordinance prohibits the waste or unreasonable use of both surface and groundwater within its area. Zone 7 staff did not evaluate whether the proposed pumping plan was consistent with the Ordinance or with the permitted irrigation uses, however, the Project applicant should be advised that any water diverted in the service area must be put to a beneficial use.

underground structures such as crypts or, if approved, onsite wastewater treatment systems. 7 cont.

Wells & Permitting Oversight

Our records indicate that there is 1 well (3S2E04G001) in the project area (Figure 1, below). This well is currently permitted as an irrigation well. Please be advised that non-irrigation uses for this well are beyond the scope of the permit. Zone 7 would need to be notified of any change in use for this well. In addition, use of a well for public supply requires additional permitting and approval from regulatory agencies.

1. **Metering & Monitoring.** Given the hydrology of the Upland Management Area and the extractions proposed by the Project, Project wells are expected to be subject to flowmeter installation requirements, annual reporting, and monitoring requirements consistent with those identified in the Alternative GSP.

2. **Additional Permits**. A Zone 7 drilling permit is needed for any water well or soil boring work that may be planned for this project. Well permit applications and the permit fee schedule can be downloaded from our website: https://www.zone7water.com/post/well-drilling-and-soil-boring-permits. For additional information please email wellpermits@zone7water.com.

3. **Open Loop Ground Heat-Exchange (GHX) system.** As per the EIR's Appendix F (Page 34), an open loop GHX system is being considered to achieve energy savings and to potentially eliminate the need for outdoor air conditioner units. If an open loop geothermal well is proposed for the project, it may not be compatible with the mineral content of local groundwater aquifer. Zone 7 has observed that changes in pH from introduction of waters of differing temperatures and chemistries can cause fouling of the well in a short period of time. Open loop geothermal wells have not historically been permitted in the Zone 7 service area. In order to receive a permit from Zone 7, the permit applicant will need to clearly demonstrate that any new wells do not jeopardize the sustainability of the basin as to water supply or water quality, among other items.

8

Onsite Wastewater Treatment Systems (OWTS, e.g., septic systems)

1. **Septic.** Zone 7 prohibits the use of septic tanks for new commercial developments which overly the Basins unless it can be satisfactorily demonstrated that the resultant wastewater loading will not exceed the equivalent loading from a typical rural residential

9

unit on 5 acres (Zone 7 Resolution 1165). For more information, please contact septics@zone7water.com. 9 cont.

2. **Proximity to Sewer.** Zone 7 recommends that the Project be connected to the City's sewer system which provides treatment and export of effluent to ensure the protection of groundwater quality in this area. We feel this is both possible and reasonable considering the project is in proximity of the City's existing pipelines (see Figure 1, below). 10

Flood Management / Runoff

1. **Floodplain Impacts.** The EIR relies on outdated FEMA analysis for floodplain delineation. Zone 7 provided an updated 100-year flood delineation to the Developer and the Community Development Agency in August 2019. Zone 7's hydraulic analysis of the Livermore-Amador Valley showed a culvert restriction at I-580 on the Arroyo las Positas, causing backwater conditions which would inundate the Phase 1 area of the Project. Zone 7 recommends mitigation based on the more recent hydraulic modeling from Zone 7, rather than FEMA's model. 11

2. **Floodplain Impacts.** On P. 3.8-13, regarding whether Project increases risk of flood hazards, the DEIR ignores previously provided floodplain delineation of the Arroyo las Positas performed by Zone 7. Phase 1 would be constructed within an area Zone 7 had identified as a floodplain. Construction within the floodplain would displace the flooding in the surrounding and downstream areas and requires mitigation for those impacts. 12

3. **Arroyo Las Positas.** The DEIR indicates no plans for flood protection or related improvements within the Arroyo Las Positas, which suggests that no considerations have been made to incorporate any of Zone 7's previous suggestions to the Developer to improve the Arroyo las Positas. Zone 7 again urges that improvements to the Arroyo could be considered as mitigation for floodplain impacts. 13

New Impervious Development

1. **Development Impact Fee.** New development and the expansion of existing development may impose a burden on the existing flood protection and storm drainage infrastructure within the Zone 7 service area. Developments creating new impervious areas within the Livermore-Amador Valley are subject to the assessment of the Development Impact Fee for Flood Protection and Storm Water Drainage. These fees 14

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are collected for Zone 7 by the local governing agency: 1) upon approval of final map for public improvements creating new impervious areas; and/or 2) upon issuance of a building or use permit required for site improvements creating new impervious areas. Fees are dependent on whether post-project impervious area conditions are greater than pre-project conditions and/or whether fees have previously been paid. Please refer to Zone 7's Flood Protection & Storm Water Drainage Development Impact Fee Ordinance and additional information at: http://www.zone7water.com/permits-a-fees. Contact Jeff Tang at (925) 454-5075 for additional information.

14 cont.

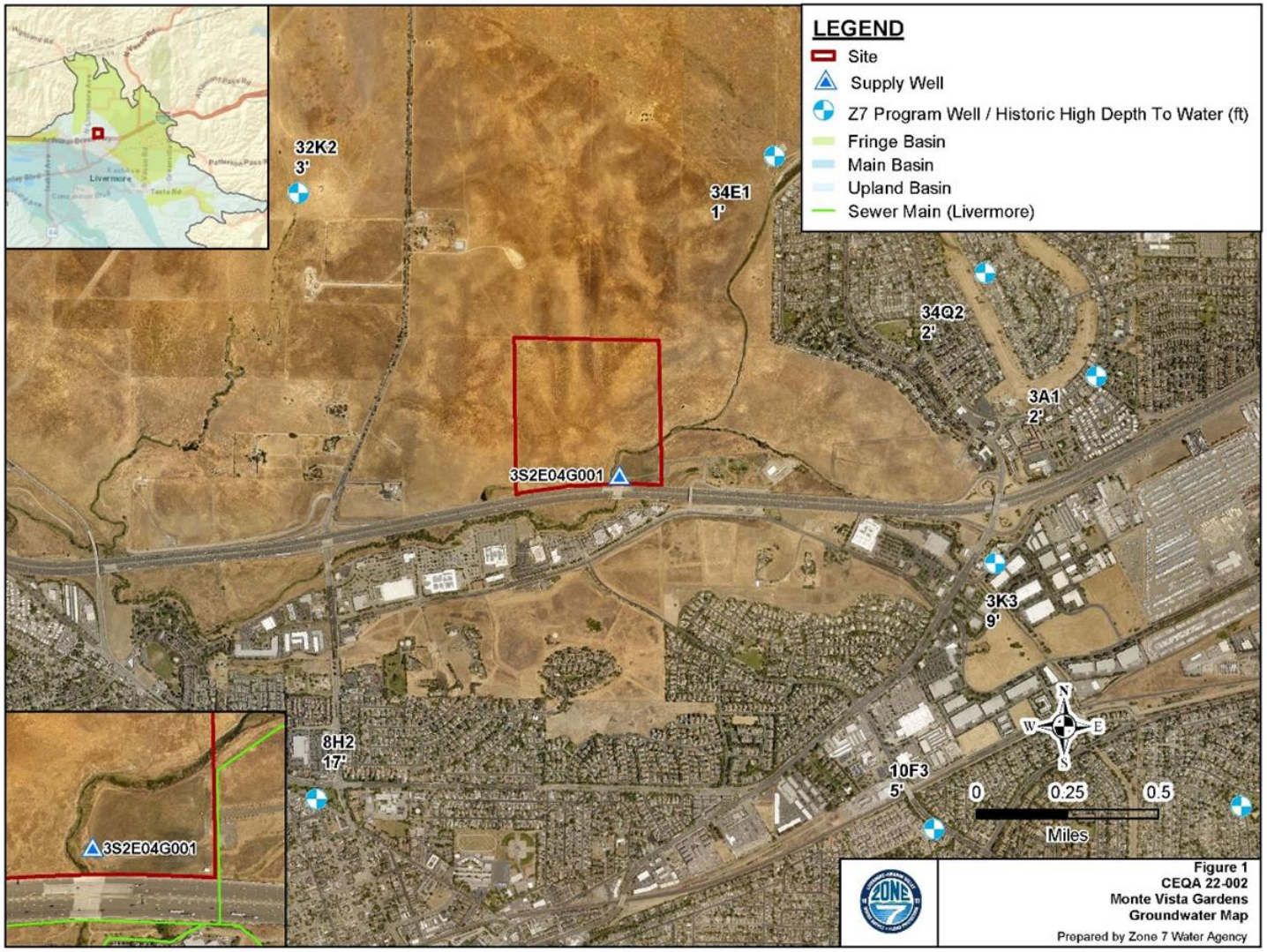
We appreciate the opportunity to comment on this project. If you have any questions on this letter, please feel free to contact me at (925) 454-5005 or via email at erank@zone7water.com.

Sincerely,

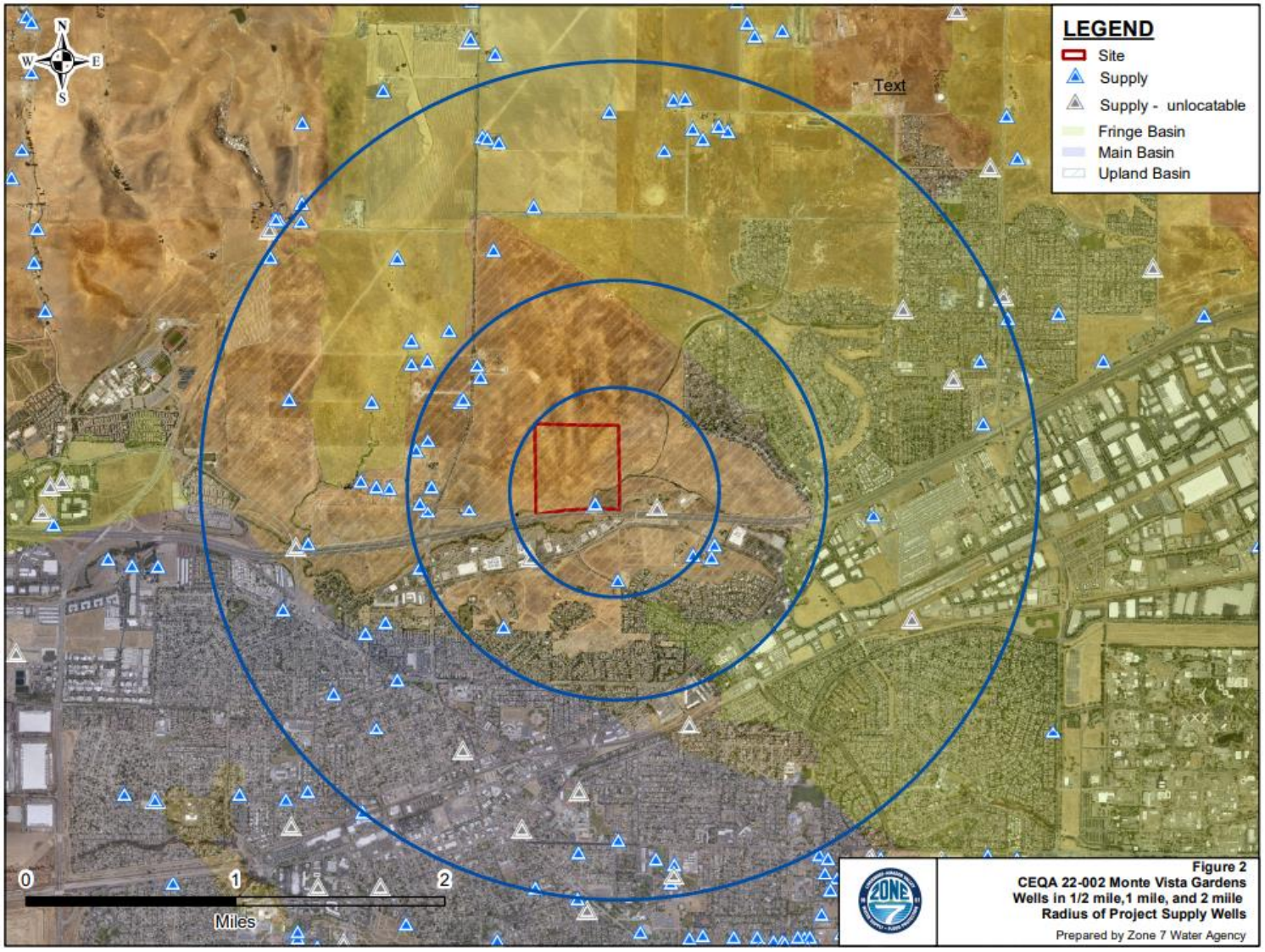
Elke Rank

Elke Rank
cc: Carol Mahoney, Amparo Flores, Ken Minn, file

Attachments (Figure 1 and Figure 2)


LEGEND
Site
Supply Well
Z7 Program Well / Historic High Depth To Water (ft)
Fringe Basin
Main Basin
Upland Basin
Sewer Main (Livermore)
32K2
3'
34E1
1'
34Q2
2'
3A1
2'
3S2E04G001
3K3
9'
8H2
17'
10F3
5'
3S2E04G001
N
W
E
S
0
0.25
0.5
Miles
Figure 1
CEQA 22-002
Monte Vista Gardens
Groundwater Map
Prepared by Zone 7 Water Agency

ZONE 7 WATER AGENCY
Delivering Quality, Reliability and Safety



RESPONSES TO COMMENT LETTER D

Response to Comment D-1

Comment noted.

Response to Comment D-2

The determination of a less than significant impact was supported by the ENGEO hydrologic analysis of the Project on page 17 of **Appendix G** of the Draft EIR:

> "… based on the water balance analyses, there is an adequate water supply to sustain the Monte Vista Memorial Garden Project's proposed water features and proposed wetland."

See Response to Comment D-4 for additional information on the water use of the Mitigated Alternative that includes removing the lakes and the man-made perennial creek. Removal of the lakes and the man-made perennial creek would reduce substantially reduce Project water demand.

Response to Comment D-3

The Mitigated Alternative addresses the concerns of this comment by removing the lakes and the man-made perennial creek. Daily, monthly, and annual water usage estimates were prepared for the Mitigated Alternative by RMA Irrigation and added as **Appendix J** of the Final EIR. The analysis determined that the Mitigated Alternative would substantially reduce total water usage through the removal of the lakes and man-made perennial creek and the use of advanced landscaping techniques and native vegetation. The Mitigated Alternative would reduce the annual water usage at full build-out from 241 acre-feet (AF) per year to approximately 86 AF per year (approximately 65 percent reduction). For further details on the Mitigated Alternative, see Master Response 1.

Response to Comment D-4

No new wells are proposed as part of the Project. Page 3.12-3 of the Draft EIR states that Project site has an existing on-site well that has been permitted for all irrigation and usage of the well is regulated by Cal Water. As noted in Master Response 1, the Mitigated Alternative will reduce the water usage of the well by approximately 65 percent because the Mitigated Alternative removes the lakes and man-made perennial creek from the Project and includes the use of advanced landscaping techniques and native vegetation. The Draft EIR addresses sustainable groundwater management and impacts to other wells on pages 3.12-5 through 3.12-6 of the Draft EIR:

> "For the purpose of sustainable groundwater management, the groundwater well draw would be limited to 150 [gallons per minute] gpm, or approximately 0.66 acre-feet (AF) of water per day (or 241 AF per year) (ENGEO, 2019). Groundwater well draw at this rate would ensure that groundwater supplies from the Livermore Valley Groundwater Basin are not depleted (Sasaki, 2021)."

As noted on page 12 of **Appendix G** of the Draft EIR, the Livermore Valley Groundwater Basin spans approximately 69,600 acres (109 square miles) and has an approximate capacity of 500,000

AF. The water balance analysis by ENGEO included in the Draft EIR was based on the proposed water usage of 241 AF per year. The Mitigated Alternative substantially reduces annual Project water usage to approximately 86 AF per year. This would be the total water demand including both Phase I and full build out of Phase II. The cone of depression formed by the proposed domestic well would not be substantially deep or spatially extensive because the well would operate intermittently, allowing water to recharge between pumping cycles. Therefore, groundwater drawdown at the Project site would be localized and minimal and would not adversely affect the local aquifer shared with any nearby wells such that groundwater supplies are decreased, or that sustainable groundwater management of the basin is impeded.

Response to Comment D-5

Comment Noted. The Mitigated Alternative would remove the lakes and man-made perennial creek. For further details on the Mitigated Alternative, see Master Response 1.

Response to Comment D-6

The 2.6-acre area is a wetlands surge area. This wetland surge area is not a new wetland created during Project development; the Project would not develop the area next to the existing wetlands on the Project site and it would be filled naturally by rainfall. This wetland surge area would be a buffer area around the existing wetlands. See Response to Comment C-3.

The Mitigated Alternative addresses the concerns of the lakes collecting precipitation recharge by removing the lakes and man-made perennial creek. The 2.6-acre wetland surge area would contribute to groundwater recharge as it does currently. For further details on the Mitigated Alternative, see Master Response 1.

Response to Comment D-7

Groundwater levels were assessed. Page 16 of **Appendix F** of the Draft EIR states as follows:

> "Groundwater was encountered at depths of 5 to 16 feet below the existing ground surface during field exploration activities at select exploration locations.
>
> Based on the above, we recommend considering a design high groundwater depth of 5 feet below existing grade for project design such as planned roadway improvements on the eastern portion of the site in the vicinity of 1-B7 through 1-B9 and 1-B15. We recommend considering a design groundwater depth of 10 feet below existing grade for project design such as the funeral home building, bridge improvements, and cemetery improvements on the remaining portions of the site."

Following the recommendations provided in the Geotechnical Exploration Report prepared by ENGEO and the recommendations of any future geotechnical reports during development of the Project in addition to permitting and review from the County prior to Project construction would ensure that the groundwater level at the Project site would not conflict with development of the Project buildings and underground structures such as burial crypts and the on-site wastewater treatment systems.

Response to Comment D-8

The Project would use the well for irrigation uses only and it would not be used for a public water supply. As indicated on page 3.12-3 of the Draft EIR, an existing domestic water meter provides domestic water use on-site and is regulated and permitted through California's Water System (Cal Water).

Response to Comment D-9

See Response to Comment E-2. Approval of an OWTS permit from the County Department of Environmental Health for the septic system would require compliance with all necessary regulations and permitting requirements and would address this concern.

Response to Comment D-10

The applicant would prefer to connect to the City of Livermore sewer system that is close to the Project but that does not appear to be an opportunity available to the applicant. Therefore, the Project proposes to use a private septic system.

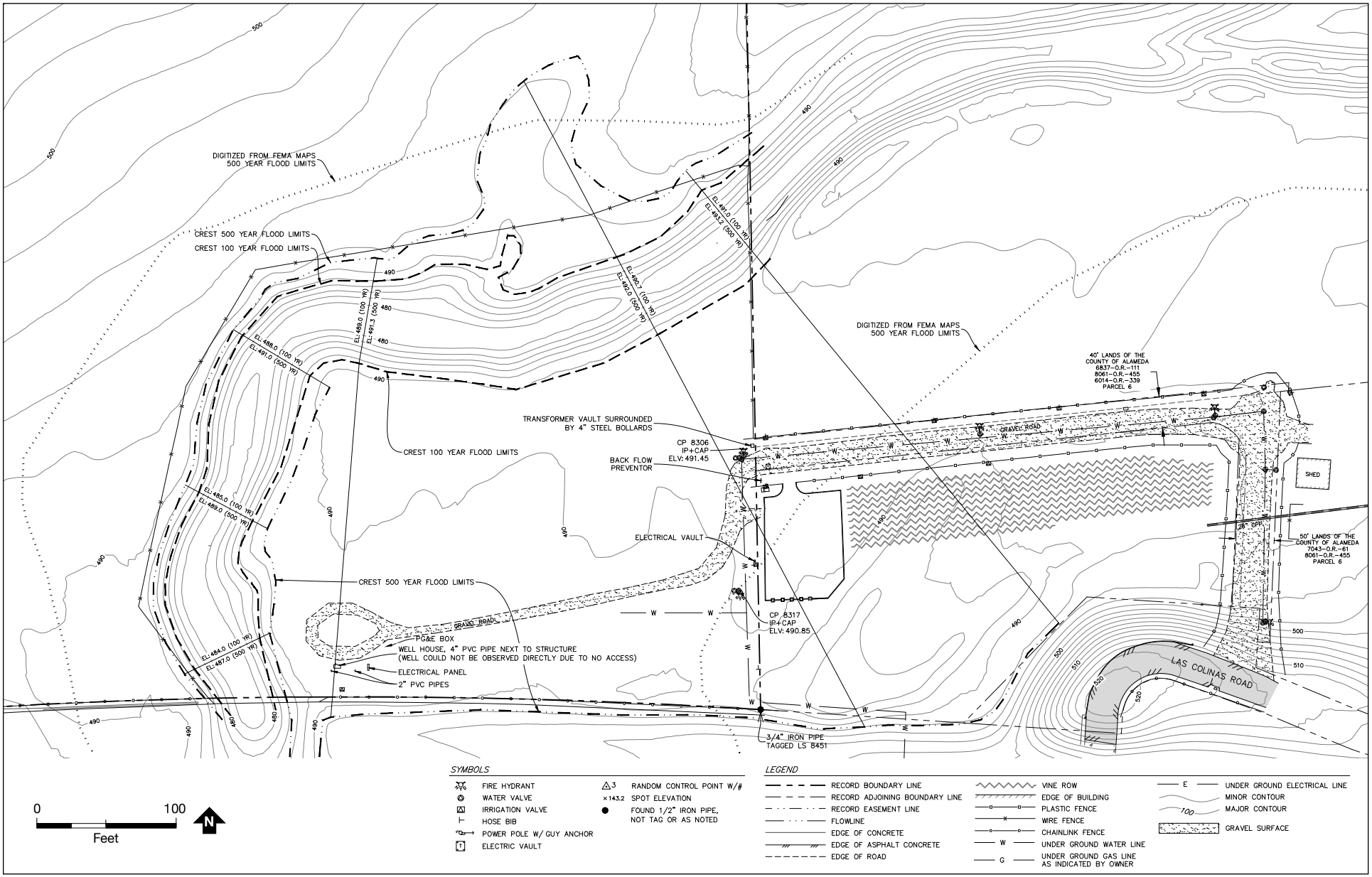
Response to Comment D-11

The EIR did rely upon the FEMA mapping. There is disagreement between the FEMA mapping and the Zone 7 mapping. FEMA provides the flood hazard data to support the National Flood Insurance Program. In response to the comments on the Draft EIR, ENGEO conducted additional hydraulic modeling (**Appendix L**). ENGEO prepared a steady state hydraulic model using HEC-RAS[2] software by the Army Corps of Engineers to evaluate the capacity of the bridge and creek channel along the subject reach. The HEC-RAS modeling is based upon the most recent topographic data from a field survey completed by Hogan Engineering on September 20, 2022 (see **Figure FEIR-6**) and information from Zone 7 modeling, including the 100-year peak flow of 6,653 cfs. The results of the HEC-RAS model are provided in **Appendix L**, Attachment A.

The analysis acknowledges that the Zone 7 model is more recent than what was used to delineate the FEMA flood insurance rate map. However, based on the results of the modeling, ENGEO's conclusion is that the Zone 7 model is overstating the limits of flooding and backwater condition at I-580. Arroyo Las Positas does not flow through a culvert under I-580 but under a bridge that spans beyond the banks of the creek.

Based on the results of the HEC RAS model, the 100-year peak flow does not result in conditions that cause the creek to overlap the banks and flood Phase I. The I-580 bridge has capacity to convey the 100-year flows with only a slight backwater condition at the upstream side of the bridge. The increase in water surface at the bridge does not result in the creek backing up and flooding the Project Site during the 100-year storm.

[2] HEC-RAS is a computer program that models the hydraulics of water flow through natural rivers and other channels.



Source: Hogan Land Services, 2022

Figure FEIR-6
2022 Floodplain Topographic Map

RCH GROUP
planning & environmental consulting

As further indicated in the letter, on October 24, 2021, a storm occurred in the region that was larger than the 100-year storm event, and the site did not flood. This further supports the ENGEO opinion that the Zone 7 model is overstating flooding at this location.

ENGEO's summary from **Appendix L** is as follows:

> "The fact that the October 24, 2021, storm did not cause flooding, supports the results of our model and is consistent with the results of the FEMA mapping. Therefore, it is our opinion that requiring mitigation based on the results of the Zone 7 Model is inappropriate. Based on our model, and real-world anecdotal evidence, the proposed improvements are not within the 100-year flood plain. The Zone 7 study is in draft form and would benefit from additional calibration efforts and a comprehensive peer review to confirm its accuracy before being considered as the basis for mitigation.
>
> The site design has proposed grades elevated at least 1 foot above 500-year flood water elevation to ensure that the site improvements are raised above potential flood water for both the 100- and 500-year scenarios. The site according to the Flood Insurance Rate Map is subject to potential flooding up to 1 foot in depth during the 500-year event.
>
> We acknowledge that filling the Phase 1 site may result in a minor increase in the floodwater elevation and displace [500-year event] flows onto the Phase 2 side of the creek. To offset the loss of floodplain in the 500-year special flood hazard area on Phase 1, the project proposes to excavate the floodplain on the opposite side of the creek to increase the channel capacity. Figure 1, Earthwork Exhibit, shows the area that will be excavated to mitigate for the loss of floodplain.
>
> As a result, the creek will have increased capacity, which will decrease peak flows to the pre-project levels and lower the water surface to that of the existing condition delineated by FEMA. Figure 2 [see **Appendix L**], Creek Cross Sections, provides an illustration of how the proposed grading relates to floodwater elevations."

In summary, the Project would not affect the 100-year floodplain, based on ENGEO's evaluation described above. Phase I grading would use soil from on-site excavations for the Phase I buildings and potentially soil from the adjacent abatement efforts to raise site improvements above potential flood water for the 500-year scenario. Any fill added to Phase I would increase gradient and improve function of utilities and stormwater management. While not required for 100-year flood protection, grading the excavation area on Phase II as shown in Appendix L would offset increases to the 500-year floodplain from fill on Phase I. The offset would be in an area of Phase II, near the wetland surge area, but would avoid impacts to seasonal wetlands. This excavation is a new project design feature (PDF), included in the Mitigated Alternative, that would be designed based on final configuration of the Phase I elevation, providing on-site retainment of additional 500-year flood waters caused by Phase I development.

Response to Comment D-12

See Response to Comment D-11, Phase I structures would not be built within a 100-year floodplain. Furthermore, Mitigation Measures 3.8.1a, 3.8.1b and 3.8.1c would ensure that the Project development would not result in detrimental increases in stormwater flow or flooding on-site or downstream.

Response to Comment D-13

Phase I Project development would avoid any work within Arroyo Las Positas. The letter in **Appendix L**, indicates that Phase 1 site development may result in a minor increase in the floodwater elevation and displace flows onto the Phase 2 side of Arroyo Las Positas. To offset the loss of floodplain in the 500-year special flood hazard on Phase 1, the project proposes to excavate the floodplain on the west side of Arroyo Las Positas to increase the channel capacity. **Appendix L**, Figure 1. Earthwork Exhibit shows the approximate area that could be excavated to mitigate for the loss of the 500-year floodplain.

Response to Comment D-14

Comment noted.

Letter E

Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Alameda, CA 94502 - (510) 567-6700

Ronald Browder, Director of Environmental Health
Phone: (510) 567-6790 Fax: (510) 337-9234

February 28, 2022

Albert Lopez, Planning Director
ATTN: Monte Vista Memorial Gardens Project EIR
Alameda County Community Development Agency
224 W. Winton Avenue, Room 111
Hayward, CA 94544

Subject: ACDEH Solid/Medical Waste Program Comments Regarding the MVMG Draft EIR

The Alameda County Department of Environmental Health (ACDEH) Solid/Medical Waste Management Program, the Local Enforcement Agency (LEA) for the California Department of Public Health (CDPH), has reviewed the Monte Vista Memorial Gardens (MVMG) Draft Environmental Impact Report (EIR) for the 45-day period commencing on January 13, 2022, and ending at 4:30 PM on February 28, 2022.

It is our understanding that medical waste may be generated during the preparation of a body for final disposition such as cremation or interment. Prior to generating any medical waste, the generator must register with the ACDEH as either:
1. a small quantity generator if less than 200 pounds of medical waste are generated per month; or
2. a large quantity generator if more than 200 pounds of medical waste are generated in any month over a 12-month period.

To ensure compliance with the Medical Waste Management Act, the applicant should complete the required forms and submit them to our department with the appropriate fee amount included**.** Application forms and relevant information regarding medical waste generators may be obtained from our website at: https://deh.acgov.org/solidwaste/medical-waste.page? 1

Additionally, the design for the proposed septic system must be approved and permitted by the ACDEH Onsite Wastewater Treatment Systems (OWTS) Program prior to commencement of operations. Pursuant to 118215(b) of the Medical Waste Management Act, any fluid blood or fluid blood products discharged to a public sewage system without treatment must be consistent with waste discharge requirements placed on the public sewage system by the California Regional Water Quality Control Board with jurisdiction. 2

Furthermore, the applicant shall abide by any other requirements set by regulatory agencies with jurisdiction, including, but not limited to, the Bay Area Air Quality Management Board (BAAQMD) and the San Francisco Regional Water Quality Control Board (SFRWQCB). The LEA reserves the right to provide additional comments to the applicant as the project progresses. 3

Thank you in advance for your cooperation with our Solid/Medical Waste Management Program. If you have any questions, please feel free to contact me at 510-639-1271 or by email at tyler.hinson@acgov.org.

Sincerely,
Tyler Hinson

Tyler Hinson, Environmental Health Specialist
Alameda County Department of Environmental Health
Solid/Medical Waste Management Program (LEA)

Cc: Ronald Browder, Maria Mendoza, Arthur Surdilla, Ryan Hammon, and Wing Suen (Alameda County LEA)
Dilan Roe, Natali Colom Cruz (ACDEH OWTS Program)

RESPONSES TO COMMENT LETTER E

Response to Comment E-1

Prior to generating any medical wastes, the operator of the facility would be required to register with the Alameda County Department of Environmental Health (ACDEH) and complete the required forms for compliance with the Medical Waste Management Act.

Response to Comment E-2

The design for the proposed septic system would be approved and permitted by the ACDEH Onsite Wastewater Treatment Systems (OWTS) Program prior to commencement of operations. Page 2-15 of the Draft EIR includes the OWTS as a Permit required by Alameda County.

Response to Comment E-3

Comment noted. As described in the applicable technical sections of the Draft EIR, the applicant would be required to comply with requirements set by regulatory agencies with jurisdiction, including those listed in the comment. It is acknowledged that the LEA reserves the right to provide additional comments to the applicant as the Project progresses.

Letter F

LIVERMORE
CALIFORNIA

March 3, 2022

Albert V. Lopez, Planning Director
Alameda County Planning Department
224 West Winton Avenue, Room 111
Hayward, CA 94544

Re: Monte Vista Memorial Gardens Cemetery

Dear Mr. Lopez,

Thank you for the opportunity to provide comments on the Draft EIR for the Monte Vista Memorial Gardens Project ("Project") located at 3656 Las Colinas Road. The City of Livermore (City) staff previously met with Alameda County staff and the Project proponent and provided comments on the Project and associated improvements for Las Colinas Road in November 2019. City staff strongly recommended that the Project applicant demonstrate consistency with the City of Livermore General Plan, the North Livermore Urban Growth Boundary Initiative, and the Scenic Corridor Policy. 1

City staff has the following comments related to the above stated policies and the environmental analysis.

<u>City of Livermore General Plan 2003-2025</u>

City staff previously recommended that the Project demonstrate consistency with the General Plan, the North Livermore Urban Growth Boundary Initiative (Initiative), and the Scenic Corridor Policy. The City's General Plan includes smart growth principles that prohibit urban uses beyond the North Livermore Urban Growth Boundary and focuses infill and mixed-use development within the City limits, where there are suitable services and utilities. The City's General Plan also includes policies for the protection and enhancement of views along Scenic Corridors such as I-580. 2

The City's General Plan, the Initiative, and the Scenic Corridor Policy are discussed in many of the regulatory setting sections of the Draft EIR impact analyses. However, the impact analyses do not include a discussion or application of the City's regulations. City staff requests that this discussion is incorporated into the impact analysis.

Letter F

North Livermore Urban Growth Boundary Initiative

The Initiative limits urbanization and promotes the preservation of open space, habitat and agriculture. It also obligates the City to discourage and oppose any urban uses beyond the Urban Growth Boundary. City staff previously requested that the County and applicant confirm that the Project is consistent with the following provisions in the Initiative:

Uses in North Livermore

- Cemetery does not exceed 20 acres, including buildings, internment, and infrastructure; and is designed to minimize off-site visual impacts from monuments or other structures.

The cemetery would be on approximately 47 acres, exceeding the size limitation set forth in the Initiative. City staff understands that a Reduced Project Footprint Alternative was considered in the Draft EIR. This alternative would reduce the cemetery to 20 acres, consistent with the Initiative. 3

Development Envelope

- All buildings on a parcel shall be placed within a contiguous development envelope as compact as reasonably possible, not to exceed two acres, except for buildings for agricultural uses or security needs that must be located outside the envelope.

According to Draft EIR Table 2-1, Project Facilities, the funeral home and pavilion buildings will be contiguous and cover approximately one acre of land on the Project site. Therefore, the Project appears to be consistent with this provision in the Initiative. 4

Maximum Floor Area

- The maximum aggregate floor area for all floors in buildings on a parcel may not exceed 1% of the parcel's area or 20,000 square feet, whichever is less.

According to Draft EIR Table 2-2, Building Specifications, the total building area will be approximately 19,623 square feet. Therefore, the Project is consistent with this provision in the Initiative. 5

Areas of Special Environmental Concern

- Wildlife Habitat - Development will not cause a reduction or impairment contrary to Federal or State law of habitat for animals or plants that are listed by the Federal or State governments as endangered or threatened.

Section 3.3, Biological Resources, of the Draft EIR states that "while there is no 6

Letter F

designated critical habitat within the Project study area, there is critical habitat for the California red-legged frog, the California tiger salamander, and the vernal pool fairy shrimp within five miles of the Study Area (see Figure 3.3-5)." The Draft EIR concludes that impacts to special status animal species from Project construction would be significant. Mitigation measures including preconstruction surveys and construction employee training would reduce the impact to less than significant. 6 cont.

There are three special-status plant species: heartscale, long-style sand spurrey, and prostrate vernal pool naverettia that have the potential to occur on the Project site. The Draft EIR concludes that impacts to special status animal species from Project construction and operation would be significant. Preconstruction surveys would reduce the impact to less than significant. 7

The Reduced Project Footprint Alternative avoids potential impacts to biological resources. The Project site is located in Conservation Zone 4 of the East Alameda County Conservation Strategy. City staff recommends the Project comply with the minimization, mitigation, and avoidance protocols identified in the Conservation Strategy. 8

Scenic Corridor Policy

The General Plan establishes policies for the protection and enhancement of views within Scenic Corridor Subareas through the control of grading, landscaping, and building height. The Project is located in Subarea 2 of the I-580 Scenic Corridor. Most of the site is also within Zone I, which limits grading to areas of 10 percent slope or less within 2,000 feet of the I-580 center line. Beyond 2,000 feet from the I-580 center line is I-580 Scenic Corridor Zone II, where grading is limited to slopes up to 15 percent. 9

City staff previously requested that the County and applicant confirm that the Project is consistent with these grading limitations. The Draft EIR does not specify the Project's consistency with the grading limitations set forth in the City's General Plan.

In addition, City staff also requested that visual simulations from I-580 be included in the land use entitlements to assess the Project's visual prominence. Section 3.1, Aesthetics, Figure 3.1-4 of the Draft EIR illustrates existing and proposed views of the Project site from the Las Colinas Road overpass. This simulation provides a view of the Project site looking west. However, the Draft EIR does not include a simulation of the Project looking north. Therefore, the height and massing of the Project buildings against the hills to the north are not evaluated. 10

The Draft EIR only includes an analysis of the view from the top of the Las Colinas Road overpass, not the view experienced by the eastbound drivers. The Draft EIR states that the proposed Phase I and Phase II development would alter the characteristics of the area" but that building design and a proposed tree line would minimize the visual impact. However, the Draft EIR does not include a figure showing how the proposed tree line screens the development from drivers on I-580. 11

Letter F

In addition, Goal CC-4 of the City's General Plan Community Character element is to protect and enhance public views within and from established scenic routes, including views of arroyos. It appears that Phase I development would obscure the view of Arroyo Las Positas. 12

According to the Draft EIR, "the Reduced Project Footprint Alternative would meet or partially meet each of the Project objectives" and was deemed the environmentally superior alternative. The Reduce Project Footprint Alternative appears to be consistent with the North Livermore Urban Growth Boundary Initiative. 13

Private High School Land Use Entitlements

On July 14, 2005, the Alameda County Local Agency Formation Commission (LAFCo) approved the annexation of 122.5 acres owned by the Adventus Corporation for development of a private high school. A Condition of LAFCo's approval is for Las Colinas Road to be constructed to City standards and maintained by the City of Livermore (LAFCo Resolution No. 2005-06).

On October 24, 2005, the Livermore City Council approved a Conditional Use Permit (CUP 05-07) and Development Agreement (DA 05-004) for developing the high school. At the request of Adventus Corporation, the City Council granted an extension of the Development Agreement on November 23, 2020. The site remains vacant, but Conditional Use Permit and Development Agreement are both valid until their expiration on December 14, 2025.

City staff continue to meet with representatives from the Oakland Diocese to discuss the private high school property, the status of the high school project, and exploration of a range of other land use alternatives for the property. 14

The City's General Plan Circulation Element identifies the Las Colinas Road Extension as a Collector Street. The Development Agreement establishes the terms and timing for developing the extension to provide primary access to the Diocese' property. Improvements to Las Colinas Road for future uses in the area should be consistent with the roadway's ultimate use as a collector street.

Section 3.11, Transportation, of the Draft EIR states that while the plans for the new collector street are not active, a redesigned roadway could provide access to both Redwood Road and the Project. However, the improvements proposed as part of the Project would be less than significant. Additional comments related to Las Colinas Road are attached.

The City will continue to oppose any urban use, such as the cemetery, that is inconsistent with the City's General Plan, including the Initiative and Scenic Corridor Policies. Further, the City would object to any improvements to Las Colinas Road that 15

Letter F

would be inconsistent with City Standards and an impediment to its future improvement as primary access to the Diocese property and connection to Redwood Road.

If the applicant and Alameda County demonstrate that the cemetery is consistent with the City's General Plan, Initiative, and Scenic Corridor Policies, then City staff would consider entering into a roadway improvement agreement that includes interim and ultimate improvements to Las Colinas Road that meet City standards.

15 cont.

If you have any questions regarding the comments above, please contact me at (925) 960-4468, or e-mail at scstewart@cityoflivermore.net.

Sincerely

Steve Stewart
Planning Manager

cc: Mike Pato, Engineering Specialist

LIVERMORE
CALIFORNIA

INTEROFFICE MEMORANDUM

Date: February 28, 2022

To: Ashley Vera, Planning

From: Michael Pato, Engineering Specialist

Subject: Monte Vista Memorial Gardens Submittal 1-31-2022

The following are concerns/comments Engineering has on the latest plan submittal (See also attached marked plans)

1. Clearly define the County Right-of-Way boundaries on all grading and utility plans showing work in the right-of-way area. The grading plans seem to indicate grading work on adjacent properties. If work required on adjacent properties, then plans should reflect required dedications of additional right-of-way.
2. Grading plans should highlight new from existing topography. Existing topography should be grey scaled for clarity with new topography being bold.
3. Utility plans should be revised to clearly indicate new from existing utilities. Recommend showing new utilities as bold and existing utilities grey scaled and properly labeling the utilities as new and or existing. There appears to be conflicts on what are existing and what are new utilities and where their points of connection to existing utilities are.
4. The City will need a minimum 15 foot wide sewer easement centered on the existing City 33” sewer main crossing the County Right-of-Way.

On Sheet C4.1 please address the following concerns:

1. Clarify if the Cal Water main in the county roadway is new or existing. This plan indicates the main as new but indicates the hydrants as existing. Revise accordingly so hydrants and water main match as either existing or new.
2. Clearly indicate if the 20' waterline easement to Cal Water is proposed new or existing.
3. Clearly show where proposed new 4" gas line connects to existing PG&E gas line. Does PG&E need an easement for this?
4. Clearly show the existing County ROW boundaries on this plan.
5. Does the existing DATA line company need an easement within County ROW?

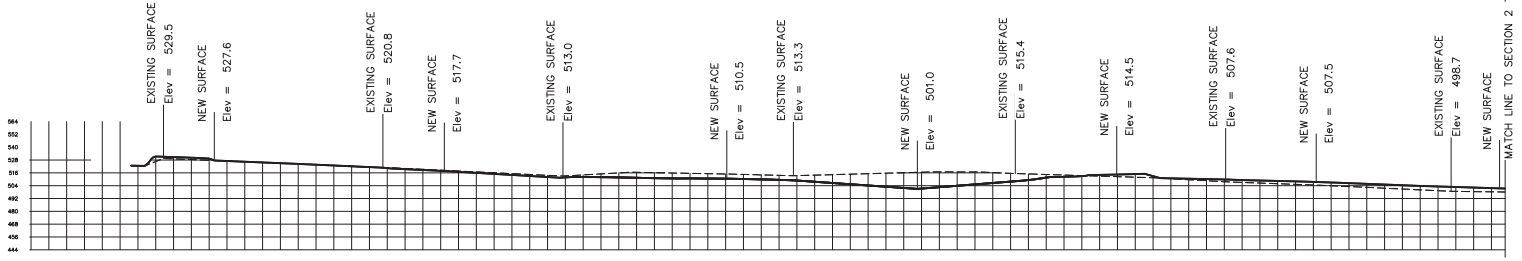
On Sheet C5 please address the following concerns:

1. Please show the City recommended roadway/trail cross section from station 0+00 to station 3+00 extending north to the existing gate at the north end of the existing cul-de-sac bulb. See the City recommended roadway/trail section marked on sheet C6.
2. Show the proposed vertical curve data on the profile.

On Sheets C6 thru C6.2 please address the following concerns:

1. Revise cross sections to reflect the City’s recommended roadway/trail section from station 0+00 to station 3+00 extending out to northern end of the cul-de-sac.

16



2 SECTION 2
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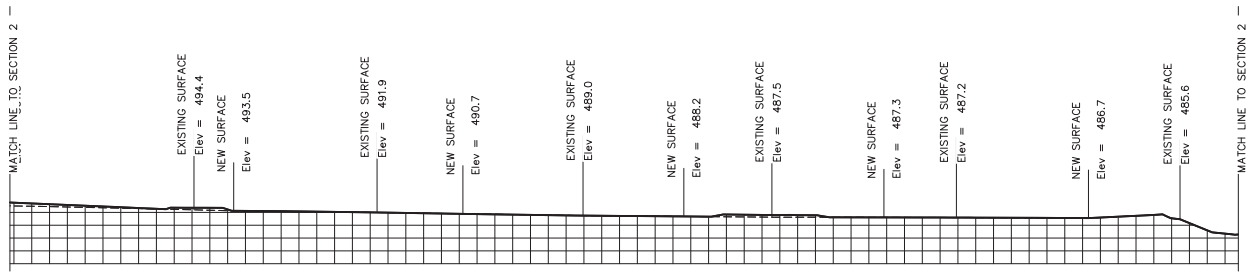
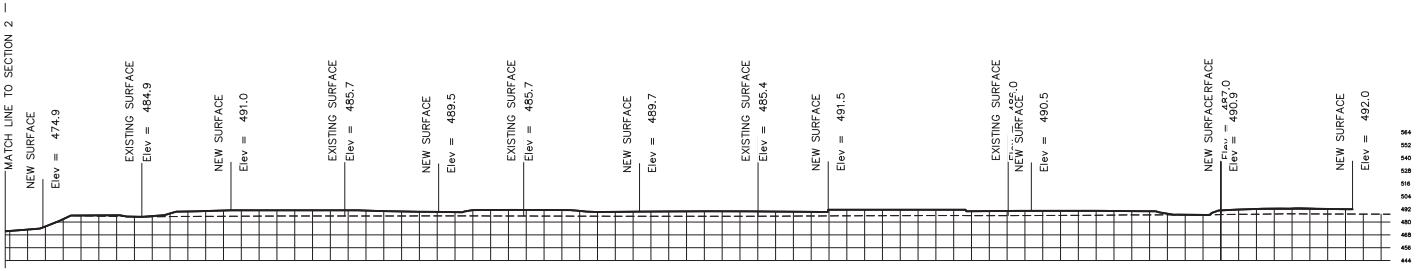


2 SECTION 2
SCALE: 1"=30'H 1"=50'V



2 SECTION 2
SCALE: 1"=30'H 1"=50'V

Clarify Location of point of connection to County Right of Way

CONSULTING ENGINEERS
1124 E. 17th Street, #B
San Leandro, California 94577
Tel. (510) 645-1129
Fax. (510) 645-1139

MONTE VISTA
MEMORIAL GARDENS
APN 099-0015-016-03
3656 LAS COLINAS RD.
LIVERMORE, CA 94551

DRAWN BY	CHECKED BY
VIT	JPA

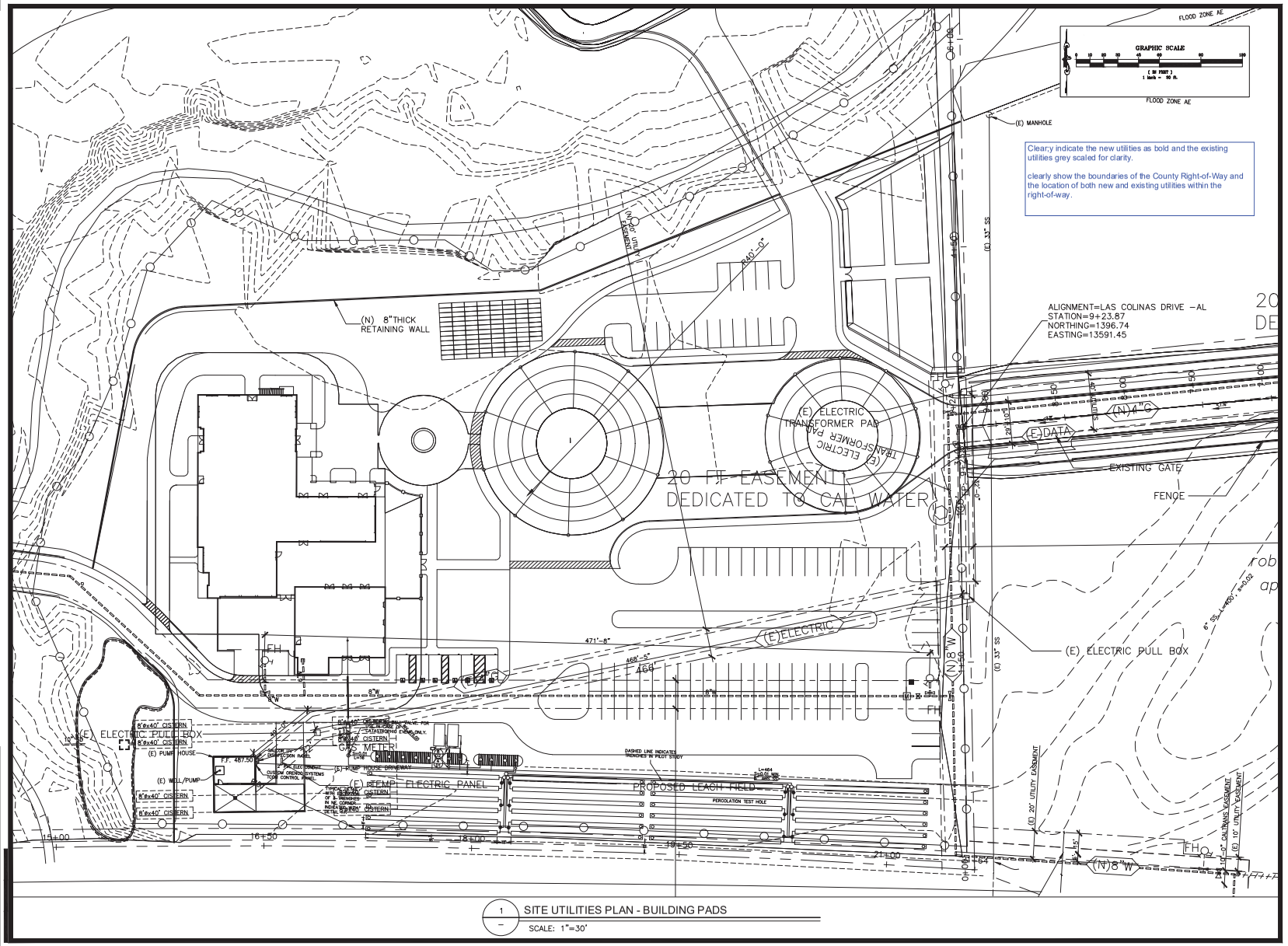
NO.	DATE	ISSUE
	02/02/2019	PERMIT SET

SHEET TITLE
SITE SECTIONS
WEST TO EAST

SHEET NUMBER
C-1.11

ACS JOB NO.: 11-12045

Letter F



1 SITE UTILITIES PLAN - BUILDING PADS
SCALE: 1"=30'

CONSULTING ENGINEERS
1124 E. 17th Street, #B
San Leandro, California 94577
Tel. (510) 645-1129
Fax. (510) 645-1139

MONTE VISTA MEMORIAL GARDENS
APN 099-0015-016-03
3656 LAS COLINAS RD.
LIVERMORE, CA 94551

DRAWN BY	CHECKED BY
VIT	JPA

NO.	DATE	ISSUE
	02/02/2019	PERMIT SET

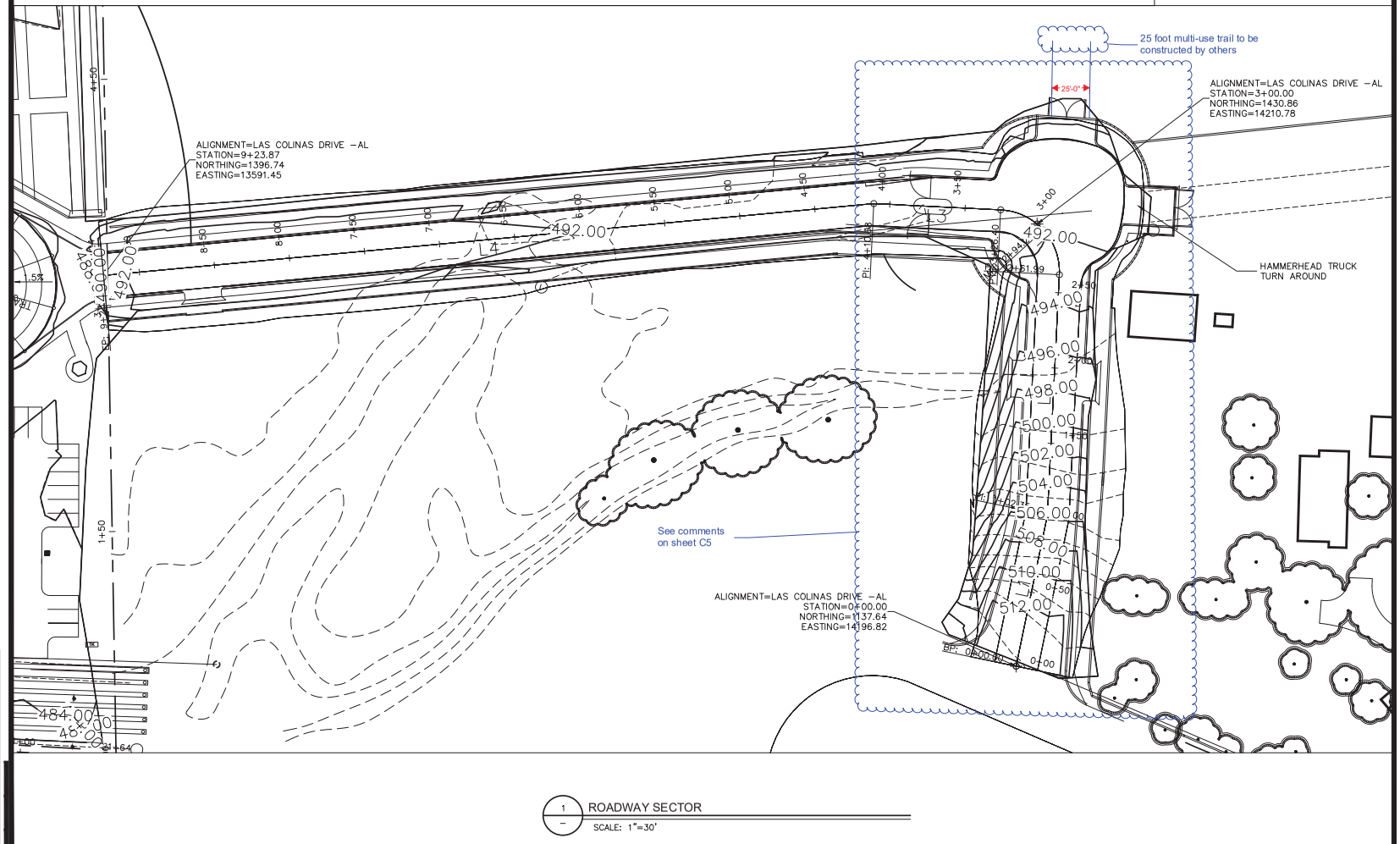
SHEET TITLE
SITE UTILITIES PLAN
BLDG PADS

SHEET NUMBER
C-2.2

ACS JOB NO.: 11-12045

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Las Colinas Roadway FG	1.000	1.000	76175.51 Sq. Ft.	0.26 Cu. Yd.	10576.12 Cu. Yd.	10575.86 Cu. Yd.<Fill>
Totals			76175.51 Sq. Ft.	0.26 Cu. Yd.	10576.12 Cu. Yd.	10575.86 Cu. Yd.<Fill>



1 ROADWAY SECTOR
SCALE: 1"=30'

GRAPHIC SCALE

CONSULTING ENGINEERS
1124 E. 17th Street, #B
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Tel. (510) 645-1129
Fax. (510) 645-1139

MONTE VISTA MEMORIAL GARDENS
APN 099-0015-016-03
3656 LAS COLINAS RD.
LIVERMORE, CA 94551

DRAWN BY	CHECKED BY
VIT	JPA

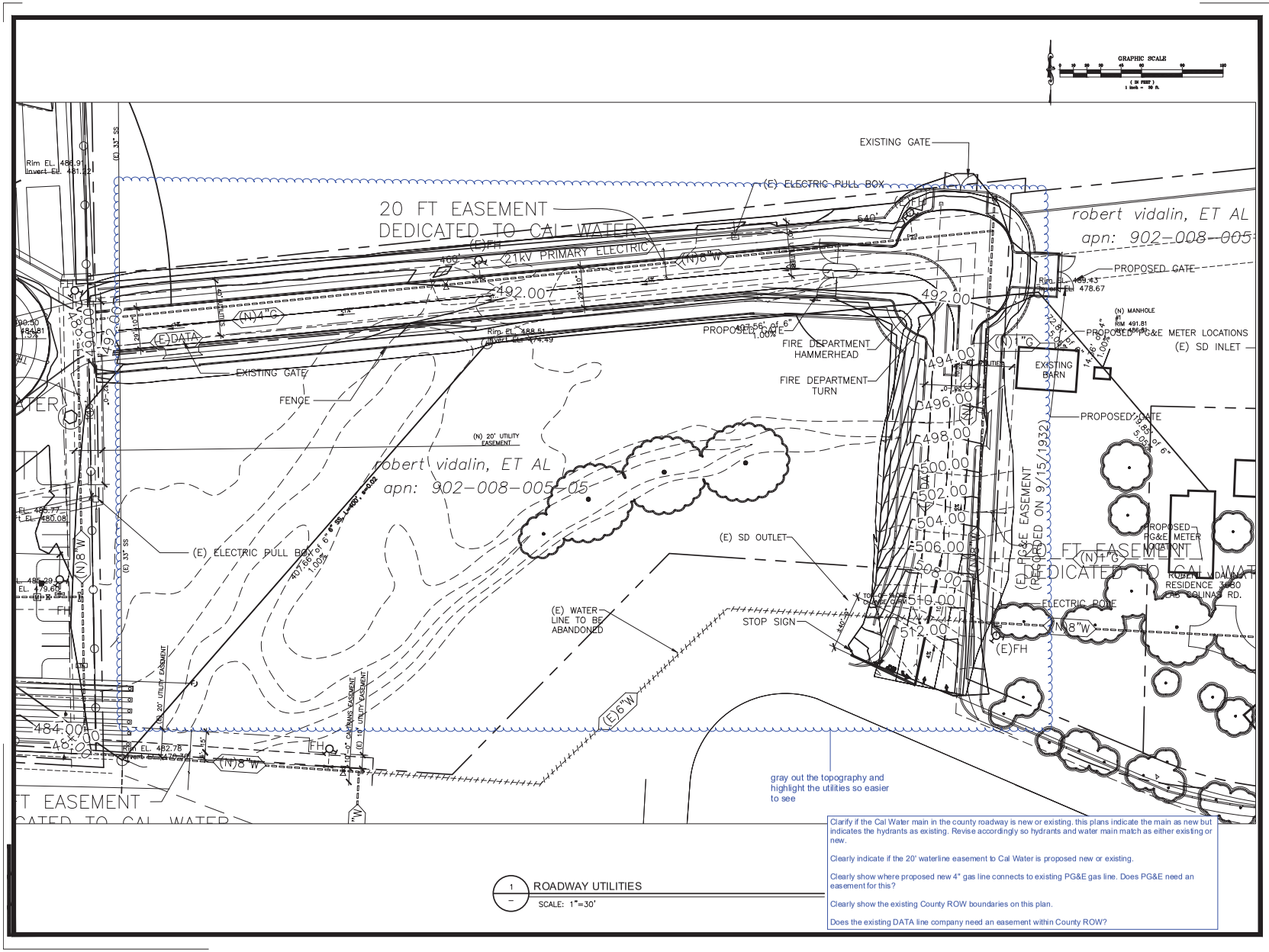
NO.	DATE	ISSUE
	02/02/2019	PERMIT SET

SHEET TITLE
ROADWAY LAYOUT

SHEET NUMBER
C-4

ACS JOB NO.: 11-12045

Letter F



1 ROADWAY UTILITIES
SCALE: 1"=30'

Clarify if the Cal Water main in the county roadway is new or existing. this plans indicate the main as new but indicates the hydrants as existing. Revise accordingly so hydrants and water main match as either existing or new.

Clearly indicate if the 20' waterline easement to Cal Water is proposed new or existing.

Clearly show where proposed new 4" gas line connects to existing PG&E gas line. Does PG&E need an easement for this?

Clearly show the existing County ROW boundaries on this plan.

Does the existing DATA line company need an easement within County ROW?

CONSULTING ENGINEERS
1124 E. 17th Street, #B
San Leandro, California 94577
Tel. (510) 645-1129
Fax. (510) 645-1139

MONTE VISTA MEMORIAL GARDENS
APN 099-0015-016-03
3656 LAS COLINAS RD.
LIVERMORE, CA 94551

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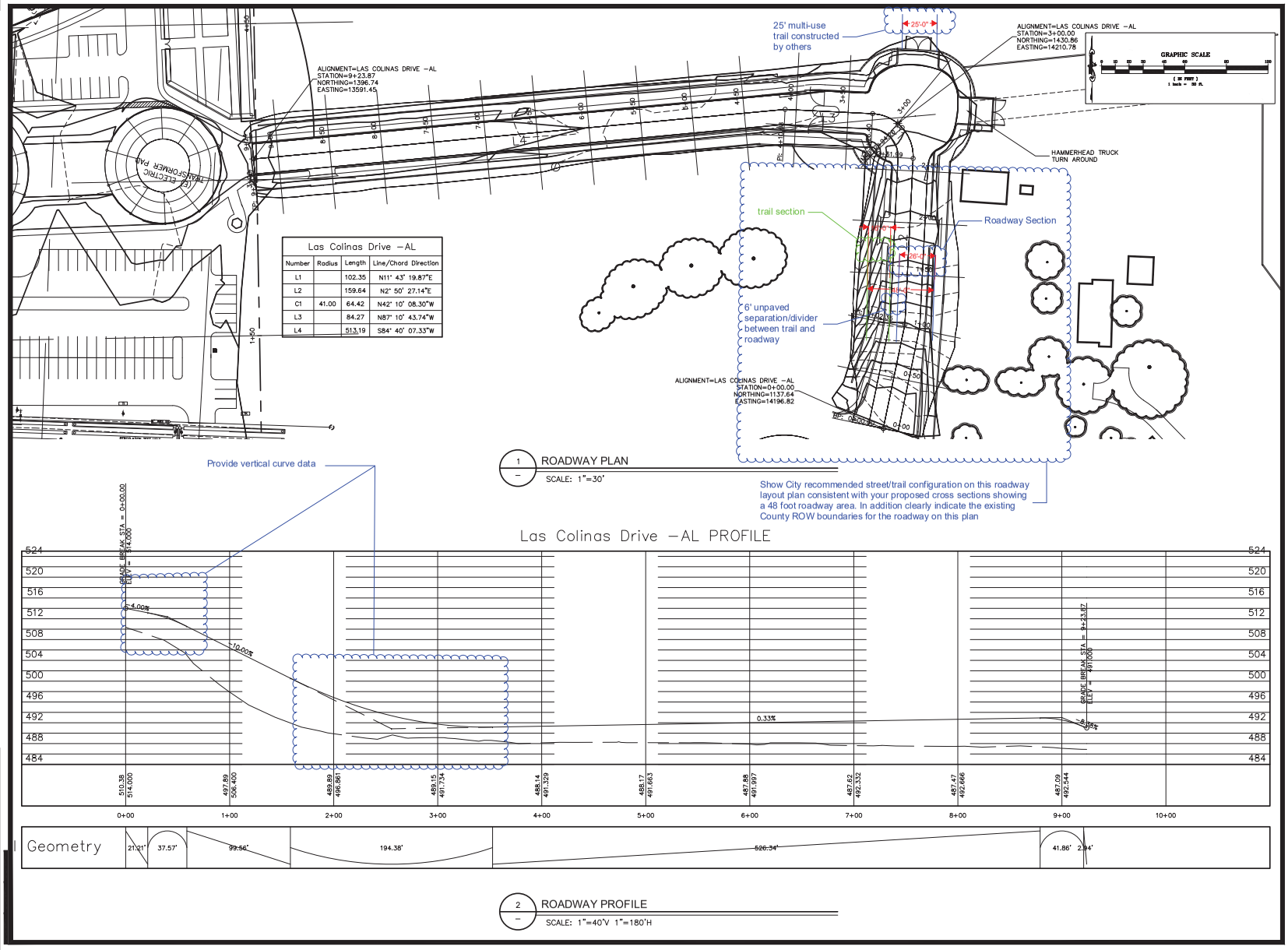
NO.	DATE	ISSUE
	02/02/2019	PERMIT SET

SHEET TITLE
ROADWAY LAYOUT

SHEET NUMBER
C-4.1

ACS JOB NO.: 11-12045



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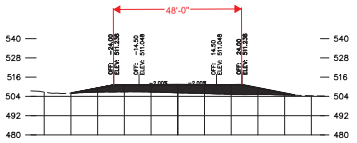
SHEET TITLE
ROADWAY ALIGNMENT AND PROFILE

SHEET NUMBER
C-5

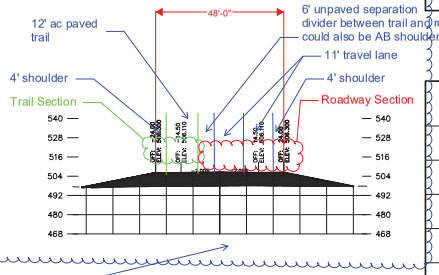
ACS JOB NO.: 11-12045



ROAD SECTION 0+50.00

Total Volume at Station 0+50.00	
Cut Area	0.00
Fill Area	322.90
Cut Vol	0.00
Fill Vol	0.00
Cum Cut Vol	0.00
Cum Fill Vol	0.00
Net Vol	0.00

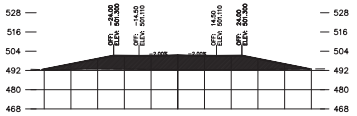
City Preferred street/trail configuration from Station 0+00 to Station 3+25 at end of bulb for connection of future trail to be constructed by others



Show existing County ROW within proposed roadway section Typical Each Section

ROAD SECTION 1+00.00

Total Volume at Station 1+00.00	
Cut Area	0.00
Fill Area	622.65
Cut Vol	0.00
Fill Vol	875.51
Cum Cut Vol	0.00
Cum Fill Vol	875.51
Net Vol	−875.51



ROAD SECTION 1+50.00

Total Volume at Station 1+50.00	
Cut Area	0.00
Fill Area	636.42
Cut Vol	0.00
Fill Vol	1165.43
Cum Cut Vol	0.01
Cum Fill Vol	2040.95
Net Vol	−2040.94

1 — ROADWAY CROSS SECTIONS
SCALE: 1"=20'H 1"=20'V

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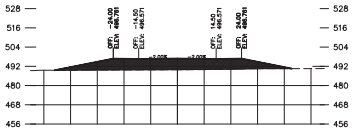
	02/02/2019	PERMIT SET

SHEET TITLE
ROADWAY CROSS SECTIONS

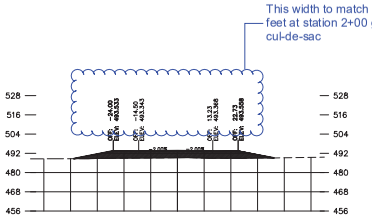
SHEET NUMBER
C-6

ACS JOB NO.: 11-12045



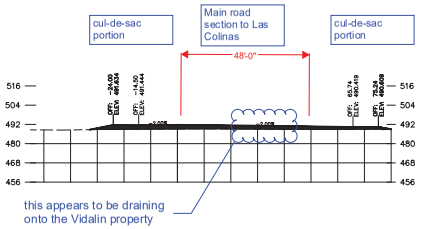
ROAD SECTION 2+00.00

Total Volume at Station 2+00.00	
Cut Area	0.00
Fill Area	458.45
Cut Vol	0.00
Fill Vol	1013.78
Cum Cut Vol	0.01
Cum Fill Vol	3054.72
Net Vol	−3054.72



ROAD SECTION 2+50.00

Total Volume at Station 2+50.00	
Cut Area	0.00
Fill Area	264.85
Cut Vol	0.00
Fill Vol	669.73
Cum Cut Vol	0.01
Cum Fill Vol	3724.45
Net Vol	−3724.45



ROAD SECTION 3+00.00

Total Volume at Station 3+00.00	
Cut Area	0.00
Fill Area	223.88
Cut Vol	0.00
Fill Vol	518.78
Cum Cut Vol	0.01
Cum Fill Vol	4243.24
Net Vol	−4243.23

2 ROADWAY CROSS SECTIONS
SCALE: 1"=20'SCALE: 1"=20'H 1"=20'V

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NO.	DATE	ISSUE
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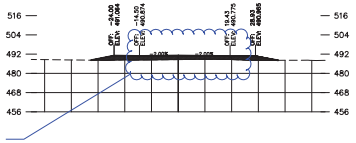
SHEET TITLE
ROADWAY CROSS SECTIONS

SHEET NUMBER
C-6.1

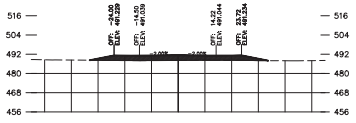
ACS JOB NO.: 11-12045

Letter F



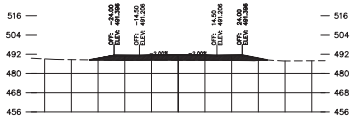
ROAD SECTION 3+50.00

Total Volume at Station 3+50.00	
Cut Area	0.00
Fill Area	149.53
Cut Vol	0.00
Fill Vol	398.49
Cum Cut Vol	0.01
Cum Fill Vol	4641.73
Net Vol	−4641.72



ROAD SECTION 4+00.00

Total Volume at Station 4+00.00	
Cut Area	0.00
Fill Area	175.25
Cut Vol	0.00
Fill Vol	300.72
Cum Cut Vol	0.01
Cum Fill Vol	4942.45
Net Vol	−4942.44



ROAD SECTION 4+50.00

Total Volume at Station 4+50.00	
Cut Area	0.00
Fill Area	177.95
Cut Vol	0.00
Fill Vol	327.31
Cum Cut Vol	0.01
Cum Fill Vol	5269.76
Net Vol	−5269.75

3 – ROADWAY CROSS SECTIONS

SCALE: 1"=20'SCALE: 1"=20'H 1"=20'V

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SHEET TITLE
ROADWAY CROSS SECTIONS

SHEET NUMBER
C-6.2

ACS JOB NO.: 11-12045

Letter F

LIVERMORE
CALIFORNIA

INTEROFFICE MEMORANDUM

Date: March 2, 2022

To: Ashley Vera

From: Joanna (Xiaojia) Liu

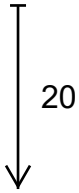
Subject: **City Comments – Proposed Monte Vista Memorial Garden**

The City of Livermore staff (Transportation Division) has reviewed the latest submittal (dated January 31, 2022) for the proposed Monte Vista Memorial Garden. The application is not deemed complete until the following items are addressed: 17

- Monte Vista Memorial Gardens Focused Traffic Study, dated May 20, 2021: 18
  - Page 6, Table 1 "Project" Trip Generation Estimates
    The average daily visitor trips estimate seems off from the assumption made as mentioned in the paragraph below the Table.
  - Page 6, Potential Project Traffic Impact, the first sentence.
    Please don't mix ITE estimates with the estimates based on data provided by the Memorial Gardens official in the statement.
- Plan Set: 19
  - Please clearly illustrate the traffic controls, signages and pavement markings within the project site.
  - Please show the dimensions of the parking spaces, accessible aisles, drive aisles, etc.

APPENDIX I

TRANSPORTATION – MONTE VISTA MEMORIAL GARDENS FOCUSED TRAFFIC STUDY



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Monte·Vista·Memorial·Gardens¶

Focused·Traffic·Study¶

Alameda·County¶
May·20,·2021¶

Revised¶

20
cont.

PHA· Transportation·Consultants¶
2711·Stuart·Street·Berkeley,·CA·94705·
(510)·848-9233¶

Project Description

PHA Transportation Consultants has prepared this focused traffic analysis to evaluate the potential traffic impact for the proposed Monte Vista Memorial Gardens Project "Project". The site of the Project is in the unincorporated Alameda County at 3656 Las Colinas Road, Livermore. The proposed Project is a multi-cultural cemetery in the Tri-Valley Area. The Project would consist of a funeral home, interment areas, and associated services, including a crematory and mortuary. The cemetery ground consists of approximately 47-acre of land, about 24 acres of which would be used for various memorial monuments and burial gardens.

According to the Project proponent, the Project will include two buildings A and B on the site. Building a (two stories) will house the morgue, crematorium, sales offices, staff offices, garage, a receiving area, reception area, guest lounge, and a chapel with a capacity for 120-140 guests. Building B (one story) would have kitchens, storages, sanitary facilities, and table seating for 120-130 guests. The project is expected to employ up to 10 professional staff members working on the site daily. The Project is scheduled to open between 9:00 a.m. and 4:00 p.m. Mondays through Fridays during the initial stage. Once fully operational, the Project will open 7 days a week. Weekend funerals and burials will be available upon request with special arrangements. The Project will provide 92 parking spaces on the site (75 at the main parking lot, 17 in the secondary lot by the Jewish cemetery internment area, and 3 hearse spaces at the garage at Building A). Figure 1 shows the location of the Project site and its environs.

20 cont.

Adjacent Area Land Use

The Project site is currently vacant. The land use in the adjacent area of the site is mostly grazing land to the north and west. There are several residences and barn structures to the east of the Project site. There are also several horse barns located further east near the terminus of Las Colinas Road. South of the Project site is the freeway Interstate 580.

According to the City of Livermore development data, a Catholic High School was once proposed to be built to the northeast of the Project site. Access to the school will be via Las Colinas Road in conjunction with Las Positas Road south of I-580. Las Colinas Road was planned to be widened and improved as part of the school project mitigation. The school project was approved in mid-2000 and later received a five-year extension to build in 2015. So far, there are no activities with the project. Figure 1 on page 2 shows the approximate location of the proposed high school and the proposed widening and extension of Las Colinas Road. Should the high school project eventually materialize, Las Colinas Road will be widened and extend further north and would likely improve the access for the area and would have a positive impact on the Monte Vista Memorial Gardens.

Figure 1 Proposed Monte Vista Memorial Gardens Site and Environs

20 cont.

Project Site Access and Area Traffic Circulation

Direct access to the Project site will be via an unnamed road off Las Colinas Road in conjunction with Las Positas Road. Regional access to the site is provided via I-580 in conjunction with North Livermore Avenue in the west and First Street in the east. The unnamed access road off Las Colinas Road is not paved and is currently blocked off.

Las Colinas Road is a two-way local street providing access to several residences and barns east of the project site and the horse stables at the eastern terminus of the road. The entire length of the road is about 1,500 feet long measuring from the eastern terminus to its connection at Las Positas Road over the freeway. The Road measures about 26 feet wide with one travel lane in each direction. The road is marked with solid double yellow lines indicating no passing. The Current (February 2021) daily traffic volume is 68 vehicles per day (VPD) on weekdays. The Peak-hour volumes are less than 15 VPD for both AM and PM. There are no posted speed limit signs observed.

Las Positas Road is a collector road with a varying width between two and four-lane connecting North Livermore Avenue in the west and Frist Street in the east. It has two travel lanes in each direction west of North Mines Road but transitions to a two-lane road with one lane in each direction in the east near the Las Colinas Road Bridge over I-580. It then transitions back to four-lane as it approaches the shopping area near Frist Street. The current daily traffic volume on a weekday is 12,899 vehicles per day east of North Livermore Avenue and 8,534 west of First Street. The peak-hour volume on Las Positas Road near Las Colinas Road was about 290 in morning and 520 in the afternoon. The posted speed limit on Las Positas Road is 40 mph based on the City of Livermore speed limit map.

20 cont.

North Livermore Avenue is a four-lane arterial road south of I-580. It runs in a north-south orientation providing access to and from the freeway. There are additional turn lanes provided at major intersections along its length. The daily traffic volume is about 30,975 vehicle trips per day south of the interchange based on a 2016 City of Livermore traffic count. The speed limit for North Livermore Avenue is 40 mph per the City of Livermore speed limit classification map.

First Street is a six-lane north-south arterial road south of I-580 near the Project site. It provides access to and from the freeway. There are also additional turn lanes provided at intersections along its length. The daily volume is about 36,590 vehicles daily south of the I-580 interchange. The speed limit for Frist Street is 40 mph based on the City's speed limit classification.

Interstate -580 is a freeway running in an east-west orientation. There are four travel lanes in each direction with additional HOV lanes in the vicinity of the proposed Project site. It has interchanges at N. Livermore Avenue and First Street. The segment near the project site vicinity carries about 193,000 vehicles per day near North First Street according to a 2019 traffic count conducted by Caltrans.

Study Area Traffic Safety Review

Traffic control devices on Las Colinas Road consist of a stop sign at the approach to Las Positas Road from Las Colinas Road, a speed advisory sign 15 mph near the curve, and a double yellow line marking at the center of the road. Traffic control devices on Las Positas Road consist of traffic signals at North Livermore Avenue, North Mines Road, and Frist Street. Traffic signals are also provided at major accesses to shopping areas along the road with turn lanes. The posted speed limit on Las Positas Road is 45 mph. Several segments of the Las Positas Road near North Livermore Avenue in the west and First Street in the east are divided with a raised landscaped median. There is a left-turn pocket at the eastbound Las Positas Road to northbound Las Colinas Road, accommodating left-turn traffic from Las Positas Road onto Las Colinas Road.

According to data obtained from Traffic Injuries and Mapping System (TIMS), a traffic collision records center located at UC Berkeley indicated there were 6 reported collisions along the segment of Las Positas Road between North Livermore Avenue and First Street between 2017 and 2019 (2000 data was not yet available). This represents an average of 2 collisions a year during the three years. There are no reported collisions on Las Colinas Road during the same three-year period. As such, Las Colinas Road and Las Positas Road do not appear to be collision hot spots. TIMS obtained traffic collision records from SWITRS, a Statewide Integrated Traffic Records System database that contains all collisions that were reported to CHP from local and government agencies.

20 cont.

Project Trip Generation Estimates

The Project has a burial ground about 24 acres and is expected to employ 10 professional staff members. Based on acreage -base trip generation rates published in the ITE Trip Generation Manual, the site is expected to generate 108 daily trips (one-way trips). ITE Trip Generation Manual is published by the Institute of Transportation Engineers and has a database containing trip generation rates and characteristics at various land-use categories and sites nationwide. Trip generation surveys were conducted frequently to update the manual's database.

As discussed previously, the Project will operate from 9 a.m. to 4 p.m. Mondays through Fridays during the initial stage but would open 7 days a week eventually. Since the facility operates between 9 a.m. and 4 p.m., the traffic related to the Project would mostly employee trips traveling to and from the site and is not expected to have significant impacts on peak hour traffic operations in the area.

Table 1 shows the summary of the trip generation estimates based on the number of employees and the size of the burial ground, plus estimated visitors and deliveries.

Table 1 "Project" Trip Generation Estimates
Monte Vista Memorial Gardens – Alameda County

Monte Vista Memorial Gardens	Units	AM Peak- Hour Trips (7-9 a.m.)			PM Peak-Hour Trips (4-6 p.m.)			Average Daily Trips (24- hour)		
		In	Out	Total	In	Out	Total	In	Out	Total
Acres (ITE 566)	24	3	1	4	7	14	21	54	54	108
Employees	~~10~~	~~10~~	~~0~~	~~10~~	~~0~~	~~10~~	~~10~~	~~10~~	~~10~~	~~20~~
Visitors	30	2	1	3	1	2	3	30	30	60
Deliveries	~~10~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~10~~	~~10~~	~~20~~
Total		**12**	**1**	**13**	**1**	**12**	**13**	**50**	**50**	**100**

ITE Trip Generation Manual (9th Edition) Rates for the cemetery (ITE land-use code 566):
Employee Based (PHA Estimates)
Daily Rate 2/employee, 50% in, 50% out,
AM Peak Hour Rate 1/employee, 100% in,0% out,
PM Peak Hour Rate, 1/employee, 0% in, 100% out
Acreage Based (ITE)
Daily Rate 4.73/acre, 50% in, 50% out.
AM Peak Hour Rate 0.17/acre, 70% in, 30% out.
PM Peak Hour Rates 0.84/acre, 33% in, 67% out.
Deliveries, Visitors (PHA Estimates)
UPS, FedEx, Amazon, USPS, Newspaper, assumed each generates two one-way trips.

This seems reflecting visitor trips only. Please ensure Table 1 reflects this numbers.

20 cont.

According to data provided by the Memorial Gardens official, when the cemetery is fully operational (by the 10th year), the cemetery will likely have 2.8 burials and memorial services per day. The average daily round trip is 44 or 88 one-way trips. This assumes the average of 2.8 burials per day attended by an average of 40 persons each at a 2.5 person vehicle occupancy rate. The trip estimates shown in Table 1 are based entirely on the number of employees, visitors, and deliveries. The ITE trip generation estimates are provided for comparison purposes.

Please include the data in Appendicies

Potential Project Traffic Impact

As indicated in the above trip generation analysis, the proposed Monte Vista Memorial Gardens will add about 100 one-way trips daily, including 4 a.m. peak and 21 p.m. peak hour trips respectively to the area. These are estimates were made based on the size (acreage) of the number of employees working at the site. Table 2 summarizes Project added traffic on the adjacent streets. The proposed project would not warrant signalization at the Las Colinas and Las Positas Road intersection based on the "Peak Hour Volume Signal Warrant" base on traffic volumes and intersection configuration. A graphic showing the "Peak Hour Volume" warrant analysis is attached.

Don't mix ITE estimates with the estimates based on data provided by the Memorial Gardens official

Table 2 "Project" Traffic Impact
Monte Vista Memorial Gardens

	Las Colinas Rd		Las Positas Rd (West of Las Colinas Rd)		Las Positas Rd (East of Las Colinas Rd)	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Current Daily Vol.	68	48	12,899	10,110	8534	6795
Project Added Trips	100	100.	60	60	40	40
Project Impact (%)	147%	208%.	0.47%	0.59%.	0.47%	0.59%.

Current Volumes represent traffic counts conducted in the field in early February 2021 amid COVID 19.
Weekday volume represents the average of Thursday and Friday counts
Weekend volume represents the average of Saturday and Sunday counts
Site traffic directional distribution assumption: 60% travel to and from the west direction, 40% to and from the east.
Burial and funeral services occur Mondays thru Fridays. Weekend services can be arranged upon request with added fees. For the purpose of the study. Weekend trips are assumed to be the same as weekday trips.

Project Site Plan Review

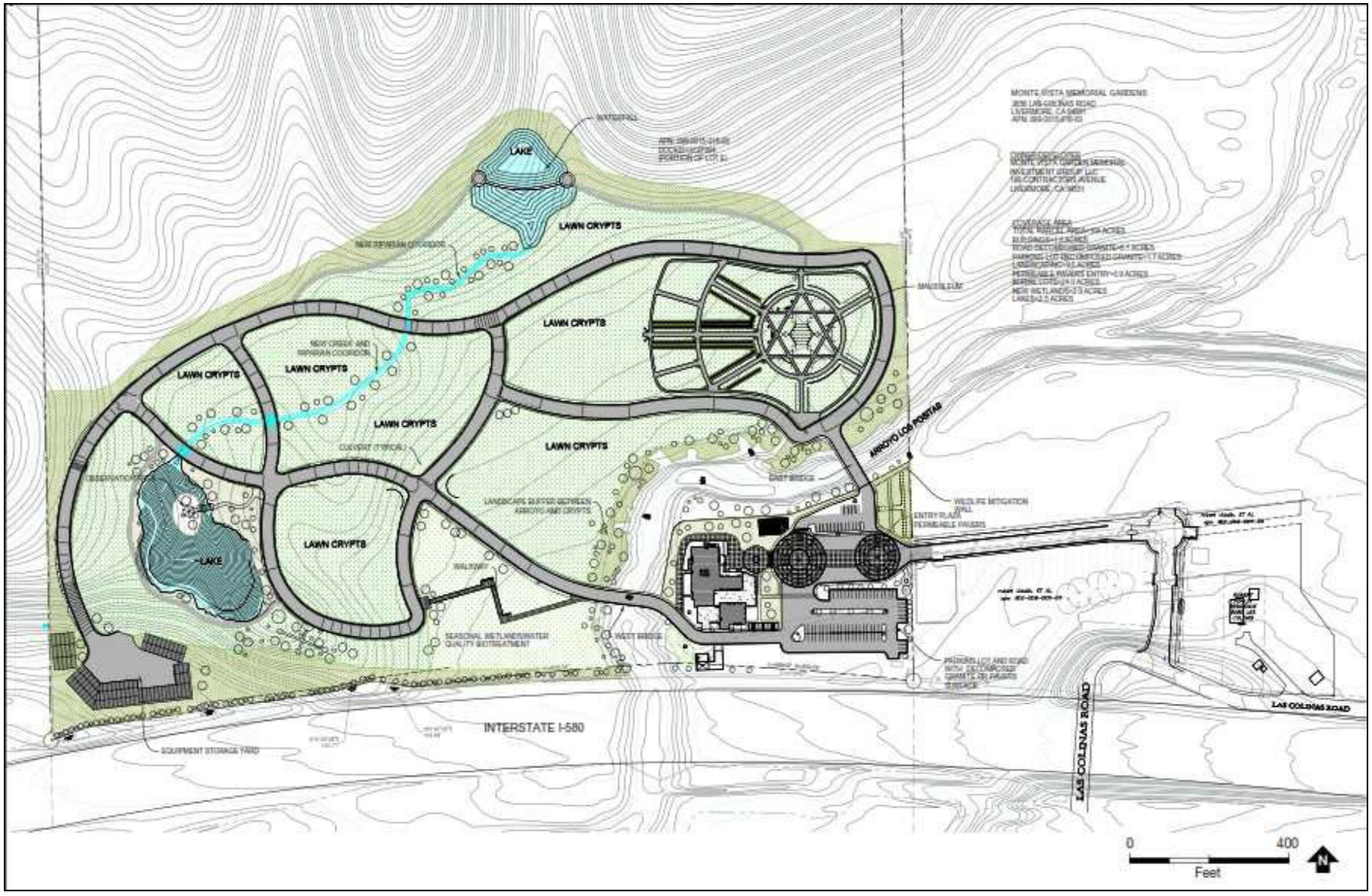
20 cont.

The site currently is vacant and the access road to the site is blocked off at Las Colinas Road. The access road is not paved and is fenced on both sides of the road. According to the preliminary site plan, there will be two buildings A and B on the site. Building A (two-story) will house the morgue, crematorium, sales offices, staff offices, garage, a receiving area, reception area, guest lounge, and a chapel with a capacity for 120-140 guests. Building B (one-story) would have kitchens, storages, sanitary facilities, and table seating for 120-130 guests. The site plan also shows two parking lots, the main lot at the southeast corner of the site has 75 stalls, and a small lot at the northeastern corner of the site has 17 parking stalls. The project proponent also indicated there is a parking garage with 3 spaces for limos at building A.

The preliminary site plan does not show parking stall dimensions, the dedicated number of handicapped parking spaces, and the drive aisle widths. These dimensions should be labeled when finalizing the site plan following the design standards of the County. Figure 2 shows the preliminary project site plan.

Parking Requirements and Needs

The Alameda County Zoning Code does not have a specific parking requirement for cemeteries. However, it does have parking requirements (1 space for every 4 fixed seats) for the auditorium, church, mortuary, chapel, and theaters. Assuming a 140-seat chapel and a 130-seat table seating for guests at Building B the total parking required for the Project is 68+/- spaces (140 seats +130 seats/4). With a total of 75 spaces at the main lot and 72 spaces at the secondary lot, the Project would satisfy the County's parking requirement.



20 cont.

Figure 2 Preliminary Project Site Plan- Source: RCH Group (ENGEO 2020)

Internal Circulation

The preliminary site plan appears to provide adequate internal circulation. The access road to the Project site is not paved and is more than 30 feet wide based on measurements from aerials. Minimum width of 24 feet or wider should be considered to provide for two-way vehicle travel. The turning radius at the approach/departure at Las Colinas Road should be designed to accommodate hearses and other service and delivery trucks.

No dimensions are showing on the internal circulation roads that provided access to burial grounds. A 24-foot wide for the internal circulation roads is desired. These dimensions would provide for funeral possessions and visitors who drive and must park parallel along the roadside and at the same time accommodate other vehicles passing through.

The internal circulation road should be designed to provide one-way forward travel with directional signs and arrows to direct visitors.

Access Driveway Sight Distance

The access driveway to the Project site is located along a curve at Las Colinas Road. Assuming a 25 mph speed limit for Las Colinas Road, the minimum sight distance requirement is 120 feet according to roadway design guidelines. Measurements conducted based on aerials indicated the stopping distance is 200 feet and 125 feet from the east and the south (from the bridge) respectively and would satisfy the minimum sight distance requirement. Sight distance (stopping sight distance) is the length of the roadway ahead that is visible to the driver. The available sight distance on a roadway should be sufficiently long to enable a vehicle traveling at or near the speed limit to stop before reaching a stationary object in its path.

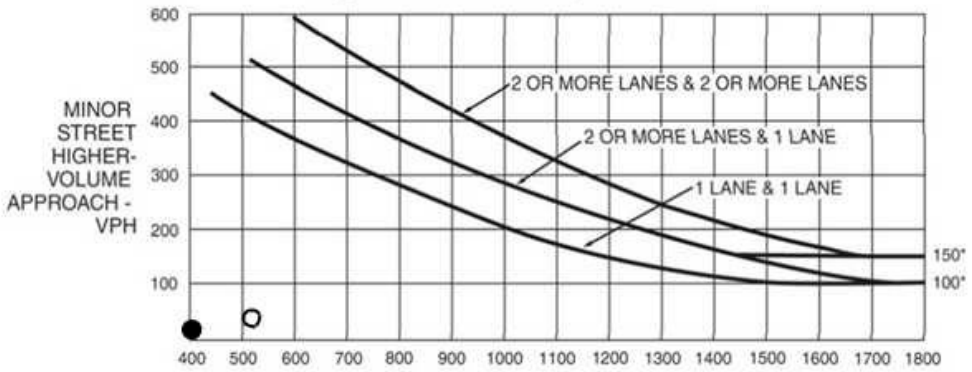
20 cont.

Conclusion

The project is expected to generate 100 trips (Table 1) daily and is not expected to create significant impacts on the peak-hour traffic operation on adjacent streets since the Project would open between 9 a.m. and 4.pm. The Project would provide 92 parking spaces on the site and will satisfy County parking requirements. The site access road at Las Colinas Road will have adequate stopping sight distances in both directions. Based on the review of the collision records, Las Positas Road and Las Colinas Road do not appear to be collision hot spots. The proposed project would not warrant signalization at the Las Colinas and Las Positas Road intersection based on the "Peak Hour Volume Signal Warrant" base on traffic volumes and intersection configuration. While there are no activities taking place currently with the approved high school project to the northeast of the Project site, it is worthwhile to monitor development activities in the vicinity since the area is mostly vacant and development may occur that could lead to realignment, widening, and extending of Las Colinas Road, and could have an impact on the proposed cemetery access and operation.

Peak Hour Volume Warrant Analysis

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

● AM volume Major Street 289 (Las Positas), Minor Street 20 (Las Colinas)
O PM volume Major Street 518 (Las Positas), Minor Street 20 (Las Colinas)

20 cont.

RESPONSES TO COMMENT LETTER F

Response to Comment F-1

This is a general comment. Responses to specific comments on the Draft EIR are provided below.

Response to Comment F-2

Comment noted. The Project is abutting, but outside of the City of Livermore's Urban Growth Boundary (UGB Initiative) and is not subject to the City's General Plan and zoning, but rather to the Alameda County General Plan. The Project would not be considered an infill or mixed-use development, but a conditional use compatible with the Large Parcel Agriculture designation. The impact analyses are primarily focused upon conformance with the County's plans, policies, and zoning.

The City of Livermore General Plan is discussed in the Draft EIR beginning on page 3.1-7. Impacts to scenic vistas are analyzed on page 3.1-9 of the Draft EIR, and the Project impacts were determined to be less than significant. Addition analysis of City of Livermore regulations are included in Master Response 2.

Response to Comment F-3

It is acknowledged that the Project use would exceed the 20-acre limit established for North Livermore in the City's UGB Initiative, and the Draft EIR includes the Reduced Project Footprint Alternative (beginning on page 5-6 of the Draft EIR) that would be consistent with this limit. See Master Response 2.

Response to Comment F-4

This comment indicates that the Project appears to be consistent with the development envelope provision of the UGB Initiative. See Master Response 2.

Response to Comment F-5

The comment indicated that the Project appears to be consistent with the maximum floor area provision of the UGB Initiative. See Master Response 2.

Response to Comment F-6

Comment noted. The commenter correctly indicates that the Draft EIR concludes that the mitigation measures would reduce the construction impacts to special status animal species to less than significant.

Response to Comment F-7

Comment noted. The commenter correctly indicates that the Draft EIR concludes that the mitigation measures would reduce the construction and operation impacts to special status plant species to less than significant.

Response to Comment F-8

See Master Response 2 for discussion of Project compliance with the East Alameda County Conservation Strategy.

Response to Comment F-9

The Project is consistent with the grading limitations. See Master Response 2.

Response to Comment F-10

As indicated by photos in the Aesthetics Section of the Draft EIR (Section 3.1), the Project would not be visible from viewpoints from the northeast or southeast (see Figures 3.1-2 and 3.1-3). These are from vantage points 2, 3, and 4 on Figure 3.1-1. The Project would be visible from vantage point 1 (east of the site looking west), as shown in the Draft EIR on Figure 3.10-4.

For simulations and discussion of views of the Project site looking north from eastbound I-580 and westbound I-580 see Master Response 2.

Response to Comment F-11

See Master Response 2 (including **Figure FEIR-3**) for a discussion of the views from eastbound I-580.

Response to Comment F-12

See Master Response 2 for simulations and discussion of views of the Arroyo from eastbound and westbound I-580.

Response to Comment F-13

The comment indicates that the Reduced Footprint Alternative appears to be consistent with the UGB Initiative. That Alternative includes the building on Phase I but eliminates the lakes and man-made perennial creek connecting the lakes.

Response to Comment F-14

The Draft EIR contains considerable information related to the proposed high school development and the access road plans, as summarized on in the Draft EIR on page ES-12. The plans for the high school (2005 CEQA Negative Declaration) do not include the connection to Redwood Road, as it would be for emergency use only. The comment indicates that discussions between the City staff and the Oakland Diocese are ongoing and include exploration of a range of other land use alternatives for the Diocese property.

The County has engaged the City staff for coordination of the improvements of Las Colinas Road for the cemetery project. The Access Road Coordination Alternative (beginning on page 5-9 of the Draft EIR) was a result of those coordination efforts. The Access Road Coordination Alternative would provide a connection that allows for better pedestrian access for the Project to

South of Interstate 580 and connects to a planned trail to the north of the project. As indicated on page 5-10 of the Draft EIR:

> "Under this alternative, the north-south portion of the Las Colinas access road would connect to and enhance a nearer-term projects, specifically the Project (MVMG facilities and grounds) and a proposed offsite trail (biking and walking trail) to the north of the project site. **Figure 5-1** shows the general concept for the multi-purpose trail and the connection to the access road as well as the access road and pedestrian trail connection between the Project and the Interstate 580 overcrossing. **Figure 5-2** and **Figure 5-3** show preliminary details for the improvements to the access road, including the pedestrian trail. The offsite trail in the City of Livermore is a currently planned connection between the Las Colinas on the south and Redwood Road on the north, with a path connection (north of Arroyo Seco) also going east to connect with the recently approved Lassen Road Residential Development Project (City of Livermore, 2019). The improvements to Las Colinas access road for the proposed Project (MVMG facilities and grounds) would be designed to accommodate (connect with) this future trail to the north in the City of Livermore."

The comment takes no exception to the Draft EIR determination in Section 3.11 (Transportation) that the environmental impacts of the improvements proposed as part of the Project would be less than significant.

Response to Comment F-15

Comment noted. See response to Comment F-14 and See Master Response 2. While the City might consider the cemetery and associated buildings/activities, the MVMG Project would not be a high-impact urban use, but a low intensity use with minimal traffic impacts. City of Livermore approvals near the Project site include the Catholic High School project on the Oakland Diocese land and the Lassen Road Residential Development Project.

Response to Comment F-16

The County would like to thank the City of Livermore for their participation in early consultation related to this Project and for their efforts in reviewing various roadway designs for the Project. This has helped move the process forward to develop final plans for the roadway improvements.

Requirements for coordination between the County, City, and applicant regarding the engineering details of the final design will be included in the conditions of Project approval. These comments and drawings are included in the Final EIR and will be considered as part of the approval of the final design.

It is generally considered acceptable to base CEQA analyses on preliminary plans when it is generally accepted that the mitigations are feasible and will be implemented in the more-refined final plans. Please note that utility plans will be reviewed by the RWQCB and County Public Works Department prior to their approval to ensure that the plans are appropriately developed to meet City and County design standards.

Response to Comment F-17

Comment noted, see Response to Comment F-16.

Response to Comment F-18

In response to the comment the Monte Vista Memorial Gardens Information will be removed from **Table 3.11-1** on page 3.11-10 of the Draft EIR and the table will rely on the ITE trip generation estimates. **Table 3.11-1** is revised as follows (new text is underlined, deleted text is in ~~strikeout~~ format):

"**TABLE 3.11-1. "PROJECT" TRIP GENERATION ESTIMATES**
MONTE VISTA MEMORIAL GARDENS – ALAMEDA COUNTY

Monte Vista Memorial Gardens	Units	AM Peak- Hour Trips (7-9 a.m.)			PM Peak-Hour Trips (4-6 p.m.)			Average Daily Trips (24- hour)		
		In	Out	Total	In	Out	Total	In	Out	Total
Acres (ITE 566)	24	3	1	4	7	14	21	54	54	108
~~Employees~~	~~10~~	~~10~~	~~0~~	~~10~~	~~0~~	~~10~~	~~10~~	~~10~~	~~10~~	~~20~~
~~Visitors~~	~~30~~	~~2~~	~~1~~	~~3~~	~~1~~	~~2~~	~~3~~	~~30~~	~~30~~	~~60~~
~~Deliveries~~	~~10~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~10~~	~~10~~	~~20~~
~~**Total**~~		~~**12**~~	~~**1**~~	~~**13**~~	~~**1**~~	~~**12**~~	~~**13**~~	~~**50**~~	~~**50**~~	~~**100**~~

ITE Trip Generation Manual (9th Edition) Rates for the cemetery (ITE land-use code 566):

~~**Employee Based** (PHA Estimates)~~
~~Daily Rate 2/employee, 50% in, 50% out,~~
~~AM Peak Hour Rate 1/employee, 100% in,0% out,~~
~~PM Peak Hour Rate, 1/employee, 0% in, 100% out~~

Acreage Based (ITE)
Daily Rate 4.73/acre, 50% in, 50% out.
AM Peak Hour Rate 0.17/acre, 70% in, 30% out.
PM Peak Hour Rates 0.84/acre, 33% in, 67% out.

~~**Deliveries, Visitors** (PHA Estimates)~~
~~UPS, FedEx, Amazon, USPS, Newspaper, assumed each generates two one-way trips.~~

"

The analysis concluding the Project would generate approximately 108 daily one-way trips is unchanged.

Response to Comment F-19

See Response to Comment F-16 for discussion of final engineering details.

Response to Comment F-20

See Response to Comment F-18, **Table 3.11-1** on page 3.11-10 of the Draft EIR has been revised based upon Comment F-18 and revisions shown on page 6 of the attachment to Comment F-20.

Mr. Lopez,

On behalf of Mission Peak Conservancy, I'd like to commend the project developers in north Livermore for working to protect the environment and comply with the California Environmental Quality Act. For example, the developers have committed not to infringe on the multi-use trail that is being planned to serve the nearby development of 178 units of housing. 1

As another example, the Monte Vista developers are working to address the abatement order issued by the Regional Water Quality Control Board by protecting a watercourse area on an adjacent property. The RWQCB has also issued a notice of violations for Sunol (see attached), that shows how the Sunol project has flouted watercourse protections. The Sunol developer has not cooperated with the RWQCB so far.

The main building at Monte Vista (12,000 sq ft) will be styled as a "Tuscan winery." The Sunol event center is styled much more lavishly, modeled after a French chateau or the Palace of Versailles. Four acres of vineyards have been planted.

The land use authorities of Alameda County have improperly and unlawfully allowed the Sunol event center, two-acre lake and four-acre vineyard to be constructed in Sunol without any EIR, zoning review or conditional use permit. The Sunol banquet hall was cloaked as a "barn" — as shown below. The event center appears to have, on several occasions, exceeded the septic OWTS limit of not more than 100 persons per event. 2

We support equal protection and equal enforcement under the law, to protect the environment of rural Sunol just as carefully as that of unincorporated Livermore. We strongly believe that county officials in charge of planning, land use, code enforcement, grading, watercourse protection and public works should require all large development projects to comply with CEQA requirements by properly reviewing the environmental impacts.

— Kelly
Mission Peak Conservancy

Planning Dept report on Monte Vista Memorial Gardens
https://www.acgov.org/board/bos_calendar/documents/CDAMeetings_02_07_2022/PLN2017000194MonteVista.pdf 3

Sunol banquet hall (12,000 sq ft) cloaked as an "agricultural barn"

— Styled after the Palace of Versailles or a French chateau.
— County failed to undertake EIR as required by CEQA; didn't do zoning review or issue any conditional use permit for the event center. 4

4
cont.

4
cont.

Overview of Sunol event center

4 cont.

RESPONSES TO COMMENT LETTER G

Response to Comment G-1

The comment is supportive of the Project and does not raise any issue with the environmental analysis presented in the Draft EIR. No further response is required.

Response to Comment G-2

The issues raised by the comment address concerns for a separate project (the Sunol event center). It does not raise any issue with the environmental analysis presented in the Draft EIR for the Monte Vista Memorial Gardens Project. No further response is required.

Response to Comment G-3

This is a weblink to the Alameda County Planning Department Staff Report for the Monte Vista Memorial Gardens Project.

Response to Comment G-4

The issues raised by the comment are for the Sunol banquet hall, not the Project analyzed in the Draft EIR. No further response is required.

Letter H

Friends of Livermore

1141 Catalina Drive # 263• Livermore, CA 94550• Phone: 925-963-0136 • E-Mail: d.michael.rounds@gmail.co

March 3, 2022

Alameda County Planning Department
224 W. Winton Avenue, Room 111
Hayward, CA 94544
Attn: Albert V. Lopez, Planning Director

submitted electronically

Re. Monte Vista Memorial Gardens Project, Draft Environmental Impact Report
Alameda County Planning Application PLN2017-00194

Dear Mr. Lopez:

Friends of Livermore (FOL) submit the following comments on the Draft Environmental Impact Report ("DEIR") prepared for the Monte Vista Memorial Gardens Project ("Cemetery Project").

Friends of Livermore is a community organization dedicated to protecting open space and improving the quality of life in the Livermore Area. We formed in early 2002 during the fight to protect North Livermore from a developer initiative that would have allowed massive housing developments in North Livermore. We have been involved with many subsequent development proposals over the ensuing 20 years and fight projects and proposals that are inconsistent with Measure D. 1

After reviewing the DEIR for the Cemetery Project, FOL has identified numerous deficiencies in the analysis and conclusions. These need to be addressed in the Final Environmental Impact Report. 2

The Cemetery Project would be built in two phases. Phase I includes construction of two buildings. A Funeral Home building would contain a mortuary, crematorium, viewing room, sales office, staff offices, chapel accommodating 120-140 visitors, garage, receiving area, preparation room, family preparation room, reception area, guest lounge, and associated storage and sanitary facilities. A second Pavilion building would have table seating for 120-130 persons, kitchens, storage and sanitary facilities. These facilities would be constructed within a building envelope on the east side of Arroyo Las Positas. 3

Phase II would include most of the cemetery grounds including a mausoleum, columbarium, other monuments, burial sites, roads, artificial lakes and artificial wetlands. Phase II buildings would be constructed on the west side of Arroyo Las Positas, outside the Phase I building envelope, and would occur over a period of 100 years based on future demand and unspecified "other development and regulatory factors." Permitting for Phase II would not begin until after Alameda County approves a conditional use permit for the entire project. (P. ES-3) This is unacceptable piecemealing of the project approval process. 4

Our detailed comments on the DEIR will follow the order of subjects analyzed in the document.

3.3 Biological Resources

Figure 3.3-3 on page 3.3-12 of the DEIR is a map of observations of Special-Status plants and animals within five miles of the project. The DEIR states that the map was used as one of the three sources by Barnett Environmental "To provide a vision of what potential biological resources may be present on the property."
The map indicates the land immediately surrounding the project area has observations of special-status plant and animal species such as California red-legged frogs, California tiger salamanders, and vernal pool fairy shrimp among others species of concern.
Table 3.3-2 also lists the Potential for Occurrence in the Study Area as high for: California Red-Legged Frogs, California Tiger Salamanders and Burrowing Owls. Additionally, the Potential for Occurrence in the Study Area is listed as 5

Moderate for: Western Spadefoots, San Joaquin Coachwhips, Swainson's Hawks, Grasshopper Sparrows, White-Tailed Kites and Loggerhead Shrike.
Considering the observations and probability of special-status species in the immediate vicinity of the project area, the assumption should be that these species are likely to exist there too. The DEIR's proposed Mitigation Measures for the likely special-status species, California Red-Legged Frogs and California Tiger Salamanders, are through the purchase of conservation easements or in-lieu fee payments. Both ultimately mean some loss of total habitat for these species. The DEIR should address how either of these measures provides more habitat than currently exists. The DEIR should show examples of successful habitat improvement made by in-lieu fee payments if that method of mitigation is proposed. Alternatives to the proposed mitigation should be presented in the DEIR. 5 cont.

Appendix D, Figure 3 (Page 13) titled "California Aquatic Resources Inventory" shows Arroyo Las Positas and at least four unnamed tributaries flow through the project area. In addition, a substantial portion of the project site is identified as a vernal pool. However, the DEIR Table .3-1 lists only 0.24A as Seasonal Wetlands. The DEIR does not address this discrepancy other than that Barnett Environmental does not agree with the map. 6

The possibility that Barnett Environmental's observations were made at a time or in a year when larger areas of seasonal wetlands were present are not addressed. Appendix G - Hydrologic Analysis, Section 6.1.2 states that "Based on the final grading of the site, the wetland area will not receive significant runoff. Therefore, we set the runoff inputs for the wetland to zero for all months." The result would appear to be the destruction of what seasonal wetland might exist. As the DEIR mentions, the East Alameda County Conservation Strategy lists "Protection of vernal pool and longhorn fairy shrimp habitat" as a priority. Conclusions on the presence of seasonal wetlands should err on the likelihood that they are present. The DEIR should address how seasonal wetland can be preserved. 7

The DEIR does not address possible effects of ground water withdrawals on flows in Arroyo Las Positas. 8

California Department of Fish and Wildlife (CDFW) in Appendix B to Notice of Preparation indicated the proposed artificial lakes are likely to attract invasive species such as American bullfrogs and possibly other non-native species. American bullfrog sightings have been reported by the USGS about 7200 ft. west of the project site (see https://nas.er.usgs.gov/viewer/omap.aspx?SpeciesID=71). American bullfrogs are a threat to Special Status Species in the area. The DEIR does not address CDFW's concern or alternatives to the lakes. 9

The DEIR does not address the consequences of the absences of the lakes if they are disallowed. Appendix G, Section 5.0 describe the lakes and creeks as "water features" and may have been included more for aesthetics than practical reasons, but they contribute to the project in several ways. First, the lower lake is intended to supply irrigation water as needed for landscaping (Appendix G, Section 5.0). The project reportedly will require 63.75 acre-feet (20,772,998 gallons) of water annually for landscaping (enough to supply 527 average California households according to the National Environmental Education Foundation). The DEIR does not address how the loss of the lakes would affect their water use.
The lakes and the artificial creek connecting them are also intended to buffer and redirect water flowing down two of the large drainage routes, which currently empty directly into Arroyo Las Positas (see Appendix G, Figure 5: Post-Development Watershed Map). The DEIR does not address drainage management if lakes and the artificial creek are disallowed. 10

Section 3.7 of the DEIR mentions the storage and use of herbicides, pesticides and fertilizers. It does not indicate the specific types or if rodenticides might be used. The DEIR acknowledges that the project has a high potential for the occurrence of Special-Status Species including California Red-Legged Frogs, Tiger Salamanders and Burrowing Owls. These species and others are likely to be adversely affected by the use of these chemicals if not by direct contact, then by contaminated runoff both in the project area and down stream from the property. The DEIR claims "... environmental impacts from hazardous materials during operation of Phase I [and Phase II] would be a less-than-significant impact." The DEIR should accurately describe the type and intended use of hazardous chemicals, and offer alternatives to their use.
The DEIR's "Don't worry, everything will be fine" attitude toward hazardous chemicals does not accurately delineate the threat. In the past, the county has shown concern regarding the use of hazardous chemical for landscaping maintenance. In 1996, the County granted the Five Pillars Islamic Cemetery (FPIC) a Conditional Use Permit with the condition that hazardous chemicals could not be used due to the presence of habitat for Special-Status Species. This condition was maintained when the CUP was renewed in 2018 (PLN 2017-00077). 11

The Monte Vista Memorial Gardens Project (MVMGP) area contains similar habitat to the FPIC area. More, and more significant, waterways flow through the MVMGP project area than through the area of the FPIC. Arguably MVMGP has habitat more likely to contain Special-Status Species. The same standard should be applied to both projects. Hazardous chemicals should not be allowed on the MVMGP property. 12

Alternatives to the large landscaped area should be offered by the DEIR. Alternatives should include the use of native drought tolerant plants, minimal use of lawn and no use of herbicides, pesticides or rodenticides. Water features and high water use landscaping are aesthetic aspects peripheral to the purpose of the project. 13

The DEIR ignores the California Department of Fish and Wildlife's comment letter to the Notice of Preparation that impacts to the western bumble bee, a Candidate species for listing under the California Endangered Species Act, must be analyzed and mitigated for. (Appendix B, p. 12; CDFW letter, P. 7, under Pollinators.) 14

3.8 Hydrology and Water Quality

The DEIR analysis of the impact of climate change on water use and availability of water is inadequate and does not take into account the ongoing acceleration of Climate Change on the available well water used in the irrigation plan for this project. The hydrological analysis for this project was conducted three years ago (Appendix G) and the "dry year" portion of the analysis was based on information from 1990. The rate of the impact of Climate Change has accelerated exponentially in the past three years. Extreme drought conditions are here now, yet are not considered. The DEIR allows for use of up to 0.66 acre feet per day (241 acre feet per year) of onsite well water for irrigation of the 33 acres of lawns and landscaping in the project. This cap on usage is supposed to insure that groundwater levels are not negatively impacted. If extreme drought conditions become the norm what will the impact be on groundwater levels? The DEIR should be revised to exclude groundwater as a source of water for project operations. The lawn areas should be eliminated and replaced with appropriate drought-friendly landscaping. At a minimum, alternate plans should be presented that take into consideration extreme drought conditions. 15

The hydrological plan for the project was developed by ENGIO and presented in Appendix G. According to this plan two manmade perennial lakes with a connecting perennial stream are required in order to balance water use over the year in order to provide adequate water for the project and provide adequate flood control during 100 year flood events. According to comments to the NOP, Appendix B by the California Department of Fish and Wildlife (CDFW) "Artificial water bodies such as lakes, reservoirs, ornamental ponds, and bioretention basins can create an attractive nuisance for both California tiger salamanders and California red-legged frogs"…and…"can attract invasive non-native species such as American bullfrogs (*Lithobates catesbeianus*) and human introduced species such as red-eared sliders (*Trachemys scripta elegans*), goldfish (Carassius auratus) and pond koi." The DEIR does not speak to any mitigation plan to control the potential introduction of these non-native species. Without adequate mitigation (if it is even possible to mitigate) the DEIR should be revisited and provide an alternate irrigation plan that does not depend on perennial artificial water feature. 16

3. 9 Land Use, Planning and Agriculture

This section of the DEIR provides faulty analysis or omits entirely analysis of many relevant provisions of the Alameda County East County Area Plan (ECAP) as amended by Measure D. Therefore the conclusion that impacts to land use, planning and agriculture are less than significant is unjustified.

The DEIR states, mostly accurately, that the purpose of Measure D was "to preserve and enhance agriculture and agricultural lands, and to protect the natural qualities, the wildlife habitats, the watersheds, and the beautiful open spaces of Alameda County from excessive, badly located and harmful development." (Beautiful was omitted in the DEIR description.) Then, after a cursory and incomplete analysis of ECAP policies and particularly policies amended or added by Measure D, concludes ipso facto that if the County approves a CUP for the project, then land use, planning, and agriculture impacts will be less than significant. This puts the cart before the horse. 17

Inconsistency of use with the Large Parcel Agriculture land use designation.

As noted in the DEIR (P. 3.9-2), the Cemetery Project would be located on land designated Large Parcel Agriculture (LPA). No analysis of the various Cemetery Project uses was made showing consistency with the uses permitted under the Large Parcel Agriculture land use designation. Instead, the DEIR simply asserts that if the project were granted a CUP, it would be a consistent use. This conclusion is devoid of analysis. 18

The LPA designation permits "agricultural uses, agricultural processing facilities (for example, wineries, olive presses), limited agricultural support service uses (for example, animal feed facilities, silos, stables, feed stores), secondary residential uses, visitor-serving commercial facilities (by way of illustration, tasting rooms, fruit stands, bed and breakfast inns), recreational uses, public and quasi-public uses, solid waste landfills and related waste management facilities, quarries, windfarms and related facilities, utility corridors, and similar uses compatible with agriculture."

Cemeteries with mortuaries, crematoria, large visitor-serving event spaces unrelated to agriculture, parking garages for hearses, offices, etc. are not listed in the LPA designation. While the Zoning Ordinance allows cemeteries in the A-(Agriculture) District, it does not allow the other proposed uses of this project that are unrelated to agriculture.

Going through the permitted uses one by one, a cemetery with these components cannot be considered any of the uses listed in the LPA designation. It is plainly not an agricultural use, an agricultural processing use, or an agricultural support service use. In fact, the DEIR states it would result in "the conversion of approximately 47 acres of agricultural lands...to non-agricultural uses." Thus, the conclusion in Table 3.9-1 that the project is "Generally Consistent" with the goal "To maximize long-term productivity of East County's Agricultural resources" is an unsupported conclusion. (Emphasis added.)

18 cont.

The project is neither a residential nor a secondary residential use; no residences are part of the project. It is not a recreational use; no recreational uses are part of the project. It is not a public or quasi-public use; it is a private use. Nor is the project a solid waste landfill or related waste management facility, a quarry, windfarm or related facility, or a utility corridor.

It is none of the above uses, and no argument has been made that the Cemetery Project is similar to any of the permitted uses. In fact, the Funeral Home and Pavilion building are visitor-serving commercial buildings unrelated to agriculture that can and must be located inside the Urban Growth Boundary. These types of facilities are commonly found in most cities as stand-alone uses, and several are located in the adjacent City of Livermore. They do not require location at a cemetery site. The County conditionally permits mortuaries only in the C-1 (Retail Business) and C-2 (General Commercial) districts. Should the project developers wish to provide these services, they can explore locations inside Livermore or in one of the other nearby cities. If these commercial buildings are removed from the project, then the remaining proposed buildings in which to hold human remains would be consistent with a cemetery as allowed in the A-district.

Proposed site design inconsistent with Large Parcel Agriculture land use designation

With very limited exceptions, ECAP requires all buildings on a parcel designated Large Parcel Agriculture to be located on a contiguous development envelope not to exceed two acres. The parcel for the proposed cemetery is designated Large Parcel Agriculture, and the site plan conflicts with this requirement.

The LPA designation states, "Apart from infrastructure under Policy 13, all buildings on a parcel shall be located on a contiguous development envelope not to exceed 2 acres, except they may be located outside the development envelope if necessary for security reasons or, if structures for agricultural use, necessary for agricultural use."

19

The DEIR fails to analyze where all contemplated Cemetery Project buildings would be located in relation to a contiguous 2-acre development envelope. Table 3.9-1 (Project Consistency with General Plan and ECAP Policies) merely identifies Policy 99 with respect to the 2-acre building envelope requirement. Policy 99 refers only to residential buildings. Since there are no residential buildings proposed in the Cemetery Project, the project is consistent with this policy.

But the DEIR omits entirely an analysis of non-residential buildings. Phase I buildings (Funeral Home and Pavilion) appear to be within a contiguous 2-acre area (although this is not stated in the DEIR). However, the Phase II buildings (mausoleum, columbarium and other above-ground vaults) on the west side of Arroyo Las Positas will clearly be outside this 2-acre envelope. (Figure ES-2, Site Plan).

Unless this configuration falls within one of the exceptions listed in the LPA designation, it is in conflict with the General Plan. Each exception will be considered in turn.

1. Is the proposed use infrastructure as defined by ECAP? The answer is No. Under ECAP Policy 13, " 'Infrastructure' shall include public facilities, community facilities, and all structures and development necessary to the provision of public services and utilities."

a. Public facilities – The proposed cemetery is not a public facility as it is neither owned nor operated by a public agency, nor is it to be operated under a franchise agreement with a public agency. Major Public Facilities is an entire section of the ECAP (pp. 37-40) and includes General Public Facilities (hospitals, research facilities, landfill sites, jails, etc.), Airports, and Solid Waste and Hazardous Waste Facilities. Clearly, the Cemetery Project is none of these.

Another category of public facilties is described in the ECAP section General Services and Facilities (pp. 59-69). Policy 218 explicitly lists the kinds of public facilities this section refers to: "parks and recreation facilities; schools; child care facilities; police, fire, and emergency medical facilities; solid waste, water, storm drainage, flood control, subregional facilities; utilties, etc." Policies 223 through 287 then elaborate on what those facilities are and the ECAP provisions enacted to ensure their adequate supply. Nowhere is the processing or burial of human remains listed in or implied by these policies. Rather, each listed type of public facility or service is something that government usually provides directly or contracts with a private entity to provide. (Public utility service is the only exception to this rule, in that such services in California are often provided by private corporations under close regulation by public authorities. See c below for the definition of a public utility under the California Public Utility Code.)

b. Community facilities – The proposed cemetery is not a community facility as that term is defined in the Alameda County Zoning Ordinance:

" 'Community facility' means any of the following buildings or uses:
1. Church or rectory or convent, when constructed of frame or more lasting materials;
2. School, attendance at which satisfies the requirements of the Compulsory Education Law of state;
3. Nursery school;
4. Library, college, university;
5. Outdoor recreation facility;
6. Public utility building or uses, excluding such uses as a business office, storage garage, repair shop or corporation yard;
7. Newspaper carrier distribution center, having an area not in excess of one hundred (100) square feet."

A plain reading of the above terms shows that a cemetery does not fit into any of the listed meanings. It is not a church, school, nursery school, library, college or university, outdoor recreation facility, public utility building or use, or newspaper carrier distribution center.

c. Public services – As stated above, a cemetery is not a public service because it is not a service provided by a public agency or operated under a franchise agreement with a public agency. Nor can it be considered a public service simply because it is open to the public for business and fills a need of the public at large. Under this sort of interpretation, any business that sells services to the public would be considered infrastructure – for example, a bank or car repair shop, real estate agency or movie theater could all be considered infrastructure since these too are services needed or used by the public. But clearly, the definition of infrastructure in ECAP cannot be construed so broadly or it would defeat a main purpose of Measure D to restrict the spread of buildings across the land.

Finally, a cemetery is not a public utility. As defined in Section 216(a) of the Public Utility Code, " 'Public utility' includes every common carrier, toll bridge corporation, pipeline corporation, gas corporation, electrical corporation, telephone corporation, telegraph corporation, water corporation, sewer system corporation, and heat corporation, where the service is performed for, or the commodity is delivered to, the public or any portion thereof."

19 cont.

Having considered all the uses in Policy 13, the Cemetery Project cannot be considered infrastructure.

2. Are the buildings proposed to be located outside the 2-acre development envelope needed for security reasons? The answer is No. Nowhere in the Cemetery Project description is security set forth as a reason for the location of buildings.

3. Are the buildings proposed to be located outside the 2-acre development envelope agricultural buildings whose location outside the development envelope is necessary for agricultural use? The answer is No. There are no agricultural buildings in the project description and no agricultural use is proposed as part of the Cemetery Project.

Simply put, the mausoleum, columbarium, and other vaults are not agricultural buildings, security buildings, or infrastructure, and therefore they are not permitted to be outside the single 2-acre development envelope that contains the Funeral Home and Pavilion.

The DEIR is deficient for not making this analysis. Had it done so, the Cemetery Project would be shown as inconsistent with respect to Land Use, Planning and Agriculture, and the impact would be listed as Significant.

19 cont.

In closing, the DEIR for Monte Vista Memorial Gardens Cemetery Project contains numerous deficiencies, omissions, and erroneous conclusions. We look forward to having these corrected in the Final Environmental Impact Report for the project.

20

Sincerely,

/David Rounds/

David Rounds for Friends of Livermore

RESPONSES TO COMMENT LETTER H

Response to Comment H-1

A primary purpose of the Alameda County Measure D (Measure D) is to preserve open spaces from intensive, urban, nonagricultural development. The MVMG Cemetery Project would cluster buildings together to preserve the open space and a portion of the site would be protected from future development. See Master Response 3 for further discussion on Project Measure D consistency.

Response to Comment H-2

This is a general comment. It summarizes conclusions of the letter from Friends of Livermore and asks for a response to these conclusions. The issues raised in this comment are addressed more specifically in other comments in this comment letter and are responded to below as requested.

Response to Comment H-3

The comment describing the proposed phasing is acknowledged.

Response to Comment H-4

The EIR addresses both proposed Project phases and, as such, does not piecemeal the analysis of the overall Project. Final permits cannot be approved until the EIR is certified and the Project is approved. The Conditional Use Permit will be included in the Project approval process and will include conditions for the Phase I and Phase II development. The Mitigation Monitoring and Reporting Program will also include mitigation measures, enforcement and monitoring responsibility, timing/implementation for Phase I and Phase II development.

Response to Comment H-5

See Master Response 4 for discussion of special status species and habitat protection.

Response to Comment H-6

See Response to Comment C-15.

Response to Comment H-7

The wetland delineation was performed during on December 12, 2018 during a normal wet year, see Response to Comment C-16. The Project site does not contain critical habitat for vernal pool nor fairy shrimp as noted in Section 3.3 of the Draft EIR. Mitigation Measure 3.3.1e would require US Fish & Wildlife Service protocol level vernal pool crustacean surveys prior to construction if any habitat is found during the development of Phase II. Page 17 of **Appendix G** of the Draft EIR states the results of the wetlands water balance analysis as follows:

> "The wetland area will be expected to be saturated for an average of 6 months every year.

Response to Comment H-8

See Response to Comment D-4, groundwater well water draw would not affect groundwater well supply in the basin.

Response to Comment H-9

The Mitigated Alternative would substantially reduce total water usage through the removal of the lakes and man-made perennial creek and the use of advanced landscaping techniques and native vegetation. For further discussion on the Mitigated Alternative see Master Response 1.

Response to Comment H-10

The Mitigated Alternative discusses removing the lakes from the Project. For details on the Mitigated Alternative, see Master Response 1.

Response to Comment H-11

Impact 3.7.1 on pages 3.7-7 and 3.7-8 of the Draft EIR addresses hazardous material management at the Project site and provides guidance for implementation of Best Management Practices (BMPs) for any potential chemical release during Project construction.

As described on page 3.7-8 of the Draft EIR the Project would be required to prepare a Hazardous Materials Business Plan if they store more than 55 gallons of a liquid, 200 cubic feet of a gas or 500 pounds of a solid. Any hazardous materials or chemicals that would be stored at the Project site for operational use are required to be stored and used according to the manufacturer's recommendations. This would apply to any chemicals or hazardous materials, including rodenticide, if they are used at the Project site for any purpose, such as landscaping. Compliance with County requirements as well as Federal, State and manufacturer requirements for the storage, use, handling and disposal of hazardous materials would significantly reduce the potential threat of accidental release of hazardous materials that could potentially result in health and environmental impacts.

Response to Comment H-12

The Five Pillars Islamic Cemetery is in an area identified in the appendices of the Draft EIR as critical habitat for the California red-legged frog (CRLF) and Vernal pool fairy shrimp (see **Appendix D** of the Draft EIR, Figure 7). The Project site is not in a critical habitat area. For further discussion see Response to Comment I-15.

Response to Comment H-13

See response to comment H-11 for a response to the potential use of rodenticide and chemicals to manage the landscaping at the Project site. The Mitigated Alternative would remove the lakes, reduce landscaping to maximize available interment area, and rely primarily on native vegetation. For further discussion see Master Response 1.

Response to Comment H-14

On a nearby project (3 miles to the northwest of the Project) the County indicated the following with regard to the western bumble bee (Alameda County, 2020):

> "… this species is currently rare across its range and in California it is currently limited to high elevation meadows in the Sierra Nevada and small coastal populations (CDFW 2019). The nearest CNDDB occurrence for this species is located approximately 6.4 miles southwest of the project site near Pleasanton (CDFW 2020). However, this record is from 1932 and there are no other nearby current records that document this species near the project site…"

Furthermore, the Project would have minimal artificial structures and traffic (CDFW states artificial structures and traffic make foraging more difficult – see Comment B-18). The Project would include landscaping (including drought resistant, and native species) that could provide support to pollinators. See Master Response 1 (**Figure FEIR-1**) showing the proposed plant legend for the landscaping. The landscaping would include a variety of tree, shrub and wetland plants. A final landscape plan will be required prior to building permit issuance.

Response to Comment H-15

The Mitigated Alternative would substantially reduce total water usage through the removal of the lakes and man-made perennial creek and the use of advanced landscaping techniques and native vegetation. For further discussion on the Mitigated Alternative see Master Response 1. Hydrologic analysis is based on long-term rainfall data for the region. See Section 5.2.1 on page 7 of **Appendix G** of the Draft EIR for details on the rainfall analysis.

Response to Comment H-16

The Mitigated Alternative mitigates the concerns in this Comment by removing the lakes and man-made perennial creek from the Project. For details on the Mitigated Alternative, see Master Response 1.

Response to Comment H-17

The comment does not identify which relevant provisions have faulty analysis or are omitted entirely.

The Projects compliance with land use plans and policies, including the ECAP, are addressed in detail in Table 3.9-1 of the Draft EIR. The ECAP policies include policies that have been amended by County Measure D. Specific plans and policies affecting individual resource topics are addressed in those respective chapters. For further discussion on Project Zoning, ECAP and Measure D Compliance, see Master Response 3.

It is acknowledged that page 3.9-2 of the Draft EIR contains a typographical error and the Draft EIR is revised as follows (new text is underlined, deleted text is in strikeout format):

> "… and the beautiful open spaces of Alameda County from excessive, badly located and harmful development.

The Project's compliance on agricultural land policies is further discussed in the third, fourth, and fifth items in Table 3.9-1 on page 3.9-6 of the Draft EIR.

Response to Comment H-18

The Project is consistent with the Zoning Ordinance. For discussion on Project Zoning, ECAP and Measure D Compliance, see Master Response 3

Response to Comment H-19

Discussion of Policy 99 has been removed from the Draft EIR as indicated in Response to Comment I-8. For discussion on Project consistency with Measure D land use restrictions and the 2-acre development envelope, see Master Response 3.

Response to Comment H-20

This is a general comment. It summarizes conclusions of the letter from Friends of Livermore and asks for a response to these conclusions. The issues raised in this comment are addressed more specifically in other comments in this comment letter and are responded to in the Responses to Comment H-1 through H-19.

Letter I

FRIENDS OF OPEN SPACE AND VINEYARDS

February 28, 2022

SENT VIA EMAIL
County of Alameda Planning Department
224 W. Winton Avenue, Room 111
Hayward, CA 94544
Attn: Albert Lopez, albert.lopez@acgov.org

RE: Monte Vista Memorial Gardens Project; Alameda County Planning Application, PLN-2017-00194;

Dear Mr. Lopez:

Friends of Open Space and Vineyards ("FOV"), a conservation organization based in Livermore, submits the following comments on the Draft Environmental Impact Report ("DEIR") prepared for the Monte Vista Memorial Gardens Project ("Cemetery Project"). FOV was founded in 1981 in an effort to stop uncontrolled residential development from taking over the land in the South Livermore Valley and displacing our local vineyards, wineries, and open space resources. In subsequent years, our mission has been expanded to also include protection and preservation of North Livermore agriculture and open space. 1

We have reviewed the draft environmental impact report for the Cemetery Project and have identified deficiencies in the analysis and conclusions. We submit these comments for response.

Factual Error

The DEIR asserts that no permits for cemeteries have been issued in Alameda County for 110 years. This is incorrect. The County issued a conditional use permit ("CUP") in December 1996 for the Five Pillars Islamic Cemetery, serving the Muslim community. This cemetery is located in North Livermore on Laughlin Road. The CUP was renewed in 2018. The DEIR must be revised to correct the error and acknowledge that the County has approved a cemetery use within Alameda County in the last 25 years. 2

Land Use

The DEIR fails to correctly and adequately address the applicable land use provisions found in Alameda County Measure D, the ECAP, and the Zoning Ordinance.

Measure D, entitled "Save Agriculture and Open Space Lands Act", is an initiative measure which was adopted by the voters in Alameda County in 2000. The purposes of the initiative are outlined in section 1 which states: 3

> The purposes of this Initiative are to preserve and enhance agriculture and agricultural lands, and to protect the natural qualities, the wildlife

habitats, the watersheds and the beautiful open spaces of Alameda County from excessive, badly located and harmful development. The measure establishes a County Urban Growth Boundary which will focus urban-type development in and near existing cities where it will be efficiently served by public facilities, thereby avoiding high costs to taxpayers and users as well as to the environment. The ordinance is designed to remove the County government from urban development outside the Growth Boundary.

The limitations this measure imposes on the amount and location of development aim at preventing excessive growth and curbing the juggernaut of urban sprawl. The Initiative will reduce traffic congestion, air and water pollution, loss of historic and scenic values and the blighting of existing city centers; and will help maintain a high quality of life in Alameda County.

Among the findings made as part of the initiative are the following pertaining to agriculture and open space:

(b) Existing Plans: The existing East County and Castro Valley Area Plans are weak. They do not provide adequate safeguards against destructive growth nor adequate protection for agriculture and vital environmental qualities. The plans contain major loopholes; some areas are not covered by any meaningful protection. The plans have no permanency. They can be changed at any time.

(c) Agriculture: The protection of existing agriculture is important to Alameda County. Agriculture remains a major contributor to the County's diversified economy. It is key to preserving open lands. Agriculture can only be maintained and enhanced if the voters of the County make a firm commitment to its preservation.

(d) Open Lands: Preservation of agriculture and other open lands protects air and water quality, contributes to health and recreation, offers habitat for plants and animals, provides visual enjoyment and beauty, gives a sense of history and community, and generally is important to the quality of our lives.

3 cont.

These identified purposes and findings demonstrate a strong commitment to agriculture and open space values and prioritize them within Alameda County.

This priority is further demonstrated by Policy 85 of the East County Area Plan ("ECAP"), added by Measure D. Policy 85 states:

In areas designated Large Parcel Agriculture, the County shall permit l*imited agriculture enhancing commercial uses that primarily support the area's agricultural production*, are not detrimental to existing or potential agricultural use, demonstrate an adequate and reliable water supply, and comply with other policies and programs of the Initiative. [Italics Added.]

This policy recognizes that commercial uses are only allowed to the extent that they primarily support agricultural production. 3 cont.

Phase 1 of the Cemetery Project includes commercial development that does not support agriculture. Measure D calls for the preservation of agricultural and open space lands. Development of a mortuary, crematorium, offices, event spaces, and spaces that will be used for funeral services (collectively referred to as "funeral facilities") does not fit within this framework. Simply put, they are inconsistent with Measure D and cannot be permitted. In contrast, the burial facilities intended for the interment of human remains, which are elements of both phases of the proposed project, do not conflict with the open space values that Measure D protects, and would be an appropriate land use assuming other environmental and legal criteria are satisfied. 4

Furthermore, the Phase 1 funeral facilities described above do not qualify as infrastructure within the meaning of Measure D and the ECAP and are subject to a 2-acre building envelope (ECAP, p. 45.) Infrastructure, as described in ECAP Policy 13 (former Policy 14A, added by Measure D) consists of "public facilities, community facilities, and all structures and development necessary to the provision of public services and utilities." The proposed project is not a "public facility" as defined within the ECAP. Policy 218 lists types of infrastructure facilities that would be considered public : "parks and recreational facilities; schools; child care facilities; police, fire, and emergency medical facilities; solid waste, water, storm drainage, flood control, subregional facilities; utilities etc." These are all examples of facilities that are managed or controlled by government agencies or their contractors. A privately owned funeral facility does not fit within this definition even if it serves the general public. Otherwise every private business could be considered a public facility. 5

Similarly, the proposed project's funeral facilities cannot be considered "community facilities." The Alameda County Zoning Ordinance defines the term to include churches, rectories or convents, schools that satisfy compulsory education requirements, nursery schools, libraries, colleges, universities, outdoor recreation facilities, public utility buildings or uses (excluding such uses as a business office, storage garage, repair shop or corporation yard), and newspaper carrier distribution centers (limited to 100 square feet). (Section 17.04.010.) Funeral facilities are not included in this list. These facilities are more like a privately-operated gym which is open to the public; the business may provide a useful service but it doesn't make it a facility that serves the community within the meaning of the Zoning Ordinance. The Zoning Ordinance cannot be arbitrarily expanded. 6

The funeral facilities cannot qualify as Infrastructure under the "public services and utilities" development. If providing services to the public is the sole criteria for falling within this definition, then just about every business would qualify. This would completely undermine one of the main objectives of Measure D, which is to avoid over-development of rural areas. 7

Thus, the funeral facilities proposed to be developed in Phase 1 of the project are not Infrastructure within the meaning of the ECAP and Zoning Ordinance. They are not infrastructure that serves permissible development and should not be authorized.

Moreover, because the funeral facilities, masoleum and columbarium are not infrastructure, they must comply with the 2-acre contiguous building envelope requirement of Measure D and the ECAP. The DEIR incorrectly concludes that the 2-acre building envelope requirement is applicable only to residential development citing ECAP Policy 99. (DEIR, Table, 3.9-1, p. 3.9-7.) This conclusion overlooks the specific requirements spelled out for Large Parcel Agriculture land-use designations as described in the ECAP which incorporates the language of Measure D: 8

> Apart from infrastructure under Policy 13, all buildings shall be located on a contiguous development envelope not to exceed 2 acres except they may be located outside the envelope if necessary for security reasons or, if structures for agricultural use, necessary for agricultural use.

8 cont.

(ECAP, p. 47.) The DEIR needs to be revised to address whether the proposed 40,000 square feet of structures (see DEIR, sec. 3.9, p. 3.9-4), including funeral facilities, mausoleum, columbarium and any other structures that are not necessary for security reasons are located within a contiguous 2-acre building envelope.

9

The argument that the funeral facilities are "accessory uses" that are therefore permitted by the Zoning Code with a Conditional Use Permit ("CUP") also lacks merit. While cemeteries are conditional uses in agricultural zones under the Zoning Code, (section 17.06.035), the funeral facilities included in the project proposal do not satisfy the definition of accessory uses found in the Code:

> 'Accessory use' means a use which is appropriate, subordinate, incidental and customarily or necessarily related to a lawfully existing principal use on the same lot or building site and does not alter the essential characteristics of such principal use as a whole and as related to other uses permitted in the same district.

The proposed funeral facilities are not subordinate or incidental uses. They are a large commercial development which could exist completely independent of an on-site cemetery. The applicant's stated unwillingness to evaluate a "burial-ground only" alternative (as more fully discussed below) confirms that these planned uses are primary uses. The applicant states that the project objectives cannot be achieved without these facilities. These are the driving force for the project—the "money-makers," essentially. These are not accessory uses as defined in the Zoning Ordinance.

10

Nor can it be said that the uses are accessory because they are customary—the uses are listed as inclusive requirements ("and"), not exclusive ("or"). In and of itself a customary use is not sufficient; it must also be subordinate and incidental which is not the case here.

Accessory uses cannot alter the essential characteristics of the principal use "as related to other uses permitted in the same district." Development of a large-scale funeral facility with a mortuary, crematorium, offices, event areas, and spaces which function as chapels in an agricultural district fundamentally alters the essential characteristics of the agricultural district which is intended for lower intensity uses. These commercial uses belong inside the urban growth boundary; not in the heart of East County's farmland. The land in the district is used primarily for cattle grazing, which a recent LAFCO study on the effects of Measure D noted is an economically productive form of agriculture in Alameda County (See LAFCO Draft Measure D 20-Year Retrospective Study (Dec. 2021), attached, p. 3-29.) The County should not allow commercial uses to encroach on and provide a basis for gradually overtaking the current land uses which are intended to be protected from this encroachment under Measure D.

Water Impacts

The DEIR fails to adequately clarify and analyze water usage impacts. The DEIR states that 9 acres of the project site will consist of landscaping but the project also includes 24 acres of monuments and burial grounds (Section ES.3.4, p. ES-5; Fig. ES-2.) The DEIR fails to identify the planned

11

landscaping for these 24 acres. Presumably, a significant portion of the Phase II area will be covered with lawns. The final EIR should clarify the amount and type of landscaping planned for the Phase II burial grounds and specify the amount of water that will be necessary for the 9 acres of landscaped area, and the 24-acres of burial grounds, respectively. 11 cont.

The DEIR analysis of water impacts should also be revised to include a focused discussion of the impacts of drought on the amount of groundwater estimated to be needed to supplement lake-sourced irrigation supplies. Appendix G references a single dry year (1990) as its basis for dry year needs. As climate change worsens, and water becomes scarcer, the water needs of the project may become prohibitive. The final EIR must discuss the effects of extreme drought and include an analysis of landscaping options that minimize the use of water. The worsening drought is another reason why the amount of lawn area needs to be clarified as well as the volume of water that will be required specifically for lawn maintenance. 12

This possibility of diminishing water supplies is of particular concern in an agricultural area. The DEIR claims that groundwater supplies are sufficient to supply this project. The real question is whether there will be adequate groundwater for agricultural uses over time. Agricultural uses should receive priority for access to groundwater supplies as a matter of County policy. Measure D emphasizes the goal of protecting and enhancing agriculture and requires development to provide for *adequate and reliable* water supplies pursuant to ECAP Policy 85. Authorizing a non-agricultural land use that will consume 300 gallons of water daily (109,500 gallons per year) for the operation of the Phase I commercial uses and 63.75 acre feet (20,772,998 gallons) of water annually for landscape maintenance is irresponsible at a time where residents are required by most jurisdictions to cut back on water use due to drought conditions. This project has the potential to indirectly undermine agriculture in East County by virtue of its water use over time in the midst of extreme drought. The DEIR should be revised to exclude groundwater as a source of water for project operations. At the very least, lawn area should be reduced or eliminated to conserve water and a drought-friendly landscape plan should be implemented. 13

The DEIR at section 3.7, p. 3.7-8 indicates that hazardous chemicals such as herbicides, pesticides, and fertilizers will be used on-site during project operations. The impacts of these chemicals on groundwater supplies should be addressed. 14

Biological Impacts

The DEIR indicates project operations would involve the use and storage of hazardous chemicals such as herbicides, pesticides and fertilizers (DEIR, section 3.7, p. 3.7-8). Presumably this includes rodenticides as well given the nature of the project operations. The DEIR recognizes that it is located in an area which includes habitat for special-status species such as California Tiger Salamanders, California Red-Legged Frogs, and Burrowing Owls in addition to many common species. The DEIR needs to discuss the impacts of the application of hazardous substances that could affect plant and animal species which may be found on the site. It is noteworthy that the Conditional Use Permit which the County granted for the Five Pillars Islamic Cemetery precluded the application of such hazardous chemicals due to the presence of habitat for special-status species. For that reason, there is no lawn area at that cemetery. (See https://5pillarscemetery.com/about-faqs/, as of February 23, 2022.) This condition was imposed at the time of the original project approval in 1996 and again when the CUP was renewed by the Planning Commission in October 2018 based on the staff recommendation. (PLN 2017-00077.) 15

The County has previously recognized the harmful impacts of hazardous chemical uses on landscaped areas necessitated a condition limiting the use of herbicides, rodenticides, pesticides, and chemical fertilizers at the Five Pillars Cemetery. The similarity of the habitats found at that project site and the location of the proposed project dictates that the same condition must be included if the cemetery project is approved. These hazardous products are not appropriate for use over on any of the areas that will be landscaped, including lawn areas. At minimum, landscape plantings that do not require chemical control and maintenance/pest/weed controls that are environmentally friendly and do not harm biological species and habitat must be identified in the final EIR and required by a CUP should the project be approved.

15 cont.

The DEIR also fails to respond to the July 2020 comments of the California Department of Fish and Wildlife ("CDFW") on the Notice of Preparation. (Exhibit B to Notice of Preparation.). In particular, CDFW stated that the artificial lakes proposed in the project will create an attractive nuisance for invasive non-native species such as American bullfrogs (Lithobates catesbeianus) and human introduced species such as red-eared sliders (Trachemys scripta elegans), goldfish (Carassius auratus) and pond koi.. CDFW recommended that both the lakes and the proposed wetland be excluded from the project. These comments must be addressed in the final EIR. If the lakes present a risk to naturally occurring native species because invasive species cannot be prevented, as CDFW states, they must not be allowed as an element of the project.

16

Cumulative Impacts

The DEIR discusses the CEQA criteria for evaluating cumulative impacts:

> The cumulative impact from several projects is the change in the environment, which results in the incremental impacts of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

17

(CEQA Guidelines, sec. 15355 subd. (b) [DEIR, p. 4-2].) The DEIR cumulative impacts analysis addresses a single additional project, the Catholic High School project site previously approved by the City of Livermore. However, this is not the only regional project which should be considered as part of the cumulative impacts analysis. In 2021, the County approved the Aramis Solar Energy Project. The project is currently in litigation with the final outcome pending.

The Aramis Project, as approved, envisions an almost 400-acre industrial-scale solar facility with a primary purpose of generating 100 megawatts of solar energy. The project site will be covered with over 300 acres of solar panels and provides battery storage facilities covering 5 acres. The Aramis project is located off North Livermore Ave and near May School Road and Manning Avenue, and is not far from the location of the Cemetery Project. As with the Cemetery Project, Aramis involves development of land designated as large parcel agriculture. The Aramis project area also includes habitat for California Tiger Salamanders, California Red-Legged Frogs, Burrowing Owls and other special status species. The land has primarily been used for grazing cattle. Cattle grazing will no longer be an option with the development of the solar facility.

18

Given the proximity of the Aramis facility to the Cemetery Project and the overlap of similar impacts, particular the loss of habitat for special status species, the cumulative impacts of both projects should be evaluated in the final EIR. 18 cont.

In particular, the EIR should include an expanded discussion of the cumulative land use, planning and agricultural resource impacts. The DEIR concludes that the loss of 47 acres of agricultural land is insignificant because there is other available agricutural land in East County. In fact, the amount of agricultural land in all of Alameda County is decreasing. The recent Alameda County LAFCO retrospective study of the effects of Measure D found that more than 3,570 net acres of East County's farmlands were lost or converted to other land use categories between the years 1984 to 2018. Nearly all of this net loss in farmland occurred after year 2000 (or post-Measure D). (LAFCO, Draft Measure D Study, p. 1-4.) Much of the loss occurred in areas within established urban growth boundaries (Ibid.) Between 2000 and 2018, there was a loss of 13,108 acres of grazing land alone in East County outside urban growth boundaries, representing 3 percent of the total farmland. (Id., at p. 3-21, Table 3-3.) Fifty-three percent of the grazing land within urban growth boundaries was lost in that time. (Ibid.) 19

It should also be noted that the County is in the process of developing a Solar Policy identifying locations where solar may be permitted. A draft of this policy is expected to be completed in March of this year to go before the Board of Supervisors thereafter. It is clear that the County contemplates further development of solar on agricultural lands in East County, notably in North Livermore which features the flat areas that are the least expensive places to construct solar facilites. Therefore, the threat to agricultural lands from solar generally will be more extensive than the DEIR has contemplated. 20

The DEIR's conclusion that the Cemetery Project will not result in a significant loss of agricultural land is belied when considered in the broader context of these changes and when combined with almost 400 acres lost due to the Aramis Project approval. We are now seeing developers move into our East County rural lands outside of the urban growth boundary that was designed to protect them. The supply of grazing land is finite. If the County intends to allow development of solar facilities, cemeteries and funeral facilities on the ground that they individually are not significant, agriculture will disappear from East County. 21

The EIR should be revised to include additional analysis of cumulative impacts both in terms of the approved Aramis Project as well as broader regional land use projects "taking place over a period of time" as per the CEQA Guidelines. 22

Alternatives Analysis

The DEIR should have considered a "Burial Ground" alternative as a reasonable alternative project. This alternative was excluded from analysis in the EIR on the grounds that it would not meet the project objectives of providing funeral services and serving the Jewish community. The other reason given was that it would generate additional traffic.

These arguments are not satisfactory justifications for excluding an analysis of the "Burial Ground" alternative. A burial ground would be more compatible with agriculture and open space than the full project, and would achieve the most critical project objective of providing additional interment space in Alameda County. Offering funeral services may be the applicant's goal, but an urgent public need for these services has not been demonstrated. Having a special area for the Jewish community is laudable 23

but is a secondary goal of the overall project. These project goals could certainly be weighed against the environmental impacts of a "Burial Ground" alternative upon full analysis.

The concern that the "Burial Ground" alternative would have a greater impact on traffic is overstated and conclusory. The same people who would drive to the project site for a funeral and burial would drive there for a burial service alone. Without a full analysis, it is not possible to know the traffic impacts of the two alternatives.

The "Burial Ground" alternative is more consistent with Measure D's objective of preserving agriculture and open space in Alameda County. It is a reasonable option to strike a balance between public need and public policy. A thorough analysis of the "Burial Ground" alternative should be included in the EIR so that it can be considered alongside the other options by the public and decisionmakers.

23 cont.

Conclusion

In closing, FOV appreciates the opportunity to comment on the Draft Environmental Impact Report for the Cemetery Project. We expect that the County will respond to these comments in the Final EIR.

24

Respectfully submitted,

Tamara Reus
President
Friends of Open Space and Vineyards
tammyreus@gmail.com
(925) 223-7972

RESPONSES TO COMMENT LETTER I

Response to Comment I-1

This is a general comment. The issues raised in this comment are addressed in Responses to Comments I-2 through I-24.

Response to Comment I-2

The Five Pillars Islamic Cemetery is acknowledged, however, it is a private cemetery. For clarity the text on page 2-1 of the Draft EIR is revised as follows (new text is underlined, deleted text is in strikeout format):

> "MVMG would be the first public cemetery developed in Alameda County in over 110 years and would accommodate the needs of several multi-cultural communities."

The text on page ES-1 is revised as follows:

> "MVMG would be the first public cemetery developed in Alameda County in over 110 years and would accommodate the needs of several multi-cultural communities."

The text on page 1-1 is revised as follows:

> "MVMG would be the first public cemetery developed in Alameda County in over 110 years and would accommodate the needs of several multi-cultural communities."

The text on page 2-1 is revised as follows:

> "MVMG would be the first public cemetery developed in Alameda County in over 110 years and would accommodate the needs of several multi-cultural communities."

The text on page 5-3 of the Draft EIR is revised as follows:

> "There has not been a public cemetery developed in Alameda County in over 110 years."

Response to Comment I-3

This comment summarizes applicable portions of Alameda County Measure D (Measure D). These are noted. For discussion on Project compliance with Measure D land use restrictions, the ECAP and the zoning ordinance, see Master Response 3.

Response to Comment I-4

The comment that burial facilities intended for the interment of human remains are an appropriate land use is noted. For discussion on Project compliance with Measure D land restrictions see Master Response 3.

Response to Comment I-5

The EIR considers the impacts of the Project as a whole, which includes both phases, and does not consider the phases as separate projects because the application is for approval of a CUP for the entire project.

The comment states that the Project is subject to a 2-acre building envelope as described in ECAP Policy 13. For discussion on Project consistency with Measure D land use restrictions, see Master Response 3.

Response to Comment I-6

The funeral facilities support the cemetery use. Cemeteries are classified as a Conditionally Permitted Use in Agricultural Districts under Alameda County Zoning Ordinance Section 17.06.35. This is the only zoning district within unincorporated Alameda County where cemeteries are permitted with a Conditional Use Permit.

Response to Comment I-7

See Response to Comment I-6 for discussion on Project zoning and allowable land use. For further discussion on Project consistency with Measure D and ECAP land use restrictions, see Master Response 3.

Response to Comment I-8

It is hereby noted that Policy 99 applies to residential development and not agricultural uses, as discussed on Table 3.9-1, last item. Therefore, for clarity, the discussion of that policy on page 3.9-2 of the Draft EIR has been deleted from that page and from Table 3.9-1. However, the final paragraph on page 3.2-99 correctly describes the 2-acre development envelope requirements for non-residential land uses, as also noted in the comment. The text on page 3.9-2 of the Draft EIR is revised as follows (new text is <u>underlined</u>, deleted text is in ~~strikeout~~ format):

> "~~*Policy 99*: The County shall require all tentative maps in areas designated "Large Parcel Agriculture" or "Resource Management" to identify a building envelope of no more than two acres on each proposed parcel within which all residential development and residential accessory uses shall be located. On-site housing for farm employees who require full-time, on-site residency is considered an agricultural use and is not limited to the identified two-acre building envelope.~~"

The text on page 3.9-7 from **Table 3.9-1** of the Draft EIR is revised as follows:

General Plan Policies	Consistent?	Analysis
~~*Policy 99*: The County shall require all tentative maps in areas designated "Large Parcel Agriculture" or "Resource Management" to identify a building envelope of no more than two acres on each proposed parcel within which all residential development and residential~~	~~Yes~~	~~The Project would not include on-site residential development or residential accessory uses.~~

General Plan Policies	Consistent?	Analysis
~~accessory uses shall be located. On-site housing for farm employees who require full-time, on-site residency is considered an agricultural use and is not limited to the identified two-acre building envelope.~~		

For discussion on Project consistency with Measure D land use restrictions, see Master Response 3. For discussion on conformance with the 2-acre development envelope, see Master Response 2.

Response to Comment I-9

Phase I development would be within the 2-acre envelope. Phase II structures would be minimal to support cemetery use. See Master Response 3 for discussion of the mausoleum and columbarium, which are not typical building structures.

Response to Comment I-10

The comment requests that a burial-ground only alternative be considered in the EIR. As described on pages 5-3 to 5-4 of the Draft EIR that alternative was considered but rejected from further study because, 1) it would fail to meet the Project objective of providing a funeral home building with full-service amenities and staff that support the cemetery mission; 2) because it would create inefficiencies related to operation of the Project (i.e., additional vehicle trips); and, 3) because this EIR has not identified significant environmental impacts resulting from the location of the funeral home, pavilion building, and crematorium at the proposed Project site that such an alternative would help to mitigate.

Response to Comment I-11

See Response to Comment D-3 for discussion of the water usage estimate prepared for the Mitigated Alternative. The analysis determined that the Mitigated Alternative would substantially reduce total water usage through the removal of the lakes and man-made perennial creek and the use of advanced landscaping techniques and native vegetation. For further discussion on the Mitigated Alternative see Master Response 1.

Response to Comment I-12

See Response to Comment I-11. The Mitigated Alternative has a substantially reduced water demand that is responsive to concerns about the worsening drought and climate change.

Response to Comment I-13

See Response to Comment D-3 for discussion of the revised water usage estimate prepared the Project. The Mitigated Alternative has a substantially reduced water demand in response to many of the comments on the Draft EIR, including this comment. For discussion on Measure D, East County Area Plan (ECAP) and zoning compliance, see Master Response 3.

Response to Comment I-14

For discussion on hazardous materials management, see Response to Comment H-11.

Response to Comment I-15

The Five Pillars Islamic cemetery is approximately 3.5 miles northeast of the Project site and is located in an area identified in the appendices of the Draft EIR as critical habitat for the California red-legged frog (CRLF) and Vernal pool fairy shrimp (see **Appendix D** of the Draft EIR, Figure 7). The Project site is not in a critical habitat area. The Project was sited and designed to avoid impacts to high quality habitat for California Tiger Salamander (CTS) and CRLF and Section 3.3 of the Draft EIR contains extensive mitigation measures to avoid impacts to any state or federally listed species, including CTS and CRLF. Regarding chemical management including herbicides, pesticides, and fertilizers, see Response to Comment H-11. Furthermore, the Mitigated Alternative would primarily use native landscaping and reduced landscaped areas.

Response to Comment I-16

The Mitigated Alternative addresses the concerns of the California Department of Fish and Wildlife by removing the lakes and man-made perennial creek from the Project. For details on the Mitigated Alternative, see Master Response 1.

Response to Comment I-17

The potential development of the Aramis Solar Project North of I-580 and west of North Livermore Road, near Manning Road, is noted. It is our understanding that the Aramis Solar project would include sheep as an agricultural use in the solar array area. The site is expected to support up to 820 head of sheep annually and as such, would reduce, but not eliminate agricultural use on much of the site.

Response to Comment I-18

The comment asks for a discussion in the Final EIR of the cumulative impacts from the potential Aramis Solar project, particularly loss of habitat for special status species. The scale of the Aramis Solar project and the MVMG Project are very different. Phase I of the MVMG Project is approximately one percent the size of the Aramis Solar Project. Phase II of the MVMG Project is approximately ten percent the size of the Aramis Solar Project. The projects are separated by three miles, hills and roads. Both projects include mitigation measures to ensure that the projects do not have significant cumulative biological resources impacts.

The Catholic High School was identified in the cumulative impacts discussion on page 4-3 of the Draft EIR because it is immediately adjacent to the Project site.

Response to Comment I-19

The cumulative loss of grazing lands in eastern Contra Costa County, as described in the comment, is acknowledged. The Projects contribution to that loss is considered less than cumulatively considerable, because of the limited acreage and low agricultural value of that land

which contains no prime soils, as noted on page 3.9-5 of the Draft EIR. Furthermore, the text of the Draft EIR has been modified to reflect the applicants intent to graze the Project site to reduce the impacts to agricultural lands during Phase II buildout that would occur over approximately 100 years, see Response to Comment I-20.

Response to Comment I-20

The County's ongoing consideration of a Solar Policy is noted. Solar power generation has environmental benefits that can offset land development cumulative impacts. Assessment of potential future development under that proposed policy is speculative at this time. As noted in Response to Comment I-18 solar facilities tend to be much larger than the proposed MVMG Project.

Response to Comment I-21

The Draft EIR addresses the potential for cumulative loss of agricultural land on page 4-5 as follows:

> "Land use, planning, and agricultural resources impacts are limited to the region. The Project would not result in significant and unavoidable impacts to land use, planning, and agricultural resources. If the Project is approved and receives a CUP from the County, impacts related to land use designations would be less than significant. Alameda County has more than 200,000 acres of land designated for agricultural purposes, most of which is in the Tri-Valley region of Eastern Alameda County (Alameda County, 2021b). The loss of 47 acres of agricultural land would be considered negligible compared to the existing acreage designated for agricultural purposes in Alameda County. Therefore, the Project would not result in significant cumulative impacts to land use, planning, and agricultural resources."

Also, as indicated in impact 3.9.2 of the Draft EIR the Project would not result in the loss or conversion of Prime or Unique farmland, or Farmland of Statewide Importance.

With the development of the Project, it is unlikely that there would be additional regional loss of agricultural land to other cemetery projects, because the Project is anticipated to meet the local cemetery needs of present and future Tri-Valley residents for up to 100 years.

Response to Comment I-22

Due to the low intensity of Project operations, it is unlikely the Project would combine with the Aramis Solar project to create cumulative effects as discussed in Response to Comment I-18. See Response to Comment I-21 for discussion of future regional projects. It is unlikely that there would be additional regional loss of agricultural land to other cemetery projects.

Response to Comment I-23

The comment incorrectly states that additional interment space is the most critical Project objective. The Draft EIR does not rank the project objectives and therefore does not have a most

critical Project objective. Regarding the request for a full traffic analysis, the Project traffic analysis shows that the combined traffic from the funeral home operations and the cemetery are minimal and less than significant. The Burial Ground Alternative would require trips to an unknown location for the funeral service, as well as trips to the interment area. As indicated in the Draft EIR this would probably result in more traffic than the Project. For discussion of the Burial Ground Alternative see Response to Comment M-22.

Response to Comment I-24

This is a general comment that asks for a response to Friends of Open Space and Vineyards comments in the Final EIR. These comments are responded to in the Final EIR as requested, in the Responses to Comments I-1 through I-23.

Letter J

MAGEN DAVID
MEMORIAL GARDENS

Albert Lopez, Planning Director
Alameda County Community Development Agency
224 W. Winton Avenue, Room 111
Hayward, CA 94544

RE: MVMIG – Draft CEQA/EIR, SCH #2020069045 - Applicant Comments (PLN 2017-00194)

Dear Albert,

As a representative of the applicant, I am writing to say a few words about our project and the vision we have for this development, namely Monte Vista Memorial Gardens and Magen David Memorial Gardens.

Monte Vista Memorial Gardens and Magen David Memorial Gardens would be the first cemetery developed in Alameda County in over 110 years and is designed and intended to serve the needs of several multi-cultural groups.

The Tri-Valley region has undergone significant population growth over the last couple of decades and the diversity of the population has grown as well. It is critical that the infrastructure to support that growth is developed as the area continues to grow and our cemetery project is intended to support this growth and to play an important infrastructural roll in this evolution.

Our goal is to develop and build a state-of-the-art final resting place and funeral home to support the needs of the entire region, and in other than the specifically Jewish section, accommodate the diverse population and culture of the entire area for the present and future residents. Our vision is to create an environmentally friendly development that will be an asset to the community which will include extensive water conservation and reuse, drought resistant landscaping, solar power, and green building practices.

Monte Vista Memorial Gardens has been designed to include an area to be known as Magen David Memorial Gardens, and it is specifically designed for the growing Jewish community in the Tri-Valley area with the appropriate burial services and practices to support the needs of the Jewish community. A little-known fact regarding Jewish culture and life is that when a new community is established, one of the first requirements is to establish a consecrated burial ground for its people. Unfortunately, the existing infrastructure in the area is either lacking or is reaching capacity, resulting in the need to develop this critical component to support Jewish life in the region including Orthodox, Conservative, and Reform members of the community.

1

969 G Edgewater Blvd #636
Foster City, CA 94404
www.magendavidmg.com

There are a few issues that are mentioned in the draft CEQA document, namely an abatement issue on the neighboring property, the access roadway, and the proposed septic system that I do want to touch on. They are as follows:

- Regarding the abatement order, it is important to note that it is not on our property. As indicated in the document, a member of our group was involved in the activities that resulted in the abatement order. We are currently providing planning and legal support to help resolve the abatement and we believe a resolution of the order is in process with a proposed plan having been provided to the water board for their approval. It is expected that we will have their response at the end of February. It is important to note that all required mitigation is going to be located on the neighboring property and not on any cemetery property. 2
- Regarding access road improvements, we anticipate conditions of approval that will require us to assist in planning and funding the improvements to the access road. It is a County Road, and we will follow the County and City of Livermore requirements regarding the access road design and improvements. Based upon the traffic study noted in the draft CEQA/EIR document, the anticipated amount of traffic to the cemetery is expected to have minimal impact on the area. 3
- Regarding the proposed septic system, it is located well away from any sensitive areas and was placed at its proposed location with this in mind. While the option for us to hook into a nearby sewer system has not previously been available, we would welcome the opportunity to connect to the public sewer system and remove the septic system. The planned septic system will be the latest and most efficient system to meet our commitment for a state of the art development. 4
- Finally, I want to reiterate that the reason for separating the project into two phases is to recognize that Phase I has little or no potential mitigation issues, and that we are committed to doing all studies and required permitting that may be needed for Phase II following approval of the Conditional Use Permit for Phase I. It should be noted that Phase II has minimal seasonal wetlands, based on multiple previous delineations already completed, and the project plans to avoid the sensitive areas, based on state and federal guidelines, to the greatest extent possible. 5

In conclusion, we are committed to being good citizens and intend to develop a needed infrastructure project that will be a community asset serving the growing Tri-Valley population.

Sincerely,

Ron Kahn
Manager

RESPONSES TO COMMENT LETTER J

Response to Comment J-1

This comment summarizes the Project and the goals of the Project. It does not raise any issue with the environmental analysis presented in the EIR. No further response is required.

Response to Comment J-2

Comment noted. The abatement issue is not on the Project property. Regardless, the comment indicates that the applicant is actively planning and providing legal support and funds to assist in a resolution to the abatement issue with the Water Board. Se Response to Comment B-4.

Response to Comment J-3

Comment noted. If approved, the conditions of approval for the Project will include requirements for the access road design and improvements. The comment notes that based on the traffic study the Project would have minimal traffic impact on the area.

Response to Comment J-4

The applicant indicates they would welcome the opportunity to connect to the public sewer system, but that option has not previously been available. Therefore, they intend to install the latest and most efficient septic system. The County would require a permit for the septic system.

Response to Comment J-5

Comment noted, the commenter notes that Phase I of the Project has few mitigation issues and Phase II of the Project would avoid sensitive areas, to the greatest extent possible, based on state and federal guidelines including seasonal wetlands.

Letter K

From: DLG <mistermenucha@gmail.com>
Sent: Tuesday, February 8, 2022 11:15 AM
To: Lopez, Albert, CDA <Albert.Lopez@acgov.org>
Subject: Fwd: Monte Vista Memorial Gardens EIR

February 8, 2022

Dear Albert,

I was in attendance at the zoom meeting yesterday re, the Monte Vista Memorial Gardens in process of being built in the Alameda County on Los Colinas Road.

I wish to say as a former resident of Pleasanton CA I heard from many people, Jewish and not Jewish people, that they are looking forward to seeing the cemetery open and operating.

From a Jewish perspective a local cemetery is of utmost importance. A mourner is forbidden according to Jewish law and practice to go to work or attend to any religious activity until the burial has been done.

I saw your positive approach to attend to this project and I commend you for that.

1

Sincerely

David L Grossbaum

RESPONSES TO COMMENT LETTER K

Response to Comment K-1

This comment is supportive of the Project, it does not raise any issue with the environmental analysis presented in the EIR. No further response is required.

Letter L

From: BERNARD CABANNE <bcabanne@comcast.net>
Sent: Monday, February 28, 2022 3:25 PM
To: Lopez, Albert, CDA <Albert.Lopez@acgov.org>; BERNARD CABANNE <bcabanne@comcast.net>; donna.cabanne@gmail.com
Subject: Fwd: Comments for Monte Vista Memorial Gardens Draft EIR

February 28,2022

Albert Lopez, Planning Director
ATTN: Monte Vista Memorial Gardens Project Draft EIR
224 W. Winton Ave.
Hayward, CA 94544

To Mr. Lopez:

The only legal alternative for the Monte Vista Memorial Gardens is a project with a cemetery only. It would not be advisable to approve the proposed project or the reduced footprint project; both violate City of Livermore and Alameda County laws and zoning. The proposed project and alternatives discussed in the Draft EIR violate provisions of Measure D, the North Livermore Urban Growth Boundary, Livermore City General Plan and Livermore Scenic Corridor provisions. While burial grounds are a permitted Measure D use, the associated elements of the project---funeral home, crematorium, chapel, businesses, family social areas, salons, children's play areas, etc., are non-agricultural, commercial uses that must be placed within city and county urban growth boundary limits. 1

Furthermore, the Draft EIR is deficient in many areas, and contains numerous questionable findings and conclusions. Minor mitigations proposed for the project cannot demonstrate the serious impacts of the project are less than significant. 2

1. The Draft EIR fails to adequately address the impacts to biological resources. For example, consider the California red-legged frog. There have been 75 CNDDB occurrences reported within five miles of the site. In addition, CDFW documented California red-legged frogs on an "adjacent property to the west, less than 300 ft. from the property site, and have been present in adjacent properties" (CDFW letter July 21,2020,p5). The CDFW further notes the red-legged frogs have " been observed to make long distance movements up to 1.7 miles" and because of documented occurrences on adjacent properties "the entire Project site should be considered suitable habitat for the species...the EIR should therefore assume presence" (CDFW letter July 21,2020,p5). 3

Nevertheless, Draft EIR Mitigation 3.31f: states" impacts to the species would be minimized and mitigated by erecting temporary and exclusion fencing" before re-location.

These mitigations could most certainly be considered a "take" and do not render the impacts less than significant. This **inconsistency** between the Draft EIR and the CDFW findings needs to be corrected in the Final EIR. 3 cont.

Another example of inconsistency exists in the Draft EIR concerning the California Tiger Salamander. According to the CFWD, " the project is located within the dispersal distance of known and/or potential California Tiger Salamander, and based on records, California Tiger Salamander have been found on the adjacent properties to the west and south...the EIR should assume presence" (CDFW letter July 21, 2020,p5) Furthermore, "widespread burrowing mammal control as required in cemeteries "pose threats to the salamander" (CDFW letter July 21,2020,p5). There have been 51 CNDDB occurrences reported within 5 miles and suitable breeding ground 0.1 mile west of the study area. 4

Draft EIR Mitigation 3.31g lists many possible mitigations for the California Tiger Salamander from purchase of credits at an approved mitigation bank, in-lieu payments for restoration of habitat elsewhere, or placement of a conservation easement over occupied California Tiger Salamander habitat. Mitigations are not possible shopping lists; specific mitigations must be detailed in the EIR so it is possible to determine if the mitigations proposed truly render the impacts less than significant.

Missing Biological Mitigations:

a**. Where is the mitigation for loss of habitat for grassland birds and bats**? According to the CDFW, " the EIR should evaluate the cumulative effects of loss of habitat as an indirect cause of avian mortality for grasslands birds". CDFW recommends an equal amount of land with "primary purpose of habitat conservation should be enhanced and conserved to offset the loss of habitat for grassland birds. " (CDFW letter July 21,2020 p4). 5

b. Where is the enforceable mitigation for permanent habitat conservation? The CDFW advises " to be consistent with the EACCS and to offset loss or conversion, the EIR should include permanent habitat conservation as an enforceable mitigation measure." (CDFW letter July 21,2020 p4-5). 6

c. Where is the specific survey and mitigation for the western bumble bee listed as endangered under CESAA June 12,2019? Adding landscaping plants that may attract pollinators in general is not sufficient for this specific pollinator. 7

In general, the same type of incomplete evidence and findings are used for biological mitigations and other mitigations 3.1.1 through 3.8.3. The only common factor for biological mitigation findings is the sentence " No sign of this species during the **one** Barnett Environmental October 2020 site visit " ---despite the fact this statement directly conflicts with reports and letters from USFWS and CDFW. As stated above, these discrepancies and inconsistences must be rectified in the FINAL EIR. 8

" In an adequate CEQA document, mitigation measures must be feasible and fully enforceable through permit conditions, agreements or other legally binding instruments. (CEQA Guidelines Section 15126.4) **Mitigation measures to be identified at some future time are not acceptable.** It has been determined by court ruling that such mitigation measures would be improperly exempted from the process of public and 9

governmental scrutiny which is required under CEQA" (San Francisco Bay Regional Water Quality Control Board letter July 27,2020p3-4) 9 cont.

2. The Draft EIR fails to adequately address the impacts to visual resources. 10
Comments, questions, and concerns to follow in subsequent email.

3. **The Draft EIR fails to adequately address the impact of alterations to the streambed, arroyo, and the impacts of flooding and wildlife habitat destruction that would be created by the two artificial lakes**. 11
Comments, questions, and concerns to follow in subsequent email.

4. **The Draft EIR fails to adequately address hydrology and water quality.** 12
Comments, questions, and concerns to follow in subsequent email.

5. **The Draft EIR fails to adequately address the issue of a viable access road.** 13
Comments, questions, and concerns to follow in subsequent email.

6. **The Draft EIR fails to address numerous cumulative impacts of the project.**

For example, the issue of how a permitted future Catholic High School could conflict with proposed project has not been analyzed or addressed sufficiently. This is especially questionable and problematic because connecting to Redwood Road would have substantial biological and hydrologic impacts as it would cross through Arroyo Las Positas and other sensitive habitats. Rejecting further analysis because the road is not needed for the current project (Draft EIR 5.3.2) is not allowed under CEQA. Approved projects that may have impacts must be analyzed under cumulative impacts. Mitigation measures to be identified at some future time are not acceptable.(see above SFBRWQCB letter July 27,2020 p3-4). 14

While there may be an "alleged" need for more burial grounds in the Tri-Valley Area, the auxiliary elements of the project are non-agricultural uses, and must be moved to commercial areas or areas zoned for these commercial uses. 15

I will add to Draft EIR comments later this week. The Draft EIR and many important documents and appendices were not available Thursday, Friday, Saturday or Sunday (2/24-2/27) due to county website " reformatting" issues. We have been told by the County Planning Director Lopez that the comment period for the Draft EIR will be extended due to lack of public access for several days. 16

Please email me back to confirm you have received this email.

Sincerely,
Donna Cabanne
40 year resident of Livermore
bcabanne@comcast.net

RESPONSES TO COMMENT LETTER L

Response to Comment L-1

For discussion on Project consistency with Alameda County Measure D (Measure D) land use restrictions, see Master Response 3. For discussion on conformance with the City of Livermore Policies, see Master Response 2.

Response to Comment L-2

This comment summarizes conclusions of specific comments from this commenter. Responses to those comments are found in Response to Comment L-1 and Responses to Comments L-3 through L-16. Additional responses to this commenter are found in Responses to Comments M-1 through M-23.

Response to Comment L-3

See Responses to Comments B-7.

Response to Comment L-4

See Responses to Comments B-22 and B-23.

Response to Comment L-5

As indicated on page 3.3-36 of the Draft EIR Mitigation Measures 3.3.1h, 3.3.1i and 3.3.1j would reduce potentially significant impacts to special-status bird species to a less-than-significant level for Phase I and Phase II through the use of construction surveys, buffer zones and construction boundary limits. See Master Response 4 for further discussion of special status species protection and habitat.

Response to Comment L-6

See Master Response 3.

Response to Comment L-7

See Response to Comment H-14.

Response to Comment L-8

The Biological Resources and Wetland Assessment (BRWA) (**Appendix D** of the Draft EIR) does not rely upon only a single, one-day site visit to determine absence of special-status species. See Response to Comment B-6.

Response to Comment L-9

The comment does not identify which mitigation measures would defer mitigation until a future time. Mitigation Measures for all identified Project impacts are contained in **Table ES-1**. Some of

the mitigation measures rely upon performance standards that would apply to the results of future field studies. This is an acceptable practice under CEQA.

Response to Comment L-10

Section 3.1 of the Draft EIR addresses environmental impacts to aesthetics. See Response to Comment M-17 in the response to the subsequent email.

Response to Comment L-11

The Mitigated Alternative would eliminate the concerns in this comment by removing the lakes man-made perennial creek from the Project. For details on the Mitigated Alternative, see Master Response 1. See Responses to Comments M-1 through M-7 in the response to the subsequent email.

Response to Comment L-12

Section 3.8 of the Draft EIR addresses environmental impacts to hydrology and water quality. Construction and operation of the Project would be required to comply with applicable federal, State, and local laws, ordinances, and regulations. See Responses to Comment M-13 through M-15 in the response to the subsequent email.

Response to Comment L-13

Section 3.11 of the Draft EIR addresses Project impacts to transportation, including discussion of the access road. The improved access road would be more than sufficient for vehicle access to the Project, including emergency vehicles.

Response to Comment L-14

Cumulative impacts from traffic from the permitted Catholic High School are discussed on page 4-3 of the Draft EIR as follows:

> "A proposed Catholic High School project site, in the City of Livermore, is just northeast of the Project site. The Development Agreement for the Catholic High School Project was approved in 2005 and the City of Livermore approved a five-year extension of the Development Agreement in 2020. The amendment extended the Development Agreement to December 14, 2025. No other planned or approved development projects are in the vicinity of Project. Due to the low intensity of Project operations (approximately 100 average vehicle trips per day), it is unlikely that the Project would combine with the future Catholic High School Project, if ever developed, to create cumulative effects."

As discussed on page 4-4 of the Draft EIR the MVMG Project does not have considerable contribution to regional cumulative impacts on biological resources. Any impacts from the Catholic High School Project related to biological and hydrologic impacts from crossing through Arroyo Las Positas would be mitigated through required permitting by CDFW, SFBRWQCB and other agencies. There will be no substantial adverse cumulative impacts due to the required permitting and mitigations for both the MVMG Project and the Catholic High School Project.

Response to Comment L-15

For discussion on zoning and East County Area Plan (ECAP) compliance see Master Response 3.

Response to Comment L-16

Comment noted.

Letter M

From: BERNARD CABANNE <bcabanne@comcast.net>
Sent: Friday, March 4, 2022 11:02 AM
To: Lopez, Albert, CDA <Albert.Lopez@acgov.org>; BERNARD CABANNE <bcabanne@comcast.net>; donna.cabanne@gmail.com
Subject: Draft EIR Monte Vista Memorial Gardens Project

March 3, 2022

Alameda County Planning Department
224 W. Winton
Hayward, CA 94554
Attn: Albert Lopez, Planning Director
RE: Monte Vista Memorial Gardens Project

Dear Mr. Lopez:

Please see comments below concerning the deficiencies of the Draft EIR for the Monte Vista Memorial Gardens Project.

The Draft EIR fails to adequately address hydrology, and water quality; the impacts of alterations to the streambed, arroyo, and the impacts of flooding and wildlife habitat destruction that would be created by the two artificial lakes. 1

Mitigations 3.8.1a-3.8.1d are inadequate because the mitigations do not offer enough specific information to determine whether the water and hydrology impacts of the project are less than significant. 2

Let's begin with wetlands. The San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) states that in order to succeed, mitigation wetlands " must be a large enough watershed to support the the required acreage of mitigation wetlands."(SFBRWQCB letter July27,2020 p2). Appendices F/G list some alternatives but did not propose a specific mitigation as required under CEQA. Waiting to define wetland areas until the issuance of grading permits is not allowable. 3

Other concerns not adequately addressed in Draft EIR include how the project will minimize pesticide and/or herbicide drift, seed spread from landscaping, leach fields for septic systems". (SFBRWQCB letter July27,2020 p2) Furthermore, the walkway must be re-designed to avoid the mitigation wetlands. 4

Additionally, the Water Board states a "restrictive covenant (conservation easement or deed restriction) must be placed over the mitigation wetlands in perpetuity...The EIR must describe the restrictive covenant to be used and the third partly who will be responsible for holding the covenant" (SFBRWQCB July 27,2020 p2) 5

Next, "permanent water bodies-- such as lakes-- provide habitat for bullfrogs and crayfish; species that prey on California Red-legged Frogs and California Tiger Salamanders." (SFBRWQCB July 27,2020 p.2-3) The CDFW states " artificial water bodies, such as lakes, can result in California Red-legged Frogs and California Tiger Salamanders becoming trapped or the desiccation of eggs, larvae or adults. (CDFW letter July 21,2020,p8) The Final EIR must address how potential threats from bullfrogs and crayfish would be eliminated. 6

The project proposes to create new wetlands as mitigation for the wetlands that were previously filled and destroyed by the applicant.
"Several violations by the project's representative have been issued over the last several years including a Notice of Violations for outstanding violations dating back to September 29,2015." (CDFW letter July 21,2020 p3) 7

Have all violations been resolved??? When? What were the conditions for clearance? 8

In totality, the consequences of the proposed project to endangered amphibians are so dire the " CDFW does not recommend creating mitigation wetlands to upland areas that no longer support habitat for the amphibians and reptiles that it is intended to support. **In fact, the CDFW recommends the lakes and wetlands be removed from the project.** "(CDFW July 21,2020 p8). 9

Where are the discussions/mitigations on how these particular threatened species will be sustained? How will the waters of the State be sufficiently protected? These issues need to be addressed in sufficient detail in the Final EIR. Clearly, Mitigation 3.8.1d, to inspect lakes once a year, and remove excess sediments and debris is not adequate to render a known significant impact to less than significant. 10

There is also is the issue of access bridges. The project proposes "two new bridges over Arroyo Las Positas and new stormwater outfalls;...however, b**ridges impact waters of the State via fill associated with abutments and piers**." (SFBRWQCB letter July 27,2020 p3) Appendices F/G include project consultants discussions using piers which the Water Board believes should be avoided. The Water Board also firmly states that the Draft EIR should "evaluate design options that use a single bridge over Arroyo Las Positas." (SFBRWQCB letter July 27,2020 p3) **Where are those single bridge designs?** 11

"In a CEQA document, a project's potential impacts and proposed mitigation measures should be presented in sufficient detail for readers of the CEQA document to evaluate the likelihood that the proposed remedy will **actually reduce impacts** to a less that significant level." (SFBRWQB letter July 27, 2020 p3) The EIR is deficient unless it presents more specific mitigations, and rectifies critical differences between government agencies and the project's and county's consultants. 12

Another deficit area in the Draft EIR is stormwater management and stormwater runoff. " Water quality treatment areas must be maintained separately from mitigation wetlands. The EIR should "indicate the locations of the proposed water quality treatment measure in relation to the proposed mitigation wetlands to demonstrate total separation." (SFBRWQCB letter July 27th, 2020 p4) The Department of Transportation also asked that the EIR "show a complete drainage study and plan to include drainage patterns and impacts to the existing State's drainage system", especially along W580. (Department of 13

Transportation letter July 29, 2020 p1-2) This is problematic because this area of W580 is known to flood during heavy storms and heavy rain years such as 2019. Why are rain totals from 2019 missing from tables in Appendices F/G?

Impact 3.8.3 states that the project will not increase flood hazards or provide sources of polluted runoff but this cannot be determined to be less than significant without further data from the heavy rain year of 2019 and complete detailed plans of drainage systems to be used through out the project.

13 cont.

Neighboring properties such as the Altamont Landfill had major problems containing runoff in 2019 despite approved drainage plans. The county is aware of this issue because the LEA issued a notice of violation to the landfill, yet information about 2019 flooding and runoff issues in this area have not been included. We know with climate change some years will become significantly drier and hotter, while wet years will produce storms with much higher levels of precipitation and runoff than in previous decades. These factors must be further analyzed in the EIR.

14

Mitigations 3.8.1.b and c state that final drainage plans and stormwater control plans will be submitted prior to grading permits. "Mitigation measures to be identified at some future time are not acceptable. It has been determined by court ruling that such mitigation measures would be improperly exempted from the process of public and governmental scrutiny which is required under CEQA".(SFBRWQCB letter July 27,2020, p3) The lack of drainage plans and stormwater control plans do not allow the public to sufficiently analyze if mitigations will render impacts less than significant.

In addition, CDFW states that each streambank must have 100ft. buffer, from the top of each streambed " to protect streams, riparian vegetation and provide a travel corridor for wildlife. No roads, buildings, yards, turf, or paved paths should be permitted within the buffer." CDFW also recommends "no permanent irrigating of landscaping should be permitted in the riparian area and on the banks."(CDFW letter July 27,2020 p8) The project designs in the Final EIR need to reflect the requested CDFW modifications.

15

Loss of Agricultural Land/ Cumulative Impacts

Impact 3.9.2 states the project's reduction in loss of agricultural land as less than significant. This has not been sufficiently analyzed in the EIR. While the area may not be currently viewed as prime farmland, it has served as grazing land for decades. We are in the middle of a farming crisis; ranchers have provided food for neighboring communities for generations. That is the main purpose of Measure D, to preserve and protect agricultural interests. Where will we go for food if projects such as this subvert agricultural land into commercial uses?

The Draft EIR incorrectly concludes that the loss of 47 acres of agricultural land is less than significant because there are other agricultural lands available in East County. However, when combined with the possible loss of 400 acres of agricultural land due to the approval of the Aramis project, and other commercial projects, the cumulative losses continue to accumulate. Between 2000 and 2018, there has been a loss of 13,108 acres of grazing land outside urban growth boundaries (LAFCO, Draft Measure D Study). These agricultural lands were intended and protected by Measure D for less intensive uses. Remaining grazing lands will be affected negatively when surrounded by higher intensity commercial uses. The Draft EIR cannot conclude the loss of agricultural land for this project is less than significant without a comprehensive analysis of the

16

cumulative impacts of loss of agricultural land to commercial projects outside urban growth boundaries in East County in the last twenty years. 16 cont.

The Draft EIR fails to adequately address the scenic resource violations to the Alameda County General Plan, ECAP, Livermore General Plan and Livermore Scenic Corridors.

The Scenic Route Element of the Alameda County General Plan states " in corridors along scenic routes with outstanding distant views above the roadbed, no building structure of more than one story in height should be permitted where it would obstruct views", (Draft EIR 3.1.5).The two story commercial buildings in the proposed project are more than one story high and "blockhouse" in style and structure that do not blend with the rural setting. The buildings' location and style do not conform to the Alameda County General Plan. 17

The project also violates Alameda County General Plan Policy 116 that states "development shall be located and designed to **conform with rather than change natural landforms.** (Draft EIR 3.1.7) Large two story buildings, two artificial lakes, and an artificial creek will drastically and negatively change the natural rolling hills, grazing lands and vistas that exist. The alteration of the natural topography will be extensive, and irreversible. 18

Furthermore, the project's design violates ECAP as the buildings and structures are not located within the required 2 acre development envelope. 19

The project **does not conform** to **Livermore General Plan Goal CC-1** to " Preserve and enhance Livermore's natural setting", **Goal CC-4.1** to "Protect and enhance public views from scenic routes and corridors," and **Goal CC-4 Policy P1** " Development shall not be allowed to detract from, or negatively effect the quality of views from scenic routes" (Draft EIR 3.1.7). Moreover, the project does not conform to Livermore General Plan Objective **Objective CC-4.16** to Preserve and enhance **natural scenic qualities in areas beyond scenic routes**. Development of lands adjacent to scenic routes should be visually compatible with the natural scenic qualities."(Draft EIR 3.1.8) The project does not conform to any of Livermore's Scenic Corridor Objectives or policies. 20

Clearly, the project does not conform to county or city scenic codes; or ECAP's restricted 2 acre development envelope. It will be visible and a distraction from W I-580,North Livermore Ave, Los Positas Road and neighboring trails and vista points. The project will alter the existing visual character of the site and its surroundings. The project needs to be redesigned to conform with county and city general plans, ECAP's 2 acre development envelope, and scenic corridor codes.

Biological mitigations.
Many Draft EIR biological mitigations detail the use of exclusion fencing and passive re-location as means to protect endangered species. In fact, these techniques could further threaten species survival and do not render the impacts to endangered species less than significant. The proposed mitigations, their effectiveness, and ability to do no harm need to be further evaluated in the Final EIR. Biological mitigations should be approved by both the CDFW and USFWS. 21

Environmentally Superior Alternative
The Draft EIR incorrectly identified the Reduced Footprint project as the environmentally superior alternative. The cemetery only alternative was rejected because it did not meet the project's objectives. This reason is not sufficient for rejecting a full analysis of the "burial ground" alternative. The cemetery only alternative would be more compatible with agriculture and could still meet the future demand for burial space. A full analysis of the burial ground alternative must be provided in the Final EIR so the public can carefully evaluate which project is truly the environmentally superior alternative. 22

The Draft EIR for the Monte Vista Memorial Gardens Project does not explain sufficiently how numerous critical impacts were found to be less than significant, contains incomplete data and omissions, factual errors (another county cemetery was approved in 1996 and renewed in 2018), deficiencies and illogical or erroneous conclusions. The Final EIR must address all of the above areas of concern. 23

Sincerely,
Donna Cabanne
Livermore resident
bcabanne@comcast.net

RESPONSES TO COMMENT LETTER M

Response to Comment M-1

Section 3.8 of the Draft EIR addresses environmental impacts to hydrology and water quality. Construction and operation of the Project would be required to comply with applicable federal, State, and local laws, ordinances, and regulations. See Response to Comment L-11. For discussion on the removal of the lakes and man-made perennial creek see Master Response 1.

Response to Comment M-2

This comment is not specific regarding what is inadequate about the mitigations. For storm-water quality impacts, preparation and implementation of required of SWPPP's that are reviewed by the RWQCB are typically considered adequate mitigation.

Response to Comment M-3

See Response to Comment C-3. If the wetlands area cannot be avoided, the Project would need to implement Mitigation Measure 3.3.3b prior to the issuance of a grading permit for the Project.

Response to Comment M-4

For discussion of hazardous materials management see Response to Comment H-11. The walkway has been removed to avoid crossing the wetland surge area. See Master Response 1.

Response to Comment M-5

See Response to Comment C-10.

Response to Comment M-6

See Master Response 4 for discussion of special status species protection and habitat. Furthermore, the Mitigated Alternative mitigates the concerns in this Comment by removing the lakes and man-made perennial creek from the Project, see Master Response 1.

Response to Comment M-7

The Project no longer intends to create mitigation wetlands at the Project site to resolve the outstanding CAO and NOV on adjacent properties, see Response to Comment C-4.

Response to Comment M-8

See Response to Comment B-4.

Response to Comment M-9

See Response to Comment B-13 and Master Response 1.

Response to Comment M-10

This comment is not specific regarding what is inadequate about Mitigation Measure 3.8.1d. The Mitigated Alternative eliminates the need for Mitigation Measure 3.8.1d by removing the lakes and man-made perennial creek from the Project. For details on the Mitigated Alternative, see Master Response 1.

Response to Comment M-11

See Response to Comment C-12.

Response to Comment M-12

This comment is not specific regarding what is inadequate about the mitigations or what the differences are between government agencies.

Response to Comment M-13

See Response to Comment C-24 for discussion of water quality treatment. Mitigation Measure 3.8.1c requires the applicant to submit a final drainage plan as prepared by a qualified civil engineer to the County for review and approval prior to approval of a grading permit. See Response to Comment C-23 for further discussion of drainage. Flood retention is based on long-term rainfall data for the region using calculation methods approved by the County. Page 7 of **Appendix G** of the Draft EIR provides details regarding the selection of years for rainfall analysis as follows:

> "We used data from The National Climatic Data Center (NCDC) of the National Oceanic and Atmospheric Administration (NOAA) which records daily precipitation for Livermore, California (NCDC,2019) Station GHCND : USC00044997 and extends from 1903 through 2018. However, in order to maintain consistency between different water budget data sets, we performed our analyses utilizing data from Water Year 2 (WY) 1969 through 2017 (October 1968 through September 2017), as this time period correlates with the available pan evaporation data, discussed later. The long-term (WY1969-2017) average annual rainfall estimate from these data is 14.06 inches. The value agrees well with the USGS estimate for mean annual rainfall of 15.0-inches for this site location (Rantz, 1971)."

Response to Comment M-14

As discussed in Response to Comment M-13, flood hazard and drainage facility calculations are based on long-term data. Drainage issues at the Altamont Landfill are not relevant to the Project site.

Response to Comment M-15

While it is in some cases impermissible to defer mitigation to a later date, for engineering plans such as drainage plans, it is generally considered acceptable to base the CEQA analyses on preliminary plans because it is generally accepted that the mitigation is feasible and will be implemented in the more-refined final plans. Please note that the drainage plans will be reviewed

by the RWQCB and County Public Works Department prior to their approval, which would ensure that they are adequate to handle anticipated flows. Review and approval of the final drainage plan by the County Public Works Department to determine compliance with County regulations would be a performance standard for the Mitigation Measure. Mitigation Measures based on future plans are acceptable if they have performance standards included.

Response to Comment M-16

For discussion on Project compliance with Measure D land use restrictions see Master Response 3. For discussion of the cumulative impacts of the Project see Section 4.2 of the Draft EIR. For discussion of cumulative loss of agricultural lands due to the Aramis Solar project see Response to Comment I-18.

Response to Comment M-17

For discussion on Project compliance with the East County Area Plan (ECAP) and additional figures showing simulated Project views from Interstate-580 see Master Response 2.

Response to Comment M-18

The proposed buildings would be located on the generally level low-lying areas of the site. Therefore, the Project would conform with natural landforms. The Mitigated Alternative removes the lakes and man-made perennial creek, see Master Response 1. For additional discussion of scenic resource impacts and additional figures showing simulated Project views from Interstate-580 see Master Response 2.

Response to Comment M-19

For discussion on Project compliance with the ECAP 2-acre development envelope see Master Response 3. The buildings do not violate the ECAP.

Response to Comment M-20

The comment's opinions regarding the Projects conformance with the City of Livermore's General Plan Goals to preserve the natural setting and scenic values are noted. As indicated in Section 3.1 of the Draft EIR, the Project would only be visible from a limited number of publicly available locations, as shown in **Figure 3.1-1**, **Figure 3.1-2** and **Figure 3.1-3** of the Draft EIR. For additional photo simulations and discussion of impacts to scenic resources see Master Response 2. For discussion on Project compliance with the ECAP see Master Response 3.

Response to Comment M-21

See Master Response 4 for discussion of species protection and habitat.

Response to Comment M-22

The Draft EIR rejected the alternative to develop the cemetery without the funeral home, pavilion building, and crematorium, as indicated on page 5-3 of the Draft EIR:

> "This would reduce the intensity of Project development, but it would fail to meet the Project objective of providing a funeral home building with full-service amenities and staff that support the cemetery mission, including an appropriate and peaceful space for religious ceremony and practices intended to accommodate a wide variety of religious and cultural standards or practices for Tri-Valley residents. Furthermore, this alternative was not further considered because it would create inefficiencies related to operation of the Project (i.e., additional vehicle trips) and this EIR has not identified significant environmental impacts resulting from the location of the funeral home, pavilion building, and crematorium at the proposed Project site."

Because it was rejected, the cemetery only alternative cannot be considered the environmentally superior alternative.

Response to Comment M-23

This is a general comment, and the commenter does not provide details regarding errors and deficiencies. Responses to additional comments from this Commenter are found in the Responses to Comments M-1 through M-22 as well as the Responses to Comments L-1 through L-16.

Letter N

March 3, 2022

County of Alameda Planning Department
224 W. Winton Avenue, Room 111
Hayward, CA 94544
Attn: Albert Lopez, albert.lopez@acgov.org

RE: Monte Vista Memorial Gardens Project; Alameda County Planning Application, PLN-2017-00194;

Dear Mr. Lopez:

Following are comments on the DEIR for the Monte Vista Memorial Gardens Project.

At least four Alternatives should be considered:
1. No project
2. Burial Ground without ponds and with native plantings
3. Burial Grounds with ponds and grass plantings
4. Complete proposal

1

Alternative 1 - No Project
Evaluate the present conditions including the agricultural land, wet lands, habitat, species, water and traffic.

2

Alternative 2 - Burial Ground without ponds and with native plantings
Study consequences of property no longer available for agricultural uses.
Study damage to habitat and special status species and other wildlife.
Study effect to drought and water shortage
Study traffic.

3

Alternative 3 - Burial Grounds with ponds and grass plantings
Study consequences of property no longer available for agricultural uses.
Study damage to habitat and special status species and other wildlife.
Study effect of landscaping water on Arroyo Las Positas watershed including the wetlands.
Study use of water for landscaping that is needed for agriculture and domestic use.
Study the effect of ponds that may bring in non-native wildlife which threatens the special status species in the area.
Study traffic.

4

Alternative 4 - Complete Project
Study the effect of mortuary, crematorium, offices, event spaces, and spaces that will be used for funeral services that are urban uses and should not be in an agricultural area.
There are already multiple mortuary, crematorium, offices, event spaces and funeral service space inside urban spaces in the valley.
Study the effect of these urban uses that should be in urban areas on municipal sewer systems and not using septic service that may damage the ground water.
Study traffic caused by these urban uses.

5

RESPONSES TO COMMENT LETTER N

Response to Comment N-1

Page 5-1 of the Draft EIR describes requirements for discussion of alternatives. Chapter 5 of the Draft EIR also discusses alternatives eliminated from further consideration in Section 5.3.

In compliance with CEQA requirements for alternatives, the Draft EIR analyzed in detail the No Project Alternative, a Reduced Project Footprint Alternative, and an Access Road Coordination Alternative. A Mitigated Alternative has also been added in the Final EIR.

The comment does not provide any justification for the list of alternatives recommended.

Response to Comment N-2

State CEQA *Guidelines* §15126.6 indicate that an EIR shall evaluate a range of alternatives including a no project alternative. The no project analysis is required to discuss existing conditions at the time of the notice of preparation is published as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved. The No Project Alternative described in Section 5 of the Draft EIR meets these requirements.

Response to Comment N-3

The alternatives analyzed in the Draft EIR comprise a reasonable range of potentially feasible alternatives, and there is no requirement to consider every conceivable alternative to a project. Similar to Alternative 2 proposed in the comment, the Mitigated Alternative would remove the lakes and use drought tolerant and low water use plants for the largest landscaped areas.

Response to Comment N-4

See Response to Comment N-3.

Response to Comment N-5

The suggested Alternative 4 appears to be the same as the Project. The complete Project is evaluated in the Draft EIR. All issues in this comment are evaluated in the Draft EIR.

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D. ORAL COMMENTS AND RESPONSES

The County and RCH Group held a zoom webinar hearing on February 7, 2022, to inform participants on the evaluations in the Draft EIR, explain the EIR process and upcoming schedules, and receive verbal comments on the Draft EIR. A PowerPoint was displayed to present the Project to the public and summarize key aspects of the Project. Topic areas included:

- An introduction to the Project team,
- Overview of the California Environmental Quality Act,
- Project elements,
- Impacts and mitigation measures, and
- Alternatives to the Project.

The meeting was then opened for public and agency comments and ten oral commenters gave comments on the Draft EIR. Each oral comment is numerically assigned a corresponding number and are shown with numbered brackets that correlate to the responses to the oral comments.

PLANNING COMMISSION MEETING FEB. 7, 2022

ORAL COMMENTS

Comments from Planning Commissioners:

Commissioner Jeffrey Moore:

Who is water purveyor for the project? 1-1

Are water rights secured already as part of Phase I and Phase II? How are CEQA conditions of approval applied on a project with this timeframe, where Phase I is over 5 years and Phase II is over 100 years? How does that work with such a long timeframe? 1-2

Specifically, I would like to see how the project will address issues of adjacency to a water course. Climate change could make an area designated for burials into a flood zone that increases or a wetland habitat that increases that makes the land unusable. I would like to see it explored in the final draft. 1-3

Commissioner Dimitris Kastriolis:

The whole area is approximately 100 acres; the cemetery is approximately 50 acres. Who owns the property and what will happen to the remaining property? 2-1

The access road belongs to the County - are there any negotiations or discussion for selling that portion to the project? 2-2

Looking at the site plan, two thirds of the site is a very steep hill, the other third is relatively mild and flat. Could that be an area not to be developed, or left as an open space? You refer to the top of the ridge, and the rest is hills? 2-3

What is mass cremation? How many cremations will take place per day, and per year? How long does it take to cremate a body? 2-4

Commissioner Andy Kelley:

Is it a condition of approval that only people interned at the cemetery are cremated? I'd like to see language restricting off-site cremations, as areas in north county and other areas close crematoriums, we may see a disproportionate impact to neighbors within this community. 3-1

I thought the staff report and provided materials are pretty comprehensive. I want to echo concerns about climate change and the waterway, we need to look at this carefully. As we start to approve projects in the pipeline that are not ten year projects, I don't know what that means, I don't think our historical approach for considering that is sufficiently legal, and we will have to figure this out. 3-2

Commissioner Larry Ratto:

This may be premature, but the planning director alluded to the fact there would be negotiations for the open space in perpetuity utilized by the facility, do you have any views on that, or would you rather wait until we deal with that in May? 4-1

Commissioner Marc Crawford: Is the cemetery dedicated for the Jewish community only, or open to all faiths? 5-1

Depending on the timing on the phases and the build out could there be a situation where only people of the Jewish faith could be buried? 5-2

I would like to see a conditional of approval to see that [nondenominational plots will be available] stays the case throughout the life of this project.

Comments from the Public

Ron Kahn:

My name is Ron Kahn, I'm a managing member of the Magen David Memorial Gardens and I'm on the board of directors of Monte Vista. The site is owned by the Monte Vista Memorial Investment Group, it's an LLC composed of multiple individual investors as is Magen David Memorial Gardens. This is the first cemetery being developed in Alameda County in over 110 years. Many people don't want to pay attention to these types of things but it's an important aspect of our infrastructure in that as I'm sure you are all aware the Tri-Valley region has undergone significant population growth over the last couple of decades including an increased diversity of the population as well. We believe it's important that the infrastructure of the County support that growth and the cemetery is intended to play that function as infrastructure. Monte Vista Memorial Gardens is designed to include an area called Magen David Memorial Gardens this is specifically designed for the growing Jewish population in the Tri-Valley and we want to make sure we have appropriate burial services and practices to support the community.

A little known fact regarding Jewish culture and life is that when a community comes into an area one of the first things that is required is the development of a cemetery and a consecrated burial grounds. And unfortunately, the existing infrastructure in the area now is either lacking or reaching capacity resulting in the need to develop this critical infrastructure to support Jewish life in the area, and we are cognizant of all three orthodox, conservative and reform members of the community. Our goal is to develop and build a state-of-the-art final resting place and funeral home to support the needs of the region, and with the specifically Jewish section to accommodate the diverse population and culture of the area for present and future residents. Our vision is to create an environmentally friendly development that will be an asset to the community which will include water conservation and reuse, drought resistant landscaping, solar power and green building practices. Two areas I would like to touch on mentioned both in the CEQA document and Albert in his presentation, the abatement issue on the neighboring property, and the access roadway:

6-1

It is important to note, the abatement issue is not on our property at all, however as one of our members was involved in the activities that generated the abatement order we have been actively planning and providing legal support and funds to come to a resolution with the water board and at this time after many months of back and forth the owners of the land where abatement is required have signed off and a complete package has been provided to the water board for their approval based on what they wanted to have.

6-2

Secondly, with regard to the access road improvements we anticipate with the conditions of approval the design the requirements of the road to meet both County and City of Livermore requirements will be incorporated into our designs.

6-3

Jean King:

I live in Livermore California. I am surprised to hear that the favorable alternative the least environmentally problematic is alternative number 2 when it would seem to be that the least environmentally problematic is number 1 no project. I am concerned about septic, in South Livermore they are restricting septic tanks because of groundwater contamination. I wonder if having septic in North Livermore close to Arroyo Las Positas is a good idea. 7-1

Another thing is about whether this is used. We may realize this is zoned Ag, it has cows grazing on it, according to Measure D having a crematorium a funeral parlor violates as an urban use, it's not allowed in Ag land. Cemeteries are allowed as an open space. I don't object to a cemetery, but I do object to urban uses they are planning. I know we do have two crematoriums in Livermore and a funeral parlor in Livermore and Pleasanton, and three cemeteries in Livermore, one of which has Jewish views. 7-2

I am concerned about the floodplain, with climate change we are having 100-year floods many times in one year, I am afraid we will see more extremes in weather and floods will be worse and then droughts. I am concerned about wetlands and mitigations for floods. 7-3

I am also concerned about mitigation for habitat, it should be kept for open space to protect water and wetlands. 7-4

Rabbi Raleigh Reznik:

I am a Rabbi in the Tri-Valley area for 17 years. The Jewish community has one cemetery in the area, the Roselawn Cemetery, as an option to the Jewish community. It's filled to capacity and has added a few more graves which will last a little bit longer and other than that there are no other options for the Jewish community - people are traveling far, to South San Francisco. This is a great need, it will add so much to our community, I appreciate the fact you are taking the time to respect the dead and the living, so this can be a project that facilitates burial, familial life, community as an integral part of the community and is done so in a way that maintains the agricultural and environmental welfare of our community. If we could approve it today and start burials tomorrow that would be great.

8-1

Mike Frederick:

I don't have a problem with cemetery for Measure D, but the crematorium is an urban use and should not be on Measure D land. I don't find having a septic system on that property as being appropriate, it is going through a water way. Livermore is trying to get sewer extended beyond the city border to get rid of septic, if they want to move forward they should find a hookup within a sanitary sewer system, thanks. 9-1

Kelly Abreu:

Neighboring properties to the Project subject to an order from the regional water quality control board are trying to cooperate with the regional waterboard, which is wonderful. In Sunol, they fill in arroyos and destroy watercourses entirely. In Livermore, people protect things and cooperate with the water board and everyone can see that happening. There seems to be acknowledgement of the need for hiking trails. There's a trail nearby, and people pay respect to that need and give deference to the recreation and transportation needs of pedestrians and cyclists, diametrically opposite to what has happened in Sunol. 10-1

For this project, if you look at the volume of environmental considerations going on, it's stunning. Instead of trying to destroy the environment they are attempting to follow the rules and protect it, I would like to commend the developers, it is completely new to me as I'm so used to what has been done to Sunol. 10-2

1. COMMISSIONER JEFFREY MOORE

Response to Comment 1-1

An on-site water well would be the primary source of water. The Project would also include cisterns to capture rainfall for reuse.

Response to Comment 1-2

Water rights are not needed for on-site groundwater wells. See response to Comment 1-1 for discussion on water supply.

Permitting of Phase II would begin following approval of the Conditional Use Permit from Alameda County. In the Planning Commission meeting dated February 7, 2022, Albert Lopez indicated that the Planning Commission can address timing issues in the Conditions of Approval for the Project.

The required CEQA Mitigation Monitoring and Reporting Plan (MMRP) will track the mitigation measures that are adopted in the EIR.

Response to Comment 1-3

The Project would be developed in a manner that avoids a 100-year flood plain zone as identified on page 3.8-14 of the Draft EIR:

> "Development of Phase I would avoid areas of high flow and FEMA floodplain hazard zones (1% Annual Chance Flood Hazard/100-year floodplain)"

As indicated on page ES-8 of the Draft EIR, the bridges would provide freeboard of at lease one foot above the 500-year flood plain.

If future conditions increase the 500-year flood plain, earthen berms could be added to the Phase II perimeter to protect burial sites.

2. COMMISSIONER DIMITRIS KASTRIOLIS

Response to Comment 2-1

The property is owned by Monte Vista Memorial Investment Group, LLC. For the remaining property not part of the Project, the Project applicant has expressed a willingness to negotiate an open space conservation easement so that the ridgetop remains undeveloped in perpetuity. The areas for Project development are primarily flat, and the remaining areas are dominated by steep slopes not conducive for development.

Response to Comment 2-2

There is no discussion for selling the access road.

Response to Comment 2-3

See response to Comment 2-1.

Response to Comment 2-4

Appendix C of the Draft EIR provides supporting information on air quality and contains a health risk assessment (HRA) with an analysis for emissions from the crematorium. The health risk assessment assumed 1,000 bodies per year would be incinerated, which is the incineration plan for the Project. At this level of operations, the health risk assessment result is under the threshold of significance due to the remote location of the Project Site and the low volume of cremations as indicated on page 3.2-15 of the Draft EIR:

> "The HRA determined that the maximum residential cancer risk would be 0.13 cancers per million and would occur at the residence on an agricultural parcel 800 feet east of the Project site. Therefore, cancer risk from the Project would be less than the BAAQMD's significance threshold of 10 per million. "

The time it takes to cremate a body varies. The average time it takes to cremate a body is one to three hours, although cremation can take over five hours.

3. COMMISSIONER ANDY KELLEY

Response to Comment 3-1

The Project would cremate those who hold services at the cemetery, the ashes might be interned at another location for a variant of personal/religious reasons.

Comment noted, Commissioner Kelly would like to restrict off-site cremations. With the limit of 1,000 cremations per year, the analysis shows the air quality health risk would be less than significant, regardless of where the ashes are interned.

Response to Comment 3-2

Comment noted. Commissioner Kelly has concerns about climate change for the long development time of the Project and effects of climate change on the waterway (Arroyo Las Positas). As indicated on page ES-8 of the Draft EIR, the bridges would provide freeboard of at lease one foot above the 500-year flood plain.

While future climate changes are speculative, the Project has been analyzed for impacts related to greenhouse gas (GHG) emissions. The Project impact on GHG emissions would be less than significant (see Impacts 3.6.1 and Impact 3.6.2). The Project also includes several measures to reduce GHG emissions as indicated in the conclusion on page 3.6-14 of the Draft EIR.

> "**Conclusion**
>
> As discussed above, the Project would not conflict with Alameda County's Climate Action Plan, BAAQMD's Clean Air Plan, and CARB's 2017 Scoping Plan. Furthermore,

the Project would include several features that reduce GHG emissions, such as 30 electric vehicle (EV) charging stalls, photovoltaic (PV) solar panels, biodiesel or natural gas fueled tractors for burials, and all electric landscaping equipment, which support the goals of the above plans (Kliment, 2021). Therefore, the Project would have a less-than-significant impact."

4. COMMISSIONER LARRY RATTO

Response to Comment 4-1

See response to Comment 2-1.

5. COMMISSIONER MARC CRAWFORD

Response to Comment 5-1

The cemetery would be open to all faiths.

Response to Comment 5-2

The Commissioner recommends a Condition of Approval that non-denominational plots are available through the life of the project, and the County could include this condition. Based on the estimates below, there would be a substantial amount of non-denominational plots in either the originally proposed project or the Mitigated Alternative.

Phase I would have approximately 1,308 Jewish burial sites and 800 non-denominational burial sites. With the lakes, Phase II would have approximately 8,300 Jewish burial sites and 73,500 non-denominational burial sites. For the Mitigated Alternative (without the lakes), Phase II would have approximately 8,300 Jewish burial sites and 87,100 non-denominational burial sites. The total estimates for Phase II are 81,800 burial sites with the originally proposed Project. The Mitigated Alternative would have an estimated 95,400 burial sites, an increase of about 17 percent above the originally proposed Project (due to the removal of the permanent lakes). The burial sites include a variety of single and double vaults and cremated remains in-ground and above-ground (Kahn, 2022).

6. RON KAHN

Response to Comment 6-1

This comment is from the applicant and is supportive of the Project. The comment summarizes elements of the Project. The comment does not bring up any issue with the environmental analysis in the Draft EIR and no further response is required.

Response to Comment 6-2

The abatement issue is not on the Project property. Regardless, the comment indicates that the applicant is actively planning and providing legal support and funds to assist in a resolution to the abatement issue with the Water Board.

Response to Comment 6-3

The comment indicates that the applicant anticipates conditions of approval regarding road designs to meet County and City of Livermore requirements.

7. JEAN KING

Response to Comment 7-1

As described in the State CEQA *Guidelines* §15126.6, an EIR shall evaluate a range of alternatives including a No Project alternative. If the No Project alternative is identified as the environmentally superior alternative, then another of the remaining alternatives must be identified as the environmentally superior alternative. The County permitting of the septic system would consider the design and location of the septic system in relation to the Arroyo Las Positas. Pages 3.8-10 to 3.8-11 of the Draft EIR discuss septic (Onsite Wastewater Treatment System [OWTS]) as follows:

> "Design for the septic system has been sent for review by the County and Final approval of the OWTS permit from the Alameda County Department of Environmental Health would be required prior to the construction of the on-site septic system proposed to support Phase I buildings. Approval of an OWTS permit would reduce potential impacts on water quality standards, waste discharge, or degradation of surface or groundwater quality to a less-than-significant impact."

Response to Comment 7-2

The existing zoning of the Project site is "A" agricultural. Cemeteries are classified as a Conditionally Permitted Use in Agricultural Districts under Zoning Ordinance Section 17.06.35, see Master Response 3 for further zoning discussion and discussion of Project compliance with Alameda County Measure D (Measure D) land use restrictions.

Response to Comment 7-3

See Response to Comment 1-3.

Response to Comment 7-4

Comment wants open space mitigation for habitat. The habitat is not further defined in the comment. As indicated on page 2-3 of the Draft EIR, the applicant proposes dedication of ridgetop open space conservation land.

8. RABBI RALEIGH REZNIK

Response to Comment 8-1

The Rabbi comment is supportive of the Project and indicates that there are few burial options for the Jewish community.

9. MIKE FREDERIK

Response to Comment 9-1

See Master Response 3 for discussion of Project Measure D compliance. See response to Comment 7-1 regarding the septic system.

10. KELLY ABREU

Response to Comment 10-1

This comment is supportive of the Project and environmental review of the Project. The comment does not bring up any issue with the environmental analysis in the Draft EIR and no further response is required.

Response to Comment 10-2

This comment is supportive of the Project and level of environmental consideration (review). The comment does not bring up any issue with the environmental analysis in the Draft EIR and no further response is required.

E. REFERENCES

Kahn, Ron. 2022. CEO/Manager*, Magen David Memorial Investment Group, LLC.* Telephone conversation with Nate Berls, RCH Group, on July 12. 2022.

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Kahn, Ron. 2022. CEO/Manager*, Magen David Memorial Investment Group, LLC.* Email Correspondence with Paul Miller, RCH Group, on September 9, 2022.

CHAPTER 4
TEXT CHANGES TO THE DRAFT EIR

The following text changes are made to the Draft EIR and incorporated as part of the Final EIR. Revisions to the Draft EIR are shown in underline for additions and ~~strikethrough~~ for deletions.

These changes comprise minor edits to the Draft Environmental Impact Report (Draft EIR) for the Monte Vista Memorial Gardens EIR. Revisions herein do not result in new significant environmental impacts, do not constitute significant new information, nor do they alter the conclusions of the environmental analysis.

The text on page ES-1 of the Draft EIR is revised as follows:

> "MVMG would be the first public cemetery developed in Alameda County in over 110 years and would accommodate the needs of several multi-cultural communities."

The following text on Figures ES-2 and 2-2 of the Draft EIR is revised as follows:

> "WETLAND SURGE AREA ~~NEW WETLANDS~~ = ~~2.9~~ 2.6 ACRES"

The following paragraph on pages ES-8 and 2-13 of the Draft EIR is revised as follows:

> "In addition to the proposed man-made lakes, the Project proposes to avoid development in ~~install~~ a 2.6-acre wetlands surge ~~seasonal wetland~~ area west of Arroyo Las Positas, along the southern boundary of the central portion of the site. Water in this natural wetland surge area would come from direct precipitation. The wetland surge area would be designed to only receive supplemental surface runoff in the event of very large storm events, along with discharge from the lower lake during storm events. The water would be detained in this wetland~~s~~ surge area and then discharged at 10-year and 100-year predevelopment flows via a stabilized outfall structure into Arroyo Las Positas."

The text of the first sentence of Mitigation Measure 3.3.1d on page ES-15 and page 3.3-33 of the Draft EIR is modified as follows:

> "The MVMG Project area will be intensively surveyed for evidence of these reptile and amphibian species within 30 days prior to construction."

The text of Mitigation Measure 3.3.1j on page ES-17 and pages 3.3-34 and 3.3-35 of the Draft EIR is modified as follows:

> "Four preconstruction site surveys shall be conducted by a qualified biologist. At least one site visit shall occur between 15 February and 15 April. The remaining three survey visits

shall occur at least three weeks apart, between 15 April and 15 July (the peak of breeding season), with at least one visit after 15 June. ~~A preconstruction survey by a qualified biologist is conducted. If possible, a winter survey should be conducted between December 1 and January 31 (when wintering owls are most likely to be present) and the nesting season survey should be conducted between April 15 and July 15 (the peak of breeding season).~~ Surveys conducted from two hours before sunset to one hour after, or from one hour before to two hours after sunrise, are preferable. The survey techniques shall be consistent with the CDFW Staff Report survey protocol (2012) or most recently adopted guidance and include a 260-foot-wide (buffer) zone surrounding the Study Area. Repeat surveys shall also be conducted not more than 30 days prior to initial ground disturbance to inspect for re- occupation and the need for additional protection measures. If no burrowing owls are detected during preconstruction surveys, then no further mitigation is required."

Based on the CDFW comment, the first sentence of Mitigation Measure 3.3.2 is revised on page ES-18 and page 3.3-36 of the Draft EIR as follows:

"**Mitigation Measure 3.3.2:** During the appropriate blooming/flowering season prior to construction, a qualified botanist shall conduct special-status plant species presence/absence surveys within areas proposed for grading or modification, in accordance with *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities* (California Department of Fish and Game 2018 ~~2009~~) to determine which special-status plants with the potential to occur on-site are evident and identifiable on-site."

The text of the first paragraph of Mitigation Measure 3.3.3b on page ES-19 and page 3.3-37 of the Draft EIR is revised as follows:

"**Mitigation Measure 3.3.3b:** A Section 404 permit from the U.S. Army Corps of Engineers and a Section 401 water quality certification from the Regional Water Quality Control Board may be required if there are any activities affecting wetlands. The Project shall communicate with the San Francisco Bay Regional Water Quality Control Board (RWQCB) to determine whether CA Dredge & Fill Procedures (aka Waste Discharge Requirement; WDR) permitting would be required and with the California Department of Fish & Wildlife to inquire about a possible 1602 Lake & Streambed Alteration Agreement (LSAA) for the proposed bridges."

The text of Mitigation Measure 3.5.2 on page ES-20 and page 3.5-12 of the Draft EIR is revised as follows:

"**Mitigation Measure 3.5.2:** The Project stormwater system design shall locate and protect all stormwater outfalls to ensure proper stability and erosion protection. This may include energy dissipators, armoring, bio-revetments/gabions, and other erosion and slope protection features. ~~Outfalls to be protected include lake outlets, discharge points into the Arroyo, and discharges into other swales and channels on-site.~~"

The text of Mitigation Measure 3.8.1b on page ES-22 and page 3.8-12 of the Draft EIR is revised as follows:

> **"Mitigation Measure 3.8.1b:** Prior to the issuance of grading permits for the Project, the Project applicant shall submit a Stormwater Control Plan to Alameda County for review and approval. The Stormwater Control Plan shall identify pollution prevention measures and practices to prevent polluted runoff from leaving the Project site. The plan shall be implemented to the satisfaction of Alameda County prior to ~~building occupancy~~ issuance of grading permits."

The text on page 1-1 of the Draft EIR is revised as follows:

> "MVMG would be the first public cemetery developed in Alameda County in over 110 years and would accommodate the needs of several multi-cultural communities."

The text on page 2-1 of the Draft EIR is revised as follows:

> "MVMG would be the first public cemetery developed in Alameda County in over 110 years and would accommodate the needs of several multi-cultural communities."

The following text in Table 2-1 on page 2-4 of the Draft EIR is revised as follows:

> "~~New Wetlands~~ Wetland Surge Area 2.6 ~~2.9~~"

The source on page 3.3-14 of **Table 3.3-1** of the Draft EIR is updated as follows (new text is underlined, deleted text is in ~~strikeout~~ format):

> "SOURCE: Barnett Environmental, 2021. Wetland delineation performed on December 12, 2018."

The last sentence in Item 1 on page 3.3-18 of the Draft EIR is revised as follows:

> "However, no heartscale was observed ~~within existing irrigation ditches~~ during the Barnett Environmental October 2020 field survey."

The last sentence in Item 2 on page 3.3-18 of the Draft EIR is revised as follows:

> "No long-style sand-spurrey were observed ~~within existing irrigation ditches~~ during the Barnett Environmental October 2020 field survey."

For the Western Pond Turtle the second column in **Table 3.3-2** of the Draft EIR (page 3.3-21) is revised as follows:

> "~~FE/CT/NA~~ None/CSC/NA"

For the San Joaquin coachwhip the second column in **Table 3.3-2** of the Draft EIR (page 3.3-22) is revised as follows:

> "~~FE/CE/NA~~ None/CSC/NA"

For the Tricolored blackbird the second column in **Table 3.3-2** of the Draft EIR (page 3.3-22) is revised as follows:

> "None/CT ~~E~~/NA"

Item 5 on page 3.3-28 of the Draft EIR (page 3.3-27) is revised as follows:

> "Western pond turtle (*Emys marmorota)*. This species is ~~listed as threatened by the U.S. Fish and Wildlife Service and by the state of~~ a California Species of Special Concern."

Item 7 on page 3.3-28 of the Draft EIR (page 3.3-28) is revised as follows:

> "San Joaquin coachwhip (*Coluber flagellum ssp. ruddockis).* This whipsnake species is ~~listed as threatened by the U.S. Fish and Wildlife Service and by the state of~~ a California Species of Special Concern."

Item 3 on page 3.3-29 of the Draft EIR is revised as follows:

> "Tricolored blackbird (*Agelauis tricolor).* The tricolored blackbird is a California threatened ~~endangered~~ species."

The first paragraph on page 3.3-32 of the Draft EIR is revised as follows:

> "Special status wildlife species that have the potential to occur on the Phase II site include: ~~According to the summary in **Appendix D Biological Resources Assessment (BRA)**, there are eight federal special wildlife species (~~San Joaquin kit fox, San Joaquin coachwhip, vernal pool fairy shrimp, longhorn fairy shrimp, California red-legged frog, the valley elderberry longhorn beetle, the western pond turtle, ~~and the~~ California tiger salamander~~)~~, ~~four special status state species (~~loggerhead shrike, white-tailed kite, Swainson's hawk, ~~and~~ tricolored blackbird~~)~~, ~~and four species of special concern (~~western burrowing owl, western spadefoot, grasshopper sparrow, and the American badger~~) that have the potential to occur on site~~. Protocol surveys for the California tiger salamander were conducted of one wetland in the Study Area in 2021 and found no sign of this species."

The text on page 3.8-14 of the Draft EIR is revised as follows:

> "In addition to the lakes, the Project would avoid development in ~~install~~ 2.6 acres of wetland~~s~~ surge area west of Arroyo Las Positas, along the southern boundary of the central portion of the Project site. Water in this natural wetland surge area would come from direct precipitation. The wetland~~s~~ surge area would be designed to only receive supplemental surface runoff in the event of very large storm events, along with discharge from the lower lake during storm events. The water would be detained in this wetland~~s~~ surge area and then discharged at 10-year and 100-year predevelopment flows via a stabilized outfall structure into Arroyo Las Positas."

The text on 3.9-2 of the Draft EIR is revised as follows:

> "… and the beautiful open space~~s~~ of Alameda County from excessive, badly located and harmful development.

The text on page 3.9-2 of the Draft EIR is revised as follows:

> "~~*Policy 99*: The County shall require all tentative maps in areas designated "Large Parcel Agriculture" or "Resource Management" to identify a building envelope of no more than two acres on each proposed parcel within which all residential development and residential accessory uses shall be located. On-site housing for farm employees who require full-time, on-site residency is considered an agricultural use and is not limited to the identified two-acre building envelope.~~"

The text on page 3.9-7 from **Table 3.9-1** of the Draft EIR is revised as follows:

General Plan Policies	Consistent?	Analysis
~~*Policy 99*: The County shall require all tentative maps in areas designated "Large Parcel Agriculture" or "Resource Management" to identify a building envelope of no more than two acres on each proposed parcel within which all residential development and residential accessory uses shall be located. On-site housing for farm employees who require full-time, on-site residency is considered an agricultural use and is not limited to the identified two-acre building envelope.~~	~~Yes~~	~~The Project would not include on-site residential development or residential accessory uses.~~

Monte Vista Memorial Gardens Information will be removed from **Table 3.11-1** on page 3.11-10 of the Draft EIR and the table will rely on the ITE trip generation estimates. **Table 3.11-1** is revised as follows:

TABLE 3.11-1. "PROJECT" TRIP GENERATION ESTIMATES
MONTE VISTA MEMORIAL GARDENS – ALAMEDA COUNTY

Monte Vista Memorial Gardens	Units	AM Peak- Hour Trips (7-9 a.m.)			PM Peak-Hour Trips (4-6 p.m.)			Average Daily Trips (24- hour)		
		In	Out	Total	In	Out	Total	In	Out	Total
Acres (ITE 566)	24	3	1	4	7	14	21	54	54	108
~~Employees~~	~~10~~	~~10~~	~~0~~	~~10~~	~~0~~	~~10~~	~~10~~	~~10~~	~~10~~	~~20~~
~~Visitors~~	~~30~~	~~2~~	~~1~~	~~3~~	~~1~~	~~2~~	~~3~~	~~30~~	~~30~~	~~60~~
~~Deliveries~~	~~10~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~10~~	~~10~~	~~20~~
~~**Total**~~		~~**12**~~	~~**1**~~	~~**13**~~	~~**1**~~	~~**12**~~	~~**13**~~	~~**50**~~	~~**50**~~	~~**100**~~

ITE Trip Generation Manual (9th Edition) Rates for the cemetery (ITE land-use code 566):

~~**Employee Based** (PHA Estimates)~~
~~Daily Rate 2/employee, 50% in, 50% out,~~
~~AM Peak Hour Rate 1/employee, 100% in,0% out,~~
~~PM Peak Hour Rate, 1/employee, 0% in, 100% out~~

Acreage Based (ITE)
Daily Rate 4.73/acre, 50% in, 50% out.
AM Peak Hour Rate 0.17/acre, 70% in, 30% out.
PM Peak Hour Rates 0.84/acre, 33% in, 67% out.

~~**Deliveries, Visitors** (PHA Estimates)~~
~~UPS, FedEx, Amazon, USPS, Newspaper, assumed each generates two one-way trips.~~

The text of Impact 3.13-2 on page 3.13-8 of the Draft EIR is revised as follows (the significance determination is unchanged):

> "**Impact 3.13.2: The Project ~~could~~ would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less than Significant)**"

The text on page 5-3 of the Draft EIR is revised as follows:

> "There has not been a public cemetery developed in Alameda County in over 110 years."

CHAPTER 5
INDEX OF COMMENTS AND RESPONSES

This index covers the issues discussed in the comments received on the Draft EIR and responses to the comments. Bolded, underlined comments (i.e., **A-1**) indicate the location of substantial information in either the comment or the response to the comment. Written comments (Letters A through N) and responses to written comments are included in **Chapter 2**, as well as oral comments (Commenters 1 through 10) and responses to oral comments.

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Topic Area	Secondary Topic Area	Index
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APPENDIX J

WATER USAGE ESTIMATES FOR MITIGATED ALTERNATIVE

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WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	47.2 ANNUAL

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/YR)	ACRE FEET/ YEAR	HCF/ YEAR	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	381,451	1.17	509.96	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	53,109	0.16	71.00	12%
					TOTALS		**40,094**	**14,850**	**434,560**	**1.33**	**580.96**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA	GALLONS/YR	1,173,311
	ACRE FEET/YR	3.60
	HCF/YR	1,568.60

ETWU	GALLONS/YR	434,560
	ACRE FEET/YR	1.33
	HCF/YR	580.96

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	0.30	YES

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

THE IRRIGATION SYSTEM FOR THIS SITE WILL BE MODERATED WITH A 2-WIRE CONTROLLER THAT WILL MANAGE THIS SYSTEM USES LOCAL WEATHER TO ADJUST THE RUN TIMES OF THE VALVES BASED ON DAILY WEATHER CONDITIONS. UTILIZING THIS TYPE OF WEATHER-BASED SYSTEM WILL HELP THE LANDSCAPE MANAGER SAVE 25% MORE WATER THAN WITH A CONVENTIONAL CONTROLLER. THE SYSTEM WILL BE MODERATED BY A MOISTURE SENSORS TO NOT OVER WATER AND WIND SENSORS. PHASE 1 IRRIGATION SYSTEM WILL USE DRIPLINE FOR GROUNDCOVER AND SHRUBS. TREES WILL BE IRRIGATION BY DRIP RINGS.

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	47.2 ANNUAL

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/YR)	ACRE FEET/ YEAR	HCF/ YEAR	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	102,424	0.31	136.93	1%
2	TURF	HIGH	0.7	SPRAY	0.75	0.933	46,606	**43,499**	1,272,953	3.91	1,701.81	5%
3	TURF	HIGH	0.7	ROTORS	0.75	0.933	954,568	**890,930**	26,072,179	80.01	34,855.85	94%
4	HEDGE	MOD	0.5	DRIP	0.81	0.617	5,717	**3,529**	103,273	0.32	138.07	1%
					TOTALS		**1,016,341**	**941,458**	**27,550,829**	**84.55**	**36,832.66**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME								
ALL	ALL	1	1,016,341						100%
		TOTALS	1,016,341						**100%**

MAWA	GALLONS/YR	29,742,203
	ACRE FEET/YR	91.28
	HCF/YR	39,762.30

ETWU	GALLONS/YR	27,550,829
	ACRE FEET/YR	84.55
	HCF/YR	36,832.66

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
75.1%	**0.70**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	941,458
TOTAL AREA	1,016,341
AVG. ETAF	92.63%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

THE IRRIGATION SYSTEM FOR THIS SITE WILL BE MODERATED WITH A 2-WIRE CONTROLLER THAT WILL MANAGE THIS SYSTEM USES LOCAL WEATHER TO ADJUST THE RUN TIMES OF THE VALVES BASED ON DAILY WEATHER CONDITIONS. UTILIZING THIS TYPE OF WEATHER-BASED SYSTEM WILL HELP THE LANDSCAPE MANAGER SAVE 25% MORE WATER THAN WITH A CONVENTIONAL CONTROLLER. THE SYSTEM WILL BE MODERATED BY A MOISTURE SENSORS TO NOT OVER WATER AND WIND SENSORS. ALL SPRINKLERS WILL INCLUDE BUILT IN CHECK VALVES AND PRESSURE REGULATORS TO PREVENT MISTING AND LOW HEAD DRAINAGE ON SLOPED AREAS.

WATER USE ESTIMATION-Monte Vista Memorial Garden_Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	0.24 DAILY

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/DAY)	ACRE FEET/ DAY	HCF/ DAY	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	521	0.00	0.70	1%
2	TURF	HIGH	0.7	SPRAY	0.75	0.933	46,606	**43,499**	6,473	0.02	8.65	5%
3	TURF	HIGH	0.7	ROTORS	0.75	0.933	954,568	**890,930**	132,570	0.41	177.23	94%
4	HEDGE	MOD	0.5	DRIP	0.81	0.617	5,717	**3,529**	525	0.00	0.70	1%
					TOTALS		**1,016,341**	**941,458**	**140,089**	**0.43**	**187.28**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	1,016,341					100%
						TOTALS	1,016,341					**100%**

MAWA	GALLONS/DAY	151,232
	ACRE FEET/DAY	0.46
	HCF/DAY	202.18

ETWU	GALLONS/DAY	140,089
	ACRE FEET/DAY	0.43
	HCF/DAY	187.28

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
75.1%	**0.70**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	941,458
TOTAL AREA	1,016,341
AVG. ETAF	92.63%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	0.24

DAILY

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/DAY)	ACRE FEET/ DAY	HCF/ DAY	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	1,940	0.01	2.59	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	270	0.00	0.36	12%
					TOTALS		**40,094**	**14,850**	**2,210**	**0.01**	**2.95**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA	**GALLONS/DAY**	**5,966**
	ACRE FEET/DAY	**0.02**
	HCF/DAY	**7.98**

ETWU	**GALLONS/DAY**	**2,210**
	ACRE FEET/DAY	**0.01**
	HCF/DAY	**2.95**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	4.4

Monthy (APR)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	35,559	0.11	47.54	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	4,951	0.02	6.62	12%
					TOTALS		**40,094**	**14,850**	**40,510**	**0.12**	**54.16**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA		
	GALLONS/MONTH	**109,376**
	ACRE FEET/MONTH	**0.34**
	HCF/MONTH	**146.23**

ETWU		
	GALLONS/MONTH	**40,510**
	ACRE FEET/MONTH	**0.12**
	HCF/MONTH	**54.16**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	4.4 Monthy (APR)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	9,548	0.03	12.76	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	109,875	0.34	146.89	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	2,250,424	6.91	3,008.59	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	9,627	0.03	12.87	1%
					TOTALS		**1,016,341**	**872,241**	**2,379,474**	**7.30**	**3,181.11**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	1,016,341					100%
						TOTALS	1,016,341					**100%**

MAWA	GALLONS/MONTH	2,772,578
	ACRE FEET/MONTH	8.51
	HCF/MONTH	3,706.66

ETWU	GALLONS/MONTH	2,379,474
	ACRE FEET/MONTH	7.30
	HCF/MONTH	3,181.11

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.70**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	6.4

Monthy (AUG)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	51,722	0.16	69.15	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	7,201	0.02	9.63	12%
					TOTALS		**40,094**	**14,850**	**58,923**	**0.18**	**78.77**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA	**GALLONS/MONTH**	**159,093**
	ACRE FEET/MONTH	**0.49**
	HCF/MONTH	**212.69**

ETWU	**GALLONS/MONTH**	**58,923**
	ACRE FEET/MONTH	**0.18**
	HCF/MONTH	**78.77**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	6.4

Monthy (Aug)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	13,888	0.04	18.57	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	159,818	0.49	213.66	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	3,273,343	10.05	4,376.13	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	14,003	0.04	18.72	1%
					TOTALS		**1,016,341**	**872,241**	**3,461,053**	**10.62**	**4,627.08**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME					
ALL	ALL	1	1,016,341			100%
		TOTALS	1,016,341			**100%**

MAWA	GALLONS/MONTH	4,032,841
	ACRE FEET/MONTH	12.38
	HCF/MONTH	5,391.50

ETWU	GALLONS/MONTH	3,461,053
	ACRE FEET/MONTH	10.62
	HCF/MONTH	4,627.08

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.70**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	0.9

Monthy (DEC) IRRIGATION SYSTEM WILL NOT BE OPERATING THE MONTH OF DECEMBER

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	7,273	0.02	9.72	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	1,013	0.00	1.35	12%
					TOTALS		**40,094**	**14,850**	**8,286**	**0.03**	**11.08**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA		
	GALLONS/MONTH	**22,372**
	ACRE FEET/MONTH	**0.07**
	HCF/MONTH	**29.91**

ETWU		
	GALLONS/MONTH	**8,286**
	ACRE FEET/MONTH	**0.03**
	HCF/MONTH	**11.08**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	0.9

Monthy (DEC) IRRIGATION SYSTEM WILL NOT BE OPERATING THE MONTH OF DECEMBER

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	1,953	0.01	2.61	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	22,474	0.07	30.05	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	460,314	1.41	615.39	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	1,969	0.01	2.63	1%
						TOTALS	**1,016,341**	**872,241**	**486,711**	**1.49**	**650.68**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME								
ALL	ALL		1	1,016,341					100%
			TOTALS	1,016,341					**100%**

MAWA	GALLONS/MONTH	567,118
	ACRE FEET/MONTH	1.74
	HCF/MONTH	758.18

ETWU	GALLONS/MONTH	486,711
	ACRE FEET/MONTH	1.49
	HCF/MONTH	650.68

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	0.70	YES

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	1.5

Monthy (FEB) IRRIGATION SYSTEM WILL NOT BE OPERATING THE MONTH OF FEBRUARY

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	12,122	0.04	16.21	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	1,688	0.01	2.26	12%
					TOTALS		**40,094**	**14,850**	**13,810**	**0.04**	**18.46**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA		
	GALLONS/MONTH	**37,287**
	ACRE FEET/MONTH	**0.11**
	HCF/MONTH	**49.85**

ETWU		
	GALLONS/MONTH	**13,810**
	ACRE FEET/MONTH	**0.04**
	HCF/MONTH	**18.46**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	1.5

Monthy (FEB) IRRIGATION SYSTEM WILL NOT BE OPERATING THE MONTH OF FEBRUARY

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	3,255	0.01	4.35	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	37,457	0.11	50.08	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	767,190	2.35	1,025.65	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	3,282	0.01	4.39	1%
					TOTALS		**1,016,341**	**872,241**	**811,184**	**2.49**	**1,084.47**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	1,016,341					100%
						TOTALS	1,016,341					**100%**

MAWA	GALLONS/MONTH	945,197
	ACRE FEET/MONTH	2.90
	HCF/MONTH	1,263.63

ETWU	GALLONS/MONTH	811,184
	ACRE FEET/MONTH	2.49
	HCF/MONTH	1,084.47

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	0.70	YES

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	1.2

Monthy (JAN) IRRIGATION SYSTEM WILL NOT BE OPERATING THE MONTH OF JANUARY

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	9,698	0.03	12.97	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	1,350	0.00	1.81	12%
					TOTALS		**40,094**	**14,850**	**11,048**	**0.03**	**14.77**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA		
	GALLONS/MONTH	**29,830**
	ACRE FEET/MONTH	**0.09**
	HCF/MONTH	**39.88**

ETWU		
	GALLONS/MONTH	**11,048**
	ACRE FEET/MONTH	**0.03**
	HCF/MONTH	**14.77**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	1.2

Monthy (JAN) IRRIGATION SYSTEM WILL NOT BE OPERATING THE MONTH OF JANUARY

7/14/2022

REGULAR LANDSCAPE AREAS												
HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	2,604	0.01	3.48	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	29,966	0.09	40.06	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	613,752	1.88	820.52	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	2,626	0.01	3.51	1%
					TOTALS		**1,016,341**	**872,241**	**648,947**	**1.99**	**867.58**	**100%**

SPECIAL LANDSCAPE AREAS										
HYDROZONE #	HYDROZONE NAME									
ALL	ALL		1	1,016,341					100%	
			TOTALS	1,016,341					**100%**	

MAWA		
	GALLONS/MONTH	**756,158**
	ACRE FEET/MONTH	**2.32**
	HCF/MONTH	**1,010.91**

ETWU		
	GALLONS/MONTH	**648,947**
	ACRE FEET/MONTH	**1.99**
	HCF/MONTH	**867.58**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.70**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	7.4

Monthy (JULY)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	59,804	0.18	79.95	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	8,326	0.03	11.13	12%
					TOTALS		**40,094**	**14,850**	**68,130**	**0.21**	**91.08**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA		
	GALLONS/MONTH	**183,951**
	ACRE FEET/MONTH	**0.56**
	HCF/MONTH	**245.92**

ETWU		
	GALLONS/MONTH	**68,130**
	ACRE FEET/MONTH	**0.21**
	HCF/MONTH	**91.08**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	7.4 Monthy (JULY)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	16,058	0.05	21.47	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	184,790	0.57	247.05	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	3,784,803	11.62	5,059.90	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	16,191	0.05	21.65	1%
					TOTALS		**1,016,341**	**872,241**	**4,001,842**	**12.28**	**5,350.06**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	1,016,341					100%
						TOTALS	1,016,341					**100%**

MAWA	GALLONS/MONTH	**4,662,973**
	ACRE FEET/MONTH	**14.31**
	HCF/MONTH	**6,233.92**

ETWU	GALLONS/MONTH	**4,001,842**
	ACRE FEET/MONTH	**12.28**
	HCF/MONTH	**5,350.06**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.70**	**YES**

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	6.6

Monthy (JUN)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	53,338	0.16	71.31	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	7,426	0.02	9.93	12%
					TOTALS		**40,094**	**14,850**	**60,765**	**0.19**	**81.24**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA		
	GALLONS/MONTH	**164,065**
	ACRE FEET/MONTH	**0.50**
	HCF/MONTH	**219.34**

ETWU		
	GALLONS/MONTH	**60,765**
	ACRE FEET/MONTH	**0.19**
	HCF/MONTH	**81.24**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	6.6

Monthy (JUN)

7/14/2022

REGULAR LANDSCAPE AREAS												
HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	14,322	0.04	19.15	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	164,813	0.51	220.34	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	3,375,635	10.36	4,512.88	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	14,441	0.04	19.31	1%
					TOTALS		**1,016,341**	**872,241**	**3,569,211**	**10.95**	**4,771.67**	**100%**

SPECIAL LANDSCAPE AREAS									
HYDROZONE #	HYDROZONE NAME								
ALL	ALL		1	1,016,341					100%
			TOTALS	1,016,341					**100%**

MAWA	GALLONS/MONTH	4,158,867
	ACRE FEET/MONTH	12.76
	HCF/MONTH	5,559.98

ETWU	GALLONS/MONTH	3,569,211
	ACRE FEET/MONTH	10.95
	HCF/MONTH	4,771.67

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	0.70	YES

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	2.9

Monthy (MAR)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	23,437	0.07	31.33	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	3,263	0.01	4.36	12%
					TOTALS		**40,094**	**14,850**	**26,700**	**0.08**	**35.69**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA		
	GALLONS/MONTH	**72,089**
	ACRE FEET/MONTH	**0.22**
	HCF/MONTH	**96.38**

ETWU		
	GALLONS/MONTH	**26,700**
	ACRE FEET/MONTH	**0.08**
	HCF/MONTH	**35.69**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	2.9

Monthy (MAR)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	6,293	0.02	8.41	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	72,418	0.22	96.82	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	1,483,234	4.55	1,982.93	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	6,345	0.02	8.48	1%
					TOTALS		**1,016,341**	**872,241**	**1,568,290**	**4.81**	**2,096.64**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	1,016,341					100%
						TOTALS	1,016,341					**100%**

MAWA	GALLONS/MONTH	**1,827,381**
	ACRE FEET/MONTH	**5.61**
	HCF/MONTH	**2,443.02**

ETWU	GALLONS/MONTH	**1,568,290**
	ACRE FEET/MONTH	**4.81**
	HCF/MONTH	**2,096.64**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.70**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	5.9

Monthy (MAY)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	47,681	0.15	63.75	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	6,639	0.02	8.88	12%
					TOTALS		**40,094**	**14,850**	**54,320**	**0.17**	**72.62**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA	**GALLONS/MONTH**	**146,664**
	ACRE FEET/MONTH	**0.45**
	HCF/MONTH	**196.07**

ETWU	**GALLONS/MONTH**	**54,320**
	ACRE FEET/MONTH	**0.17**
	HCF/MONTH	**72.62**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	5.9

Monthy (MAY)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	12,803	0.04	17.12	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	147,332	0.45	196.97	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	3,017,613	9.26	4,034.24	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	12,909	0.04	17.26	1%
					TOTALS		**1,016,341**	**872,241**	**3,190,658**	**9.79**	**4,265.59**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	1,016,341					100%
						TOTALS	1,016,341					**100%**

MAWA	GALLONS/MONTH	3,717,775
	ACRE FEET/MONTH	11.41
	HCF/MONTH	4,970.29

ETWU	GALLONS/MONTH	3,190,658
	ACRE FEET/MONTH	9.79
	HCF/MONTH	4,265.59

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	0.70	YES

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	1.5

Monthy (NOV)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	12,122	0.04	16.21	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	1,688	0.01	2.26	12%
					TOTALS		**40,094**	**14,850**	**13,810**	**0.04**	**18.46**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA		
	GALLONS/MONTH	**37,287**
	ACRE FEET/MONTH	**0.11**
	HCF/MONTH	**49.85**

ETWU		
	GALLONS/MONTH	**13,810**
	ACRE FEET/MONTH	**0.04**
	HCF/MONTH	**18.46**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	1.5

Monthy (NOV)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	3,255	0.01	4.35	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	37,457	0.11	50.08	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	767,190	2.35	1,025.65	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	3,282	0.01	4.39	1%
					TOTALS		**1,016,341**	**872,241**	**811,184**	**2.49**	**1,084.47**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME								
ALL	ALL	1	1,016,341						100%
		TOTALS	1,016,341						**100%**

MAWA		
	GALLONS/MONTH	**945,197**
	ACRE FEET/MONTH	**2.90**
	HCF/MONTH	**1,263.63**

ETWU		
	GALLONS/MONTH	**811,184**
	ACRE FEET/MONTH	**2.49**
	HCF/MONTH	**1,084.47**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.70**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	3.2

Monthy (OCT)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	25,861	0.08	34.57	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	3,601	0.01	4.81	12%
					TOTALS		**40,094**	**14,850**	**29,462**	**0.09**	**39.39**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA		
	GALLONS/MONTH	**79,546**
	ACRE FEET/MONTH	**0.24**
	HCF/MONTH	**106.35**

ETWU		
	GALLONS/MONTH	**29,462**
	ACRE FEET/MONTH	**0.09**
	HCF/MONTH	**39.39**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	3.2

Monthy (OCT)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	6,944	0.02	9.28	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	79,909	0.25	106.83	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	1,636,672	5.02	2,188.06	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	7,002	0.02	9.36	1%
					TOTALS		**1,016,341**	**872,241**	**1,730,526**	**5.31**	**2,313.54**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	1,016,341					100%
						TOTALS	1,016,341					**100%**

MAWA	GALLONS/MONTH	2,016,421
	ACRE FEET/MONTH	6.19
	HCF/MONTH	2,695.75

ETWU	GALLONS/MONTH	1,730,526
	ACRE FEET/MONTH	5.31
	HCF/MONTH	2,313.54

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	0.70	YES

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 1, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	5.3

Monthy (SEPT)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	GROUND COVER/SHRUBS	LOW	0.3	DRIP	0.81	0.370	35,194	**13,035**	42,832	0.13	57.26	88%
2	TREES	LOW	0.3	RINGS	0.81	0.370	4,900	**1,815**	5,963	0.02	7.97	12%
					TOTALS		**40,094**	**14,850**	**48,796**	**0.15**	**65.24**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME											
ALL	ALL					1	40,094					100%
						TOTALS	40,094					**100%**

MAWA		
	GALLONS/MONTH	**131,749**
	ACRE FEET/MONTH	**0.40**
	HCF/MONTH	**176.13**

ETWU		
	GALLONS/MONTH	**48,796**
	ACRE FEET/MONTH	**0.15**
	HCF/MONTH	**65.24**

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	**0.30**	**YES**

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	14,850
TOTAL AREA	40,094
AVG. ETAF	37.04%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

WATER USE ESTIMATION-Monte Vista Memorial Garden Phase 2, Livermore CA

WATER TYPE	POTABLE
SITE ETO=	5.3

Monthy (SEPT)

7/14/2022

REGULAR LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME	PLANT WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY	ETAF (PF/IE)	AREA (SQ. FT) (HA)	ETAF X AREA (HA)	ETWU (GAL/MONTH)	ACRE FEET/MONT	HCF/MONTH	PERCENTAGE OF LANDSCAPE
1	TREES	LOW	0.3	RINGS	0.81	0.370	9,450	**3,500**	11,501	0.04	15.38	1%
2	TURF	HIGH	0.7	BUBBLER	0.81	0.864	46,606	**40,277**	132,350	0.41	176.94	5%
3	TURF	HIGH	0.7	BUBBLER	0.81	0.864	954,568	**824,935**	2,710,737	8.32	3,623.98	94%
4	HEDGE	MOD	0.5	BUBBLER	0.81	0.617	5,717	**3,529**	11,596	0.04	15.50	1%
					TOTALS		**1,016,341**	**872,241**	**2,866,184**	**8.80**	**3,831.80**	**100%**

SPECIAL LANDSCAPE AREAS

HYDROZONE #	HYDROZONE NAME								
ALL	ALL	1	1,016,341						100%
		TOTALS	1,016,341						**100%**

MAWA	GALLONS/MONTH	3,339,697
	ACRE FEET/MONTH	10.25
	HCF/MONTH	4,464.83

ETWU	GALLONS/MONTH	2,866,184
	ACRE FEET/MONTH	8.80
	HCF/MONTH	3,831.80

SITE IRRIGATION EFFICIENCY	SITE PLANT FACT0R	MAWA COMPLIANT
81.0%	0.70	YES

ETAF Calculations	
REGULAR LANDSCAPE AREAS	
TOTAL ETAF x AREA	872,241
TOTAL AREA	1,016,341
AVG. ETAF	85.82%

MAWA FORMULA
MAXIMUM APPLIED WATER ALLOWANCE (MAWA) GALLONS PER YEAR
MAWA = (ETo)(0.62)[(LA x 0.45) + (0.55 x SLA)]

ETo = REFERENCE EVAPOTRANSPIRATION

0.55= ET ADJUSTMENT FACTOR

LA=LANDSCAPED AREA (SQUARE FEET)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

ETWU FORMULA
ESTIMATED TOTAL WATER USE (ETWU) GALLONS PER YEAR
ETWU= ((ETO)(.62)(ETAF x LA))

ETo = REFERENCE EVAPOTRANSPIRATION

PF = PLANT FACTOR FOR HYDROZONES

HA = HYDROZONE AREA (SQ.FT)

0.62 = CONVERSION FACTOR (GALLONS/SQ.FT/YR)

IE = IRRIGATION EFFICIENCY (0.81)-BUBBLER/DRIP

IE = IRRIGATION EFFICIENCY (0.75)-ROTORS/SPRAY

APPENDIX K

WETLANDS DELINEATION

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Monte Vista Memorial Gardens City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 2

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): alluvial terrace Local relief (concave, convex, none): concave Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.705165695 Long: -121.758140468 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔ No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔ No _____	
Wetland Hydrology Present?	Yes ✔ No _____	

Remarks:

Shallow basin / swale (SW-A) drained by an ephemeral tributary of Arroyo Las Positas. Soils are moderately to strongly saline / alkaline.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Erodium sp.	8	Yes	FACU
2. Festuca perennis	8	Yes	FAC
3. Hordeum marinum	8	Yes	FAC
4. Psilocarphus brevissimus	1		FACW
5.			
6.			
7.			
8.			
	25 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 75 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Vegetation data of 14 June 2012.

SOIL

Sampling Point: DP 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** ___

Remarks:

alkali soils ; no redox mottling.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✔ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

cattle hoof prints

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Monte Vista Memorial Gardens City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 3

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): alluvial terrace Local relief (concave, convex, none): none Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.705153765 Long: -121.7580947 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Bromus hordeaceus	20	Yes	FACU
2. Erodium sp.	20	Yes	FACU
3. Hordeum marinum	20	Yes	FAC
4. Festuca perennis	15	Yes	FAC
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	35	x 3 =	105
FACU species	40	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	75 (A)		425 (B)

Prevalence Index = B/A = 5.7

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Vegetation data of 14 June 2012.

SOIL

Sampling Point: DP 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/1	97	7.5YR 3/3	3	C	PL		
3-4	10YR 3/1	95	7.5YR 3/2	5	C	PL		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✔ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ **No** ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Monte Vista Memorial Gardens City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 5

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): basin floor Local relief (concave, convex, none): _____ Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.70332359 Long: -121.7603721 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔ No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔ No _____	
Wetland Hydrology Present?	Yes ✔ No _____	

Remarks:

Shallow grassland swale (mapped as SW-C), truncated @ southern end by the Interstate 580 right-of-way. Soils are moderately to strongly saline / alkaline.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Lepidium ?acutidens	15	Yes	FAC
2. Bromus hordeaceus	10	Yes	FACU
3. Festuca perennis	10	Yes	FAC
4. Cressa truxillensis	5		FACW
5. Erodium sp.	5		FACU
6. Hordeum marinum	5		FAC
7. Psilocarphus brevissimus	5		FACW
8.			
	55 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 45 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Vegetation data of 14 June 2012.

SOIL

Sampling Point: DP 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	7.5YR 3/1	> 99	5YR 3/3	< 1	C	PL	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ No ___

Remarks:

Use vegetation, cattle hoofprints to determine hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✔ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

cattle hoof prints.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Monte Vista Memorial Gardens City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 6

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): alluvial terrace Local relief (concave, convex, none): none Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.70335383 Long: -121.760423 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Bromus hordeaceus	30	Yes	FACU
2. Hordeum marinum	15	Yes	FAC
3. Cressa truxillensis	10		FACW
4. Erodium sp.	5		FACU
5. Hypochaeris glabra	5		FACU
6. Centaurea solstitialis	1		--
7. Lepidium ?acutidens	1		FAC
8.			
	67 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 33 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 10	x 2 = 20
FAC species 16	x 3 = 48
FACU species 40	x 4 = 160
UPL species 1	x 5 = 5
Column Totals: 66 (A)	233 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Vegetation data of 14 June 2012.

SOIL

Sampling Point: DP 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1	95	7.5YR 3/4	5	C	PL	silty	
2-8	10YR 3/1						clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✔ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ **No** ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

no cattle hoof prints.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Monte Vista Memorial Gardens City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 8

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): alluvial terrace Local relief (concave, convex, none): concave Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.70371368 Long: -121.7604886 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔ No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔ No _____	
Wetland Hydrology Present?	Yes ✔ No _____	

Remarks:

Very small but distinct depression (mapped as SW-B). Soils are moderately to strongly saline / alkaline.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Hordeum marinum	20	Yes	FAC
2. Plagiobothrys sp.	20	Yes	FACW
3. Polypogon monspeliensis	15	Yes	FACW
4. Festuca perennis	5		FAC
5.			
6.			
7.			
8.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 40 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Vegetation data of 14 June 2012.

SOIL

Sampling Point: DP 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1						loam	
ca. 10	10YR 3/1						clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** ___

Remarks:

Use vegetation & hydrology indicators to determine hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✔ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

many cattle hoof prints, deep

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Monte Vista Memorial Gardens City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 9

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): alluvial terrace Local relief (concave, convex, none): none Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.70370241 Long: -121.7604691 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Bromus hordeaceus	40		FACU
2. Erodium sp.	30		FACU
3. Hordeum marinum	20		FAC
4.			
5.			
	90 = Total Cover		
Herb Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Vegetation data of 14 June 2012.

SOIL

Sampling Point: DP 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1						silty	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

no cattle hoof prints

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Monte Vista Memorial Gardens City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 11

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): alluvial terrace Local relief (concave, convex, none): concave Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.7031996 Long: -121.7610381 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔ No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔ No _____	
Wetland Hydrology Present?	Yes ✔ No _____	

Remarks:

Shallow grassland swale (mapped as SW-D), truncated @ southern end by the Interstate 580 right-of-way. Soils are moderately to strongly saline / alkaline.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Hordeum marinum	20	Yes	FAC
2. Plagiobothrys sp.	20	Yes	FACW
3. Festuca perennis	5		FAC
4. Psilocarphus brevissimus	5		FACW
5. Malvella leprosa	3		FACU
6.			
7.			
8.			
	53 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 47 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Vegetation data of 14 June 2012.

SOIL

Sampling Point: DP 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1						clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** _____

Remarks:

Use vegetation & hydrology indicators to determine hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✔ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

many cattle hoof prints.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Monte Vista Memorial Gardens City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 12

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): basin floor Local relief (concave, convex, none): _____ Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.70320177 Long: -121.7610715 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: _____)			
1. Hordeum marinum	50	Yes	FAC
2. Bromus hordeaceus	20	Yes	FACU
3. Erodium sp.	15		FACU
4.			
5.			
6.			
7.			
8.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species 0	x 1 =	
FACW species 0	x 2 =	
FAC species 50	x 3 =	150
FACU species 35	x 4 =	140
UPL species 0	x 5 =	
Column Totals: 85 (A)		290 (B)

Prevalence Index = B/A = 3.4

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Vegetation data of 14 June 2012.

SOIL

Sampling Point: DP 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 3/2						silty	+ undecomposed organic
2-5	7.5YR 3/1		**				silty	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

** Reddened mineral grains; no redox.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

no cattle hoof prints.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Monte Vista Memorial Gardens City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 14

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): abandoned stream channel Local relief (concave, convex, none): concave Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.70288496 Long: -121.7643229 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

bottom of old segment of Arroyo Las Positas stream channel, abandoned by construction of Interstate 580 (mapped as SW-E). Soils are moderately to strongly saline / alkaline.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Distichlis spicata	45	Yes	FAC
2. Polypogon monspeliensis	35	Yes	FACW
3. Malvella leprosa	2		FACU
4.			
5.			
6.			
7.			
8.			
	82 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 18 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Vegetation data of 14 June 2012.

SOIL

Sampling Point: DP 14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/1						clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ No ___

Remarks:

Use vegetation & hydrology to determine hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✔ Surface Water (A1)
- ___ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ✔ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✔ No ___ Depth (inches): 4

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ✔ No ___ Depth (inches): 0 (surface)

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Many cattle hoof prints. Ponded water seen in deepest part of abandoned channel, along fenceline.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Monte Vista Memorial Gardens City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 15

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): abandoned floodplain Local relief (concave, convex, none): none Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.70292117 Long: -121.7642969 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Distichlis spicata	20	Yes	FAC
2. Centaurea ?iberica	20	Yes	FACU
3. Festuca perennis	5		FAC
4. Lotus corniculatus	5		FAC
5. Malvella leprosa	5		FACU
6.			
7.			
8.			
	55 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 45 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 =
FACW species 0	x 2 =
FAC species 30	x 3 = 90
FACU species 25	x 4 = 100
UPL species 0	x 5 =
Column Totals: 55 (A)	190 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Vegetation data of 14 June 2012.

SOIL

Sampling Point: DP 15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2						clay loam	
2-10	10YR 3/1	45	7.5YR 4/6	5	C	PL	clay loam	
	10YR 2/1	30						
	10YR 6/2	20						
10-12	7.5YR 3/1							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ **No** ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Las Colinas Road (APN 902-0008-005-05) City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 36

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): alluvial terrace Local relief (concave, convex, none): concave Slope (%): < 2 %

Subregion (LRR): LRR C Lat: 37.70387112 Long: -121.7552754 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Appears to be an artificial drainage channel (mapped as SW-K), but must be old because the willow trees lining it are quite mature. Hydrologic input by means of culvert under driveway to the east.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix laevigata	100	Yes	FACW
2.			
3.			
4.			
	100 = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Anemopsis californica	60	Yes	OBL
2. Bolboschoenus robustus	30	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Vegetation data of 21 Jan. 2016.

SOIL

Sampling Point: DP 36

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 3/1						clay	
4-8	10YR 3/2	98	7.5YR 3/2	2	C	PL	clay	
8-11	10YR 4/1	> 94	10YR 4/3	5	C	PL	clay	
			10YR 3/3	< 1	C	PL	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✔ Surface Water (A1)
- ___ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✔ No _____ Depth (inches): 6

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ✔ No _____ Depth (inches): 0 (surface)

Wetland Hydrology Present? Yes ✔ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Ponded water seen in deepest part of channel (close to sampling point).

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Las Colinas Road (APN 902-0008-005-05) City/County: Livermore / Alameda Sampling Date: 12/12/2018

Applicant/Owner: Mike Kliment State: CA Sampling Point: DP 37

Investigator(s): R. D. Stone Section, Township, Range: none

Landform (hillslope, terrace, etc.): upper part of channel bank Local relief (concave, convex, none): none Slope (%): 15 %

Subregion (LRR): LRR C Lat: 37.70391711 Long: -121.7552793 Datum: NAD 83

Soil Map Unit Name: Clear Lake clay, drained, 0 to 2 percent slopes, MLRA 14 NWI classification: Hydric

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Bromus hordeaceus	70	Yes	FACU
2. Phalaris aquatica	20	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

Vegetation data of 21 Jan. 2016.

SOIL

Sampling Point: DP 37

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	7.5YR 3/1						clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

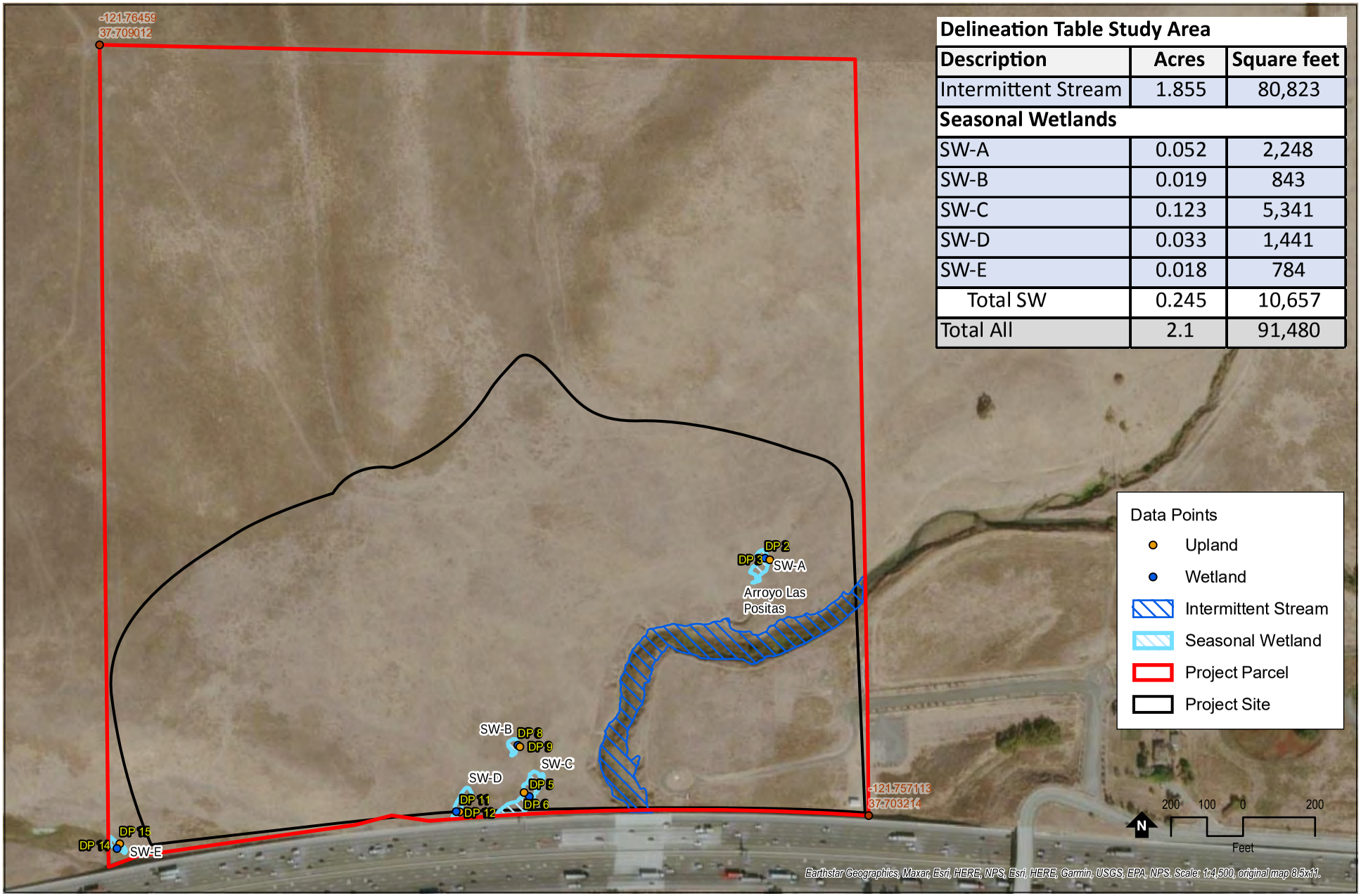
Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



Delineation Table Study Area

Description	Acres	Square feet
Intermittent Stream	1.855	80,823
Seasonal Wetlands		
SW-A	0.052	2,248
SW-B	0.019	843
SW-C	0.123	5,341
SW-D	0.033	1,441
SW-E	0.018	784
Total SW	0.245	10,657
Total All	2.1	91,480

Source: Barnett Environmental 2021

Figure 3.3-4

Project Area Wetlands and "Other Waters Of The U.S."

RCH GROUP
planning & environmental consulting

National temperature and precipitation maps are available from February 2001 to April 2022. Please note that not all products are available for all dates and time periods.

Products: Select All

County Maximum Temperature Ranks
County Minimum Temperature Ranks
County Precipitation Ranks
CONUS Gridded Average Temperature Ranks
CONUS Gridded Maximum Temperature Ranks
CONUS Gridded Minimum Temperature Ranks
CONUS Gridded Precipitation Ranks

Products Filter

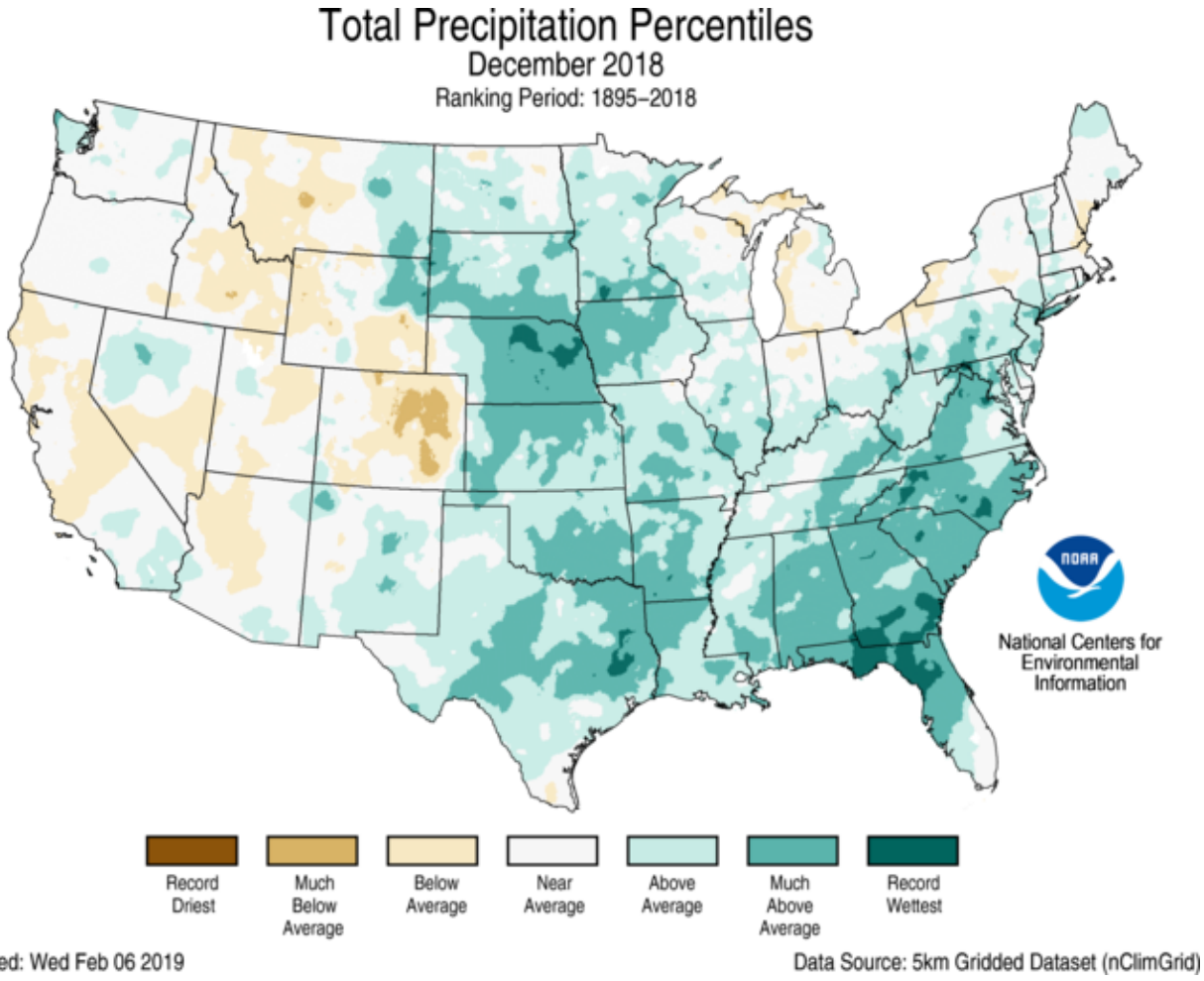
Product Type
- [x] Ranks
- [ ] Anomalies
- [ ] Absolute Values
- [ ] Percent of Normal

Parameter
- [ ] Temperature
- [ ] Precipitation

Region
- [x] CONUS
- [ ] Alaska

Year: 2018 Month: December Timescale: 1-Month View

December 2018


Total Precipitation Percentiles
December 2018
Ranking Period: 1895–2018
National Centers for Environmental Information
Record Driest
Much Below Average
Below Average
Near Average
Above Average
Much Above Average
Record Wettest
Created: Wed Feb 06 2019
Data Source: 5km Gridded Dataset (nClimGrid)

National temperature and precipitation maps are available from February 2001 to April 2022. Please note that not all products are available for all dates and time periods.

Products: Select All

County Maximum Temperature Ranks
County Minimum Temperature Ranks
County Precipitation Ranks
CONUS Gridded Average Temperature Ranks
CONUS Gridded Maximum Temperature Ranks
CONUS Gridded Minimum Temperature Ranks
CONUS Gridded Precipitation Ranks

Products Filter

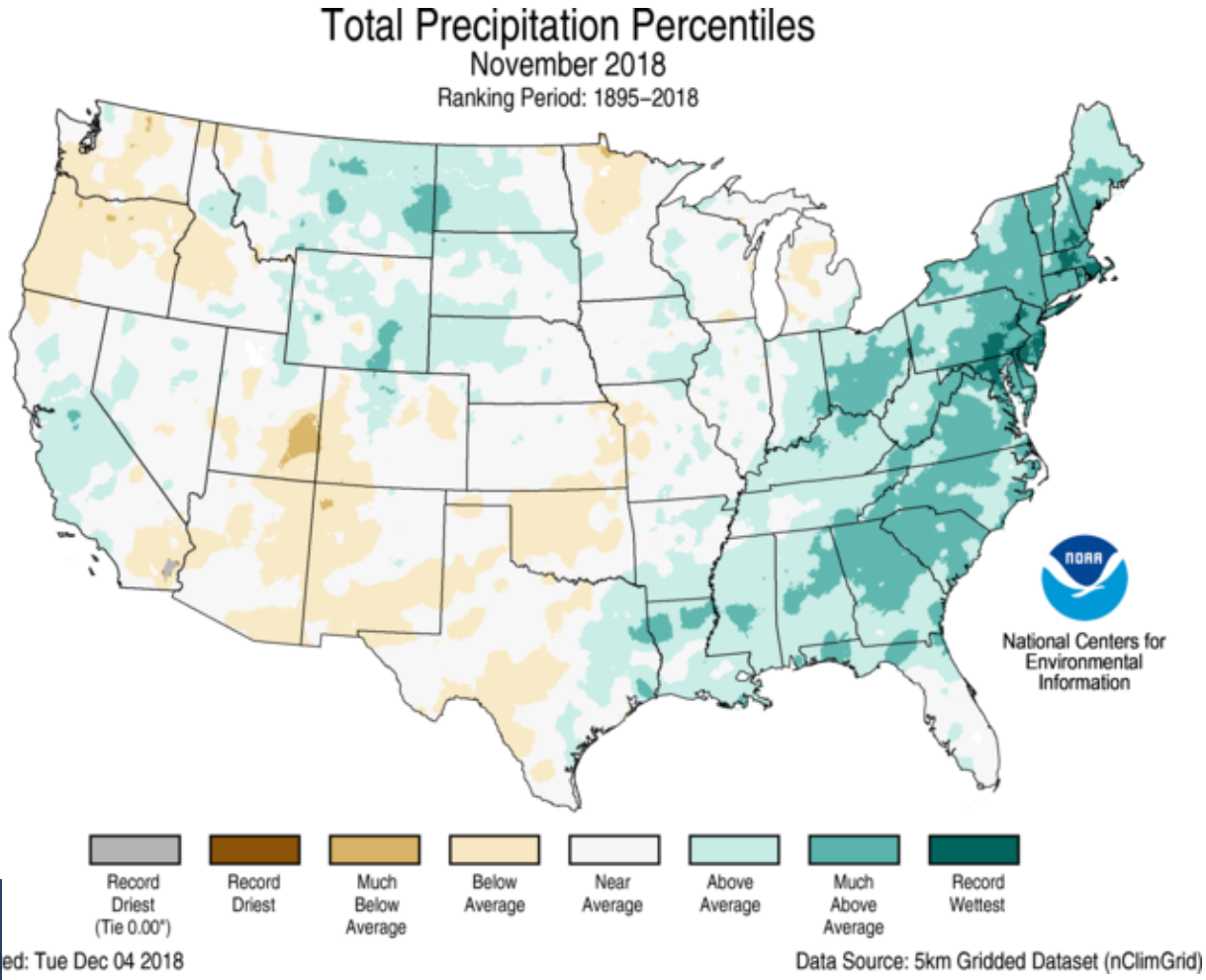
Product Type
- [x] Ranks
- [ ] Anomalies
- [ ] Absolute Values
- [ ] Percent of Normal

Parameter
- [ ] Temperature
- [ ] Precipitation

Region
- [x] CONUS
- [ ] Alaska

Year: 2018 Month: November Timescale: 1-Month View

November 2018


Total Precipitation Percentiles
November 2018
Ranking Period: 1895–2018
National Centers for Environmental Information
Record Driest (Tie 0.00")
Record Driest
Much Below Average
Below Average
Near Average
Above Average
Much Above Average
Record Wettest
Created: Tue Dec 04 2018
Data Source: 5km Gridded Dataset (nClimGrid)

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APPENDIX L

ENGEO HYDRAULIC MODEL LETTER

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Project No.
15426.000.000

October 10, 2022
Revised October 21, 2022

RCH Group, Inc.
Attention: Paul Miller
P.O. Box 516
Rancho Murieta, CA 95683

Subject: Monte Vista Memorial Gardens
3656 Las Colinas Road
Livermore, California

RESPONSE TO ALAMEDA COUNTY ZONE 7 WATER AGENCY COMMENTS REGARDING FLOOD MANAGEMENT

Dear Mr. Miller:

We are pleased to provide this response to the comments provided by Zone 7 Water Agency (Zone 7) regarding Arroyo Las Positas flood management. Their comments were included as part of the EIR process for the Monte Vista Memorial Gardens project in Livermore, California.

This letter responds to the following italicized comments from Zone 7.

FLOOD MANAGEMENT/RUNOFF

1. ***Floodplain Impacts.*** *The EIR relies on outdated FEMA analysis for floodplain delineation. Zone 7 provided an updated 100-year flood delineation to the Developer and the Community Development Agency in August 2019. Zone 7's hydraulic analysis of the Livermore-Amador Valley showed a culvert restriction at I-580 on the Arroyo Las Positas, causing backwater conditions which would inundate the Phase 1 area of the Project. Zone 7 recommends mitigation based on the more recent hydraulic modeling from Zone 7, rather than FEMA's model.*

2. ***Floodplain Impacts.*** *On P. 3.8-13, regarding whether Project increases risk of flood hazards, the DEIR ignores previously provided floodplain delineation of the Arroyo Las Positas performed by Zone 7. Phase 1 would be constructed within an area Zone 7 had identified as a floodplain. Construction within the floodplain would displace the flooding in the surrounding and downstream areas and requires mitigation for those impacts.*

3. ***Arroyo Las Positas.*** *The DEIR indicates no plans for flood protection or related improvements within the Arroyo Las Positas, which suggests that no considerations have been made to incorporate any of Zone 7's previous suggestions to the Developer to improve the Arroyo las Positas. Zone 7 again urges that improvements to the Arroyo could be considered as mitigation for floodplain impacts.*

We acknowledge that the Zone 7 model is more recent than what was used to delineate the FEMA flood insurance rate map. ENGEO prepared a separate hydraulic analysis for comparison purposes using Zone 7 flow rates. Based on the results of our model, it is our opinion that the Zone 7 model is overstating the limits of flooding and the backwater condition at I-580. ENGEO prepared a steady state hydraulic model using HEC-RAS software by the Army Corps of Engineers to evaluate the capacity of the bridge and creek channel along the subject reach. Our model assumed the 100-year peak flow to be 6,653 cfs, based on the flow rates from the Zone 7 model. The Arroyo Las Positas flows under the interstate through a bridge that spans beyond the banks of the creek. It does not flow through a culvert. The bridge dimensions were approximated using data from the Zone 7 model. The topographic data we used for the model was from a field survey completed by Hogan Engineering on September 20, 2022. Figure 1, Earthwork Exhibit, shows the location of fill proposed on Phase 1 and the cross sections used for hydraulic analysis.

Based on the results of the ENGEO model, the 100-year peak flow does not result in conditions that cause the creek to overtop the banks and flood Phase 1. This is consistent with FEMA mapping. The bridge has the capacity to convey the 100-year flows with only a slight backwater condition at the upstream side of the bridge. The increase in the water surface at the bridge does not result in the creek backing up and flooding the site during the 100-year storm.

The results of the HEC RAS model are provided in Attachment A. In Attachment A, there is a water profile of the creek and cross sections of the creek with the 100-year water surface shown.

The channel on the far right of the cross section represents the wetland area to the east of Phase 1. The results illustrate that 100-year flood elevation does not overtop the banks, as stated by Zone 7.

On October 24, 2021, a storm occurred in the region that was larger than the 100-year storm event, and the site did not flood. This fact supports our opinion that the Zone 7 model is overstating flooding. The Mallory Ridge Rain Gauge, located nearby in Danville, recorded 5.18 inches of rain between October 24 and October 25, 2021. Per the NOAA Precipitation Frequency Data Server, the 100-year rainfall depth in Livermore is 4.19 inches. It rained almost an inch more than a 100-year rainfall event. The rainfall depth recorded was more than 200-year event, and only slightly less than the 500-year storm, and no flooding was observed on the site. This is demonstrable evidence that the Zone 7 model overstates the flooding potential at the site. The precipitation data is provided in Attachment B.

The fact that the October 24, 2021, storm did not cause flooding, supports the results of our model and is consistent with the results of the FEMA mapping. Therefore, it is our opinion that requiring mitigation based on the results of the Zone 7 Model is inappropriate. Based on our model, and real-world anecdotal evidence, the proposed improvements are not within the 100-year flood plain. The Zone 7 study is in draft form and would benefit from additional calibration efforts and a comprehensive peer review to confirm its accuracy before being considered as the basis for mitigation.

The site design has proposed grades elevated at least 1 foot above 500-year flood water elevation to ensure that the site improvements are raised above potential flood water for both the 100- and 500-year scenarios. The site according to the Flood Insurance Rate Map is subject to potential flooding up to 1 foot in depth during the 500-year event.

We acknowledge that filling the Phase 1 site may result in a minor increase in the floodwater elevation and displace flows onto the Phase 2 side of the creek.

To offset the loss of floodplain in the 500-year special flood hazard area on Phase 1, the project proposes to excavate the floodplain on the opposite side of the creek to increase the channel capacity. Figure 1, Earthwork Exhibit, shows the area that will be excavated to mitigate for the loss of floodplain.

As a result, the creek will have increased capacity, which will decrease peak flows to the pre project levels and lower the water surface to that of the existing condition delineated by FEMA. Figure 2, Creek Cross Sections, provides an illustration of how the proposed grading relates to floodwater elevations.

Section A-A' on Figure 2, is a cross section of the creek and adjacent floodplains upstream of where the excavation is proposed. Section B-B' is a cross section with the expanded flood plain shown. The excavation area will be the same as the area of fill to be placed within the 500-year special flood hazard area, resulting in a cross-sectional area with at least as much capacity as what currently exists.

We strived to perform our professional services in accordance with generally accepted principles and practices currently employed in the area; there is no warranty, express or implied. If you have any questions or comments regarding this letter, please contact us and we will be glad to discuss them with you.

Sincerely,

ENGEO Incorporated

Sean Cleary, PE

Josef J. Tootle

sc/jjt/ar

Attachments: Figures 1 and 2
Appendix A – Results of Hydraulic Models
Appendix B – Precipitation Data

FIGURES

ARROYO LAS POSITAS

FILL AREA FOR IMPROVEMEMTS

robert vidalin, ET AL
apn: 902-008-005-09

PHASE 1

PHASE 2

BLDG PADS

6+95

5+83

5+07

3+24

2+44

0+66

A

A'

B

B'

EXCAVATION AREA FOR EXPANDING CREEK CAPACITY AND DETENTION

APPROXIMATE LOCATION OF EXISTING WETLANDS.

490

500

510

520

480

EARTHWORK MAP

SCALE=1'=80'

EXPLANATION

- FILL AREA FOR IMPROVEMENTS
- CUT AREA FOR INCREASING CHANNEL CAPACITY AND DETAINING FLOWS
- HEC RAS HYDRAULIC CROSS SECTIONS
- A — A' CREEK CROSS SECTION (SEE SHEET 2)

N

0 80
FEET

BASE MAP SOURCE: UNKNOWN

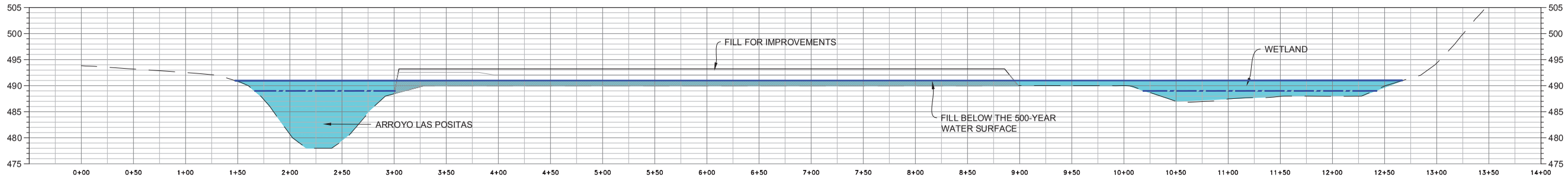
ENGEO Expect Excellence

EARTHWORK EXHIBIT
MONTE VISTA MEMORIAL GARDENS
ALAMEDA COUNTY, CALIFORNIA

PROJECT NO.: 15426.000.000
SCALE: AS SHOWN
DRAWN BY: SPC CHECKED BY: JTT

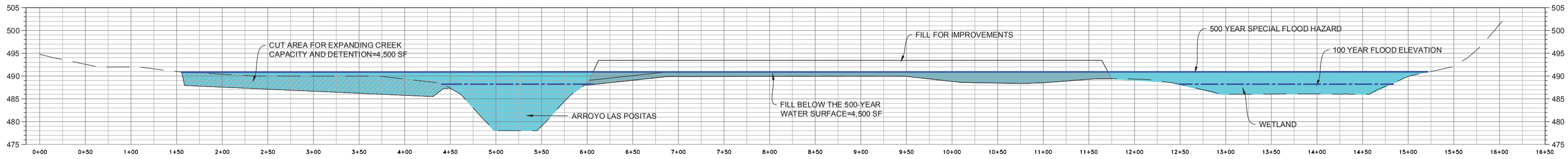
FIGURE NO. 1

ORIGINAL FIGURE PRINTED IN COLOR



A — CREEK CROSS SECTION A-A'

HORIZONTAL SCALE 1"=50'; HOR:VERT=5:1



B — CREEK CROSS SECTION B-B'

HORIZONTAL SCALE 1"=50'; HOR:VERT=5:1

EXPLANATION

- 100-YEAR FLOODPLAIN
- 500-YEAR SPECIAL FLOOD HAZARD PER FLOOD INSURANCE RATE MAP

BASE MAP SOURCE: UNKNOWN

ENGEO — Expect Excellence

CREEK CROSS SECTIONS
MONTE VISTA MEMORIAL GARDENDS
ALAMEDA COUNTY, CALIFORNIA

PROJECT NO.: 15426.000.000 | FIGURE NO.: 2
SCALE: AS SHOWN
DRAWN BY: SPC | CHECKED BY: JTT

ORIGINAL FIGURE PRINTED IN COLOR

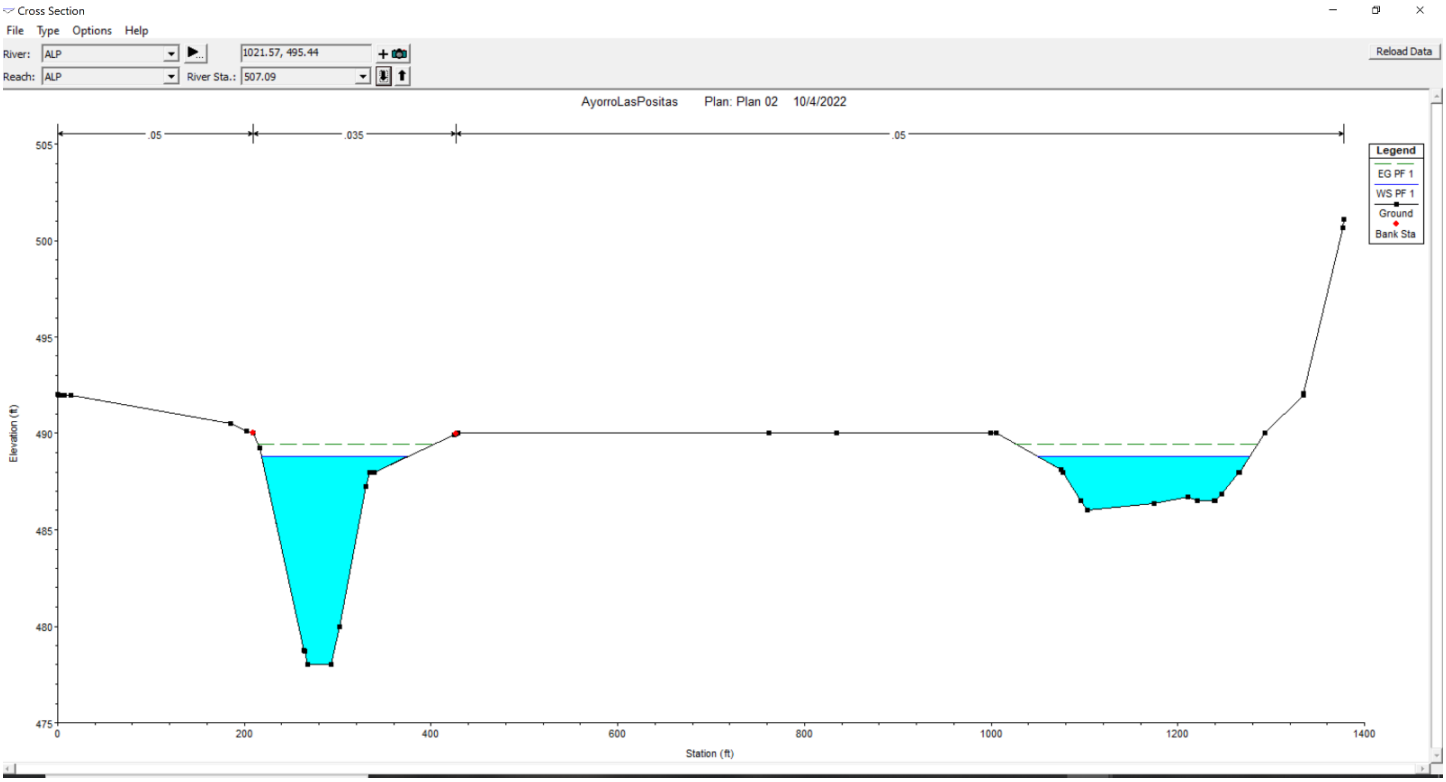
APPENDIX A

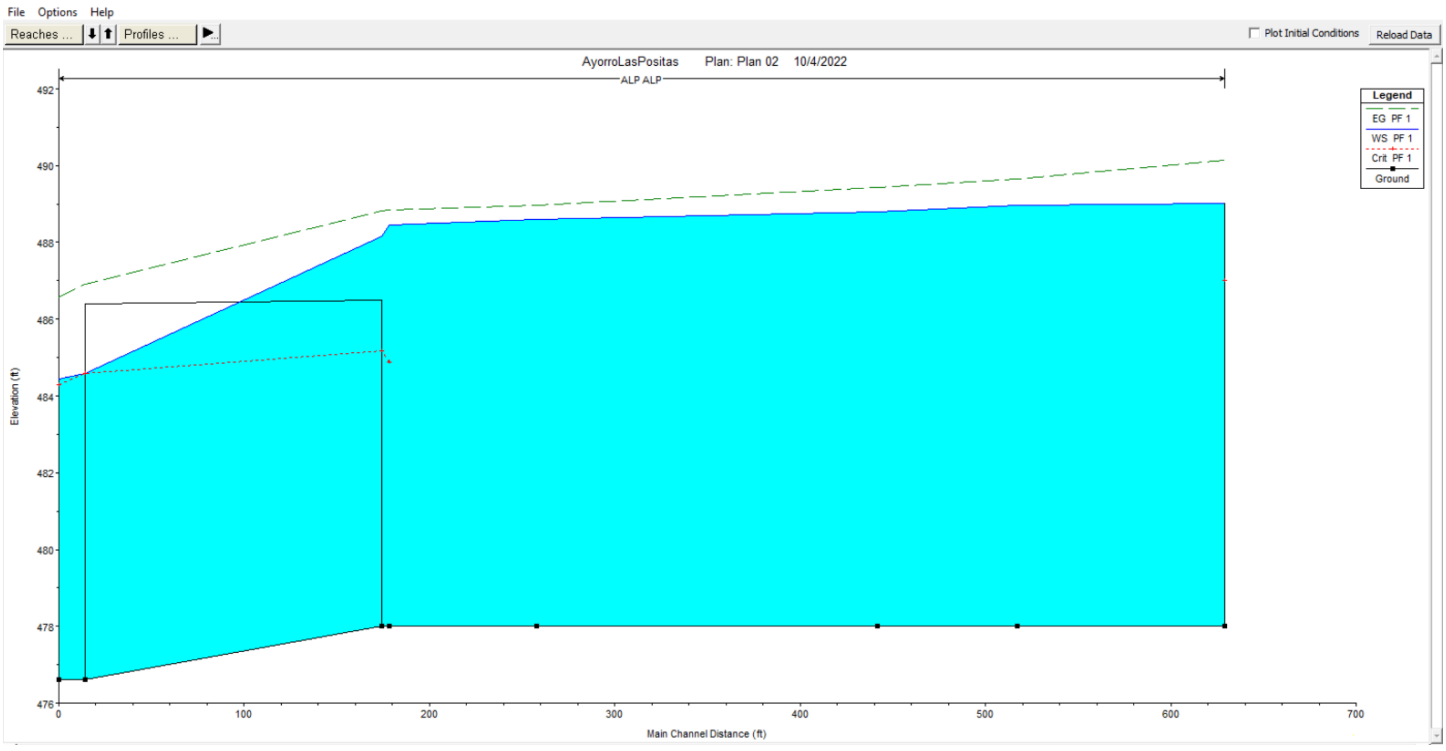
Results of Hydraulic Models

15426.000.000
October 10, 2022
Revised October 21, 2022

APPENDIX A

RESULTS OF HYDRUALIC MODELS





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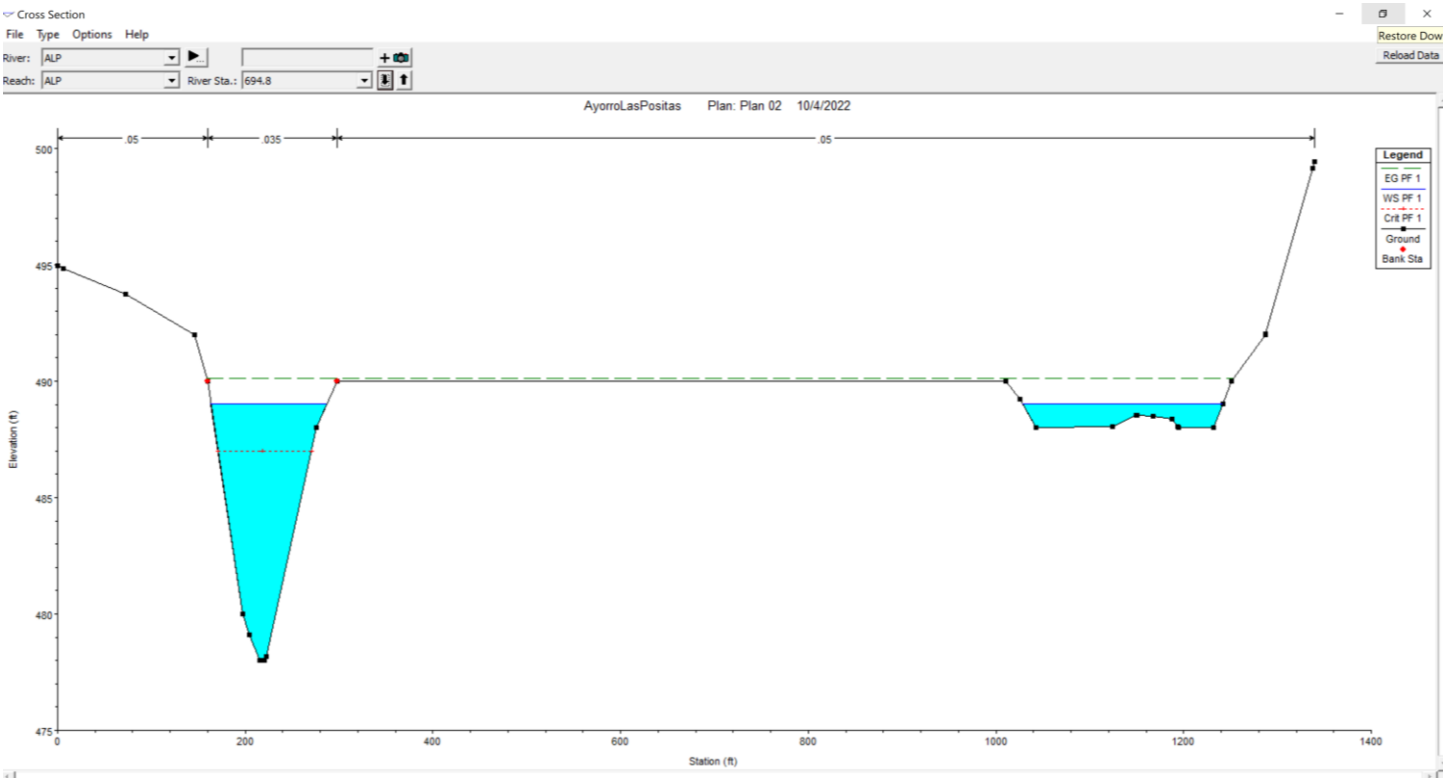
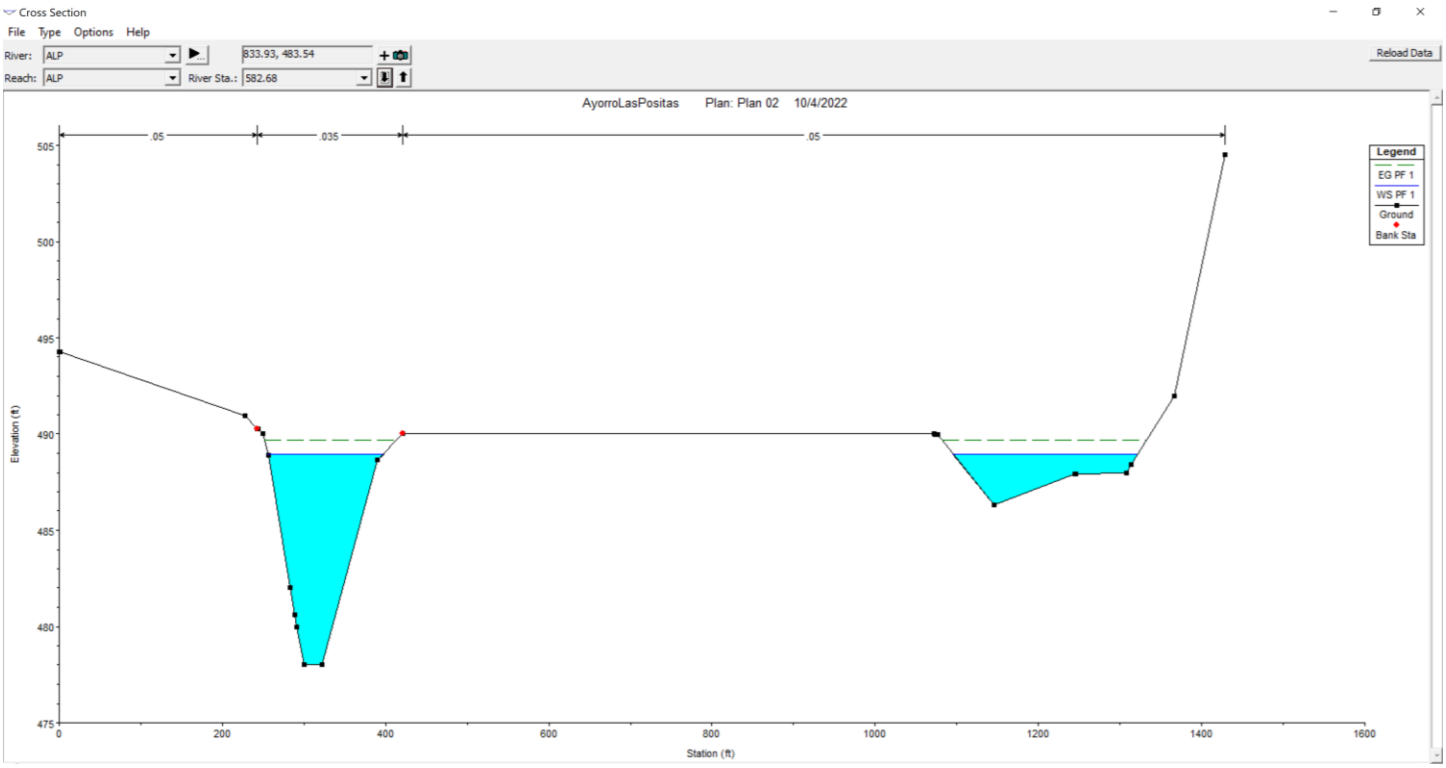
October 10, 2022
Revised October 21, 2022

APPENDIX A

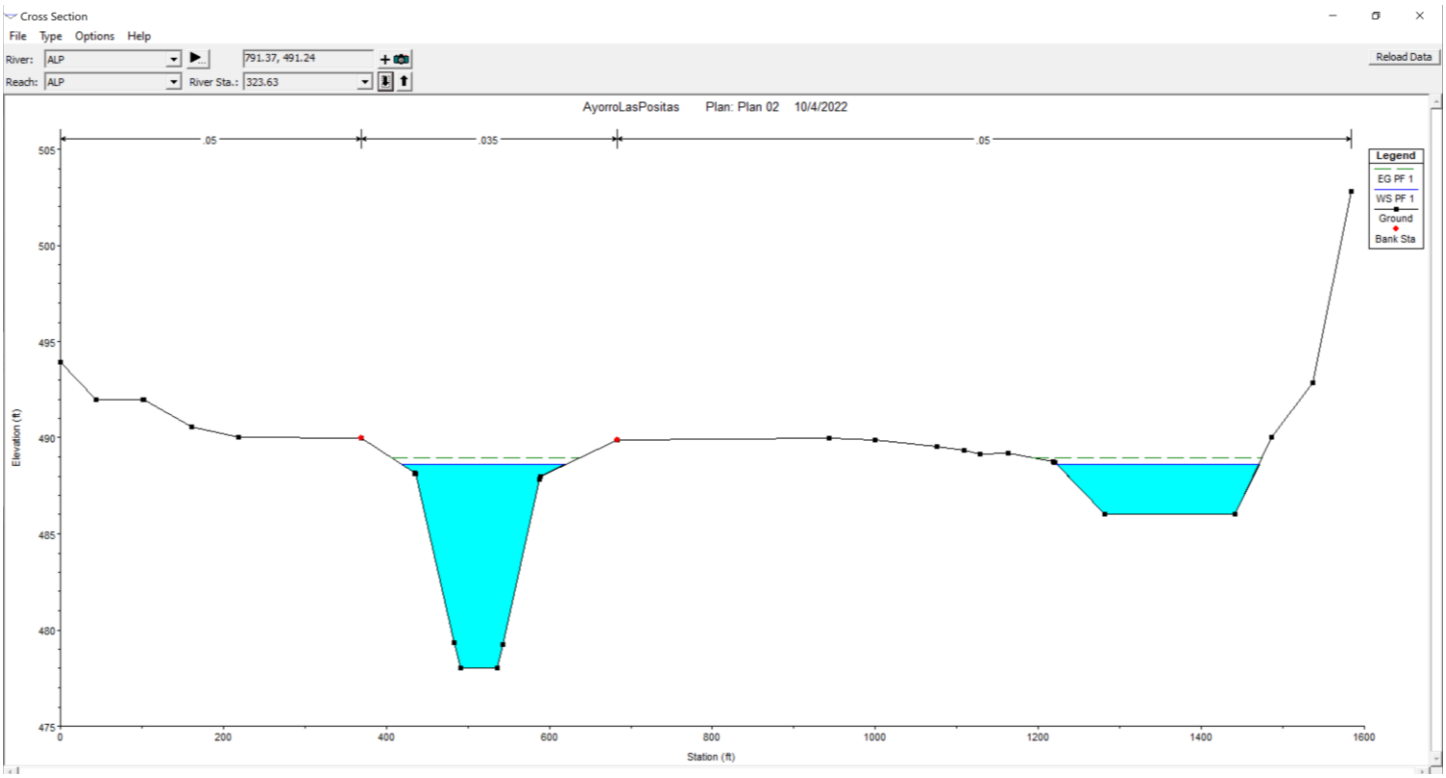
RESULTS OF HYDRUALIC MODELS

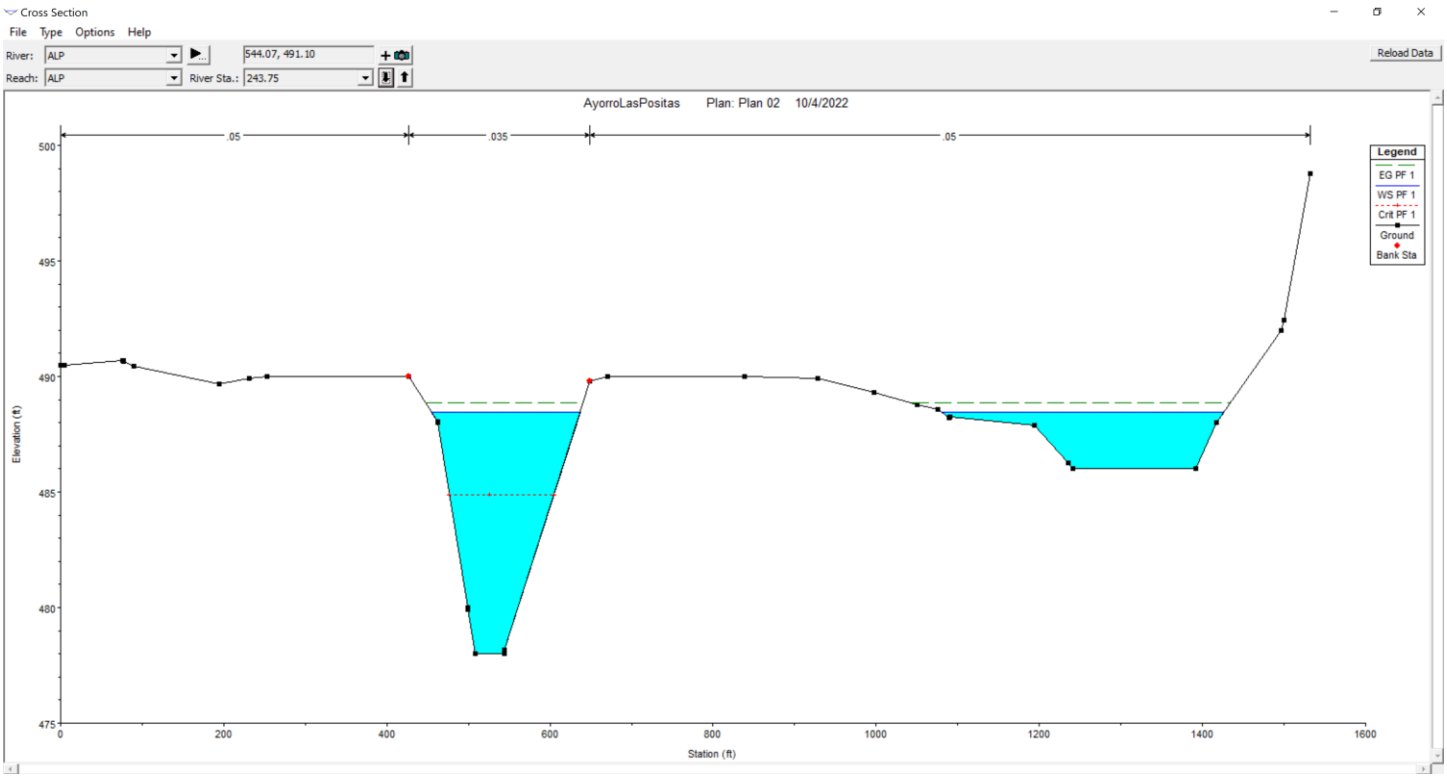




APPENDIX A

RESULTS OF HYDRUALIC MODELS





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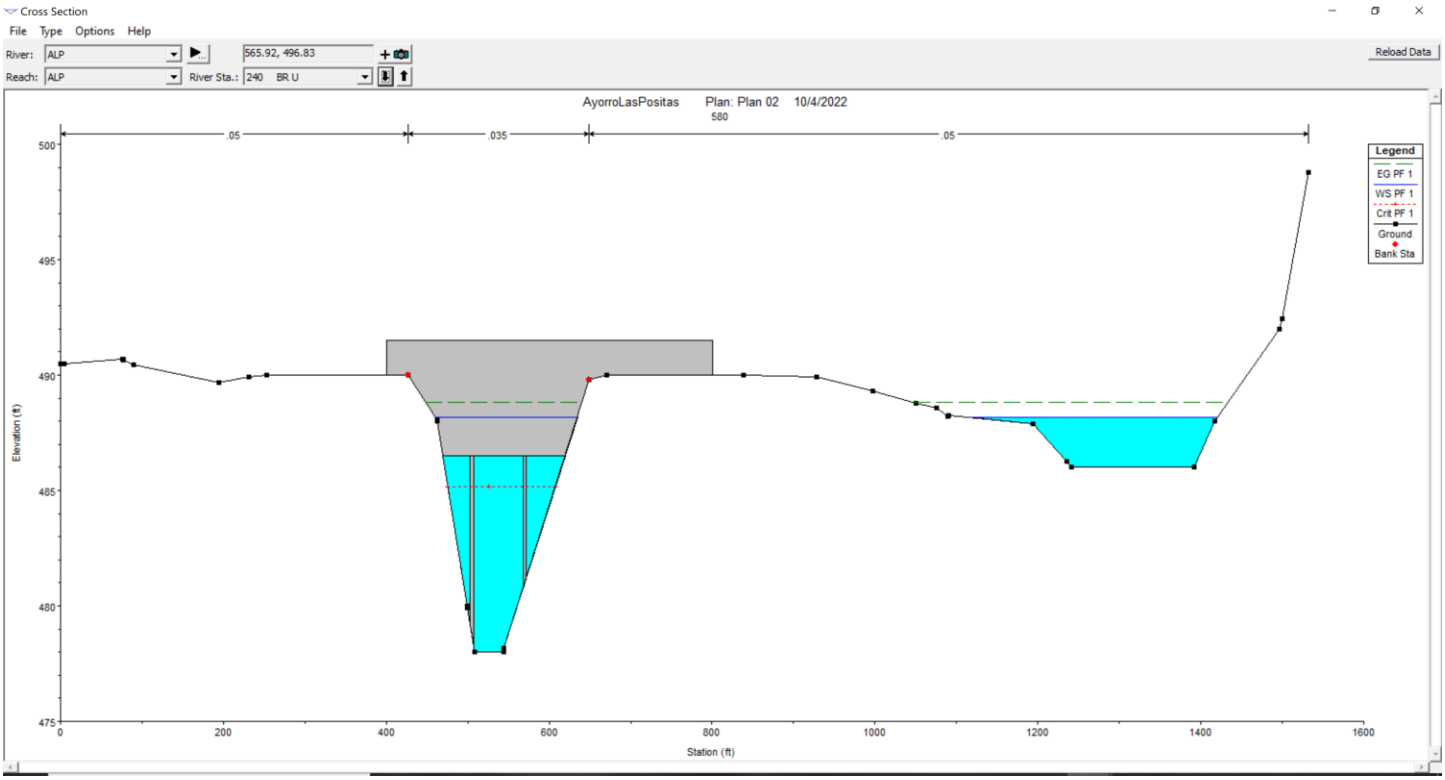
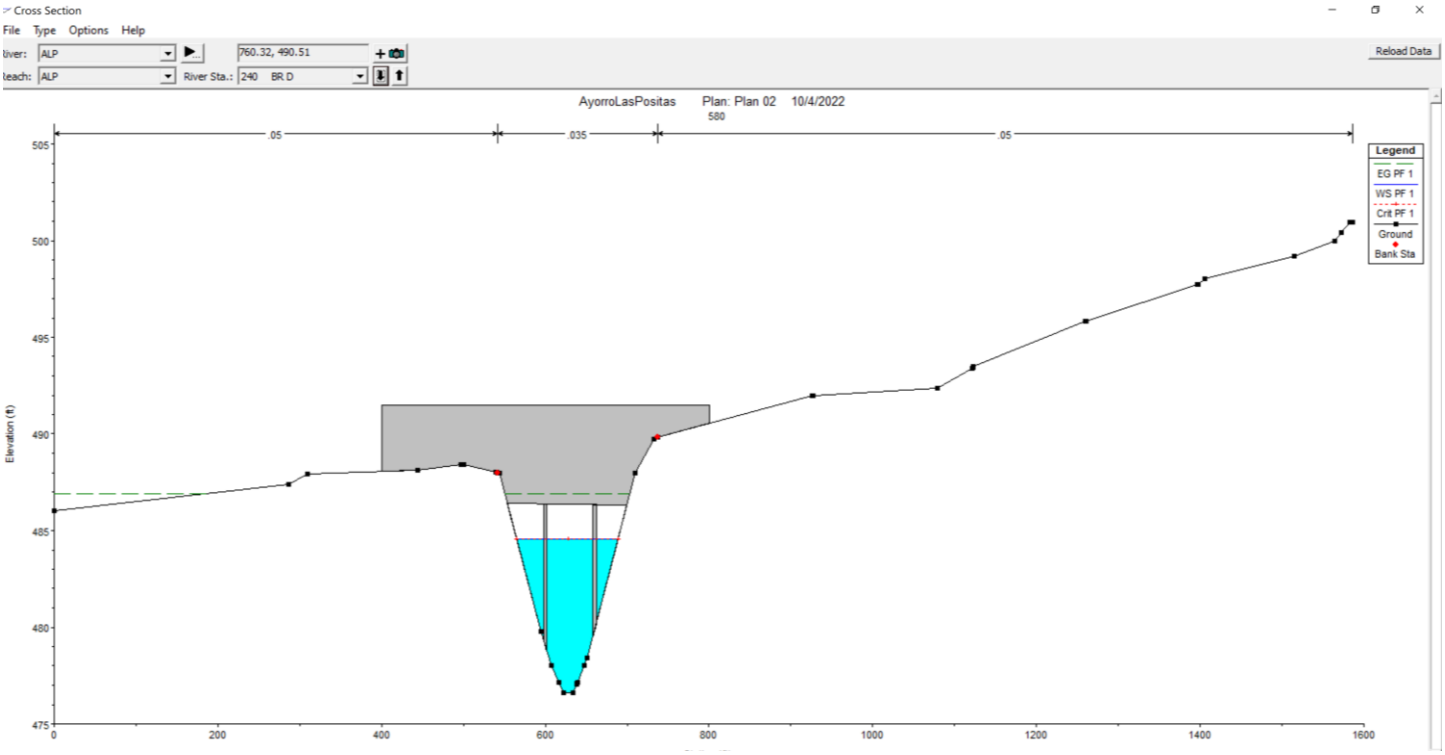
RESULTS OF HYDRUALIC MODELS

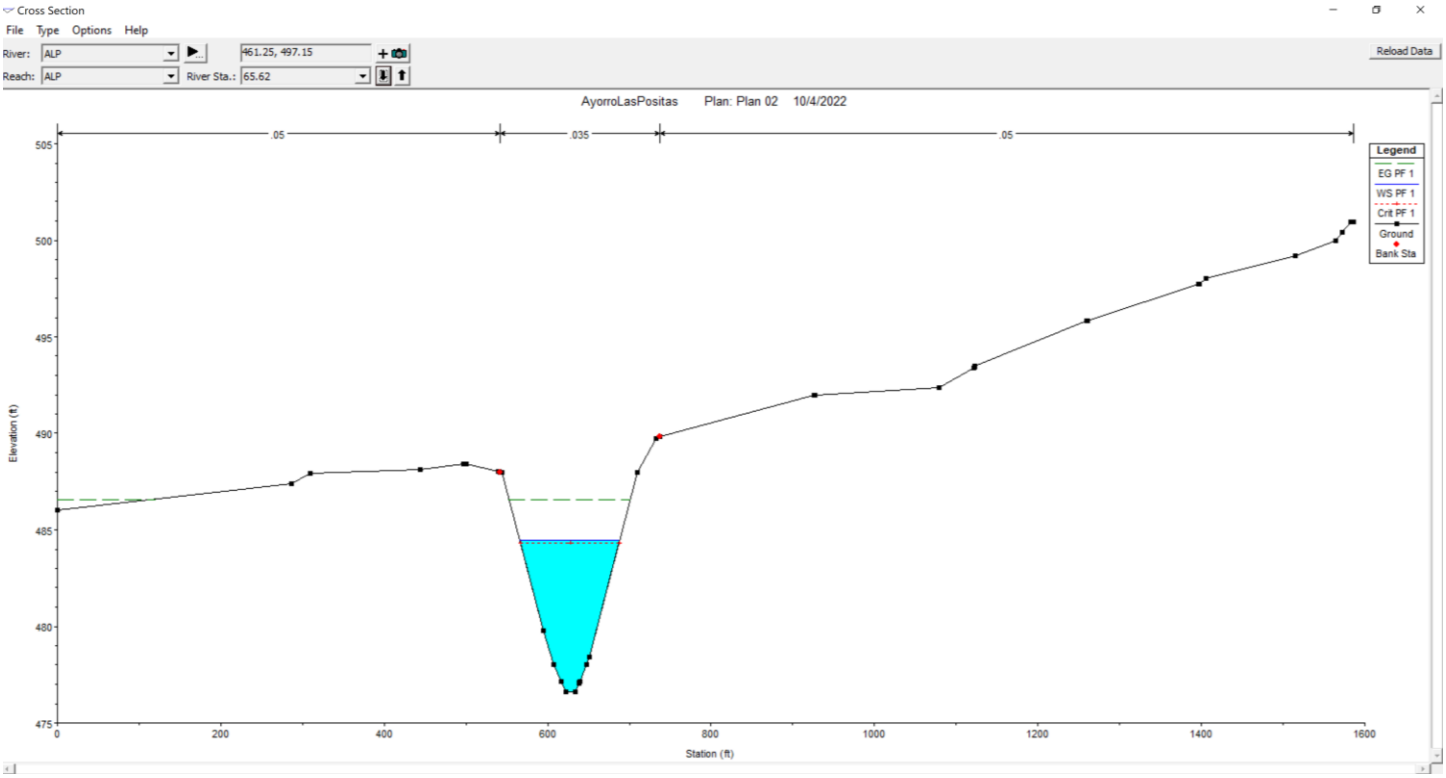




15426.000.000
October 10, 2022
Revised October 21, 2022

APPENDIX A

RESULTS OF HYDRUALIC MODELS



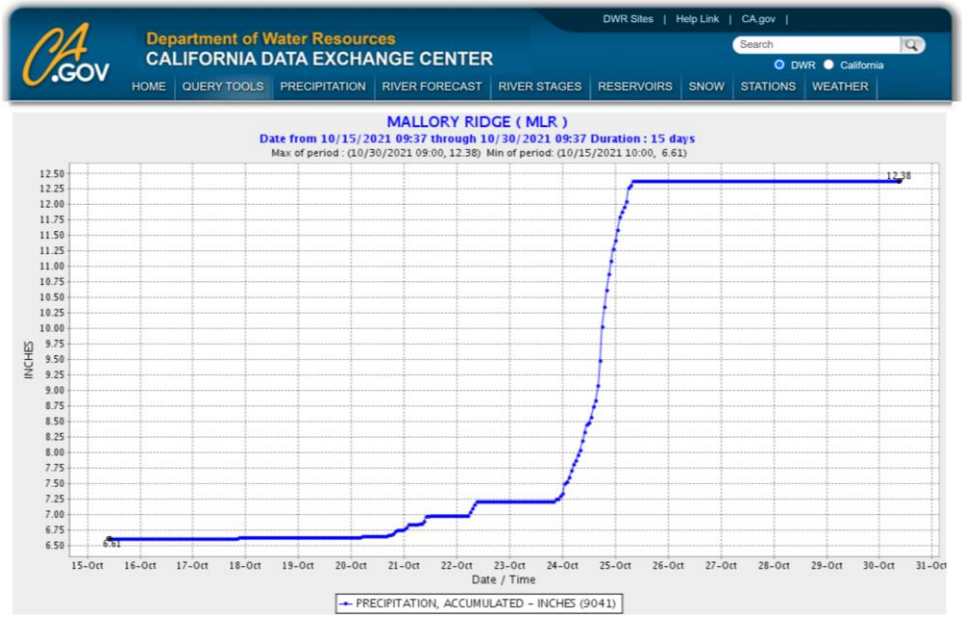
APPENDIX B

Precipitation Data

15426.000.000
October 10, 2022
Revised October 21, 2022

APPENDIX B

PRECIPITATION DATA



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