DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

THE FIELDS AT ALAMO CREEK PROJECT

SCH# 2023030657
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Prepared for:

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Supplemental Environmental Impact Report

The Fields at Alamo Creek

FERBUARY 2024

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Agricultural Buffer
ABAG	Association of Bay Area Governments
ADWF	Average Dry Weather Flow
AFY	Acre-Feet per Year
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
APN	Assessor's Parcel Number
BMP	Best Management Practices
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
DOC	Department of Conservation
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
ECAS	Energy Conservation Action Strategy
EDFZ	Electricity Demand Forecast Zones
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
EWWTP	Easterly Wastewater Treatment Plant
GHG	Greenhouse Gas
HCP	Habitat Conservation Plan
HOA	Homeowners Association
LAFCO	Local Agency Formation Commission
LOS	Level of Service
MGD	Million Gallons per Day
MS4	Municipal Separate Storm Sewer System
MSR	Municipal Service Review
NAHC	Native American Heritage Commission
NBA	North Bay Aqueduct
NOP	Notice of Preparation
NO_x	Oxides of Nitrogen
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
OS	Open Space
PF	Public Facilities
PG&E	Pacific Gas and Electric Company

Acronym/Abbreviation	Definition
PM_{10}	Coarse Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
PPD	Pounds Per Person Per Day
RASS	Residential Appliance Saturation Survey
RMD	Residential Medium Density
ROG	Reactive Organic Gases
RVS	Recology Vacaville Solano
SB	Senate Bill
SDMP	Storm Drain Master Plan
SEIR	Supplemental Environmental Impact Report
SID	Solano Irrigation District
SOI	Sphere of Influence
SSMP	Sewer System Management Plan
SVAB	Sacramento Valley Air Basin
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TAZ	Traffic Analysis Zone
TDM	Transportation Demand Management
UGB	Urban Growth Boundary
UWMP	Urban Water Management Plan
VFD	Vacaville Fire Department
VMT	Vehicle Miles Traveled
WDR	Waste Discharge Requirements
YSAQMD	Yolo-Solano Air Quality Management District

ES Executive Summary

This chapter provides a summary of the Draft Supplemental Environmental Impact Report (SEIR) for the Fields at Alamo Creek project ("proposed project"). Included in this summary are areas of known controversy and issues to be resolved, an overview of those issues adequately addressed in the *Farm at Alamo Creek Specific Plan Environmental Impact Report* (SCH No. 2017062068) that was certified in November 2018 ("2018 EIR"), a summary of all project impacts and associated mitigation measures, and a statement of the ultimate level of significance after mitigation is applied.

ES.1 Document Purpose

This Draft SEIR was prepared by the City of Vacaville ("City"), as lead agency, and updates the analysis in the 2018 EIR to inform decision makers, public agencies, and the public of the potential significant environmental effects associated with the proposed project. This SEIR has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code, Section 21000 et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines; 14 CCR 15000 et seq.) published by the Natural Resources Agency of the state of California.

In 2018, the City approved the Farm at Alamo Creek Specific Plan ("Specific Plan") and certified the 2018 EIR. The Specific Plan includes development of 210.5 acres of land located at the northeast corner of Leisure Town Road (future Jepson Parkway) and Elmira Road. The Specific Plan includes 584 detached single-family homes and 184 duet homes for a total of 768 homes, over 45 acres of various parks, trails, and open space, 7.4 acres for neighborhood commercial use, a landscaped detention basin, a new street network, and roadway improvements. The 2018 EIR concluded that development of the Specific Plan would result in significant and unavoidable impacts associated with operational air emissions due to the increase in reactive organic gases (ROG) and nitrogen dioxide (NO_x), in addition to level of service traffic impacts at three intersections. The remaining impacts could all be reduced to less than significant with mitigation.

On December 28, 2018, amendments were made to the sample environmental checklist within Appendix G of the CEQA Guidelines to include energy and wildfire hazards as resource topics. Although the 2018 EIR did not include standalone chapters for the analysis of energy and wildfire impacts, these topics were discussed in various sections of the 2018 EIR such as in Chapter 5, CEQA Considerations (p. 5-6) and within the Initial Study (Appendix B to the 2018 EIR). Additionally, in 2020, the CEQA Guidelines were updated to remove level of service as the metric to evaluate transportation impacts and replaced it with vehicle miles traveled (VMT).

The Farm at Alamo Creek Tentative Map shows an intent to annex and develop the proposed project area as an extension of the Specific Plan. The purpose of this Draft SEIR is to analyze proposed project components that were not previously evaluated in the 2018 EIR (including the Initial Study included as Appendix B to the 2018 EIR) and to identify potential effects on the environment resulting from any "changed condition" (i.e., changed circumstances, project changes, or new information of substantial importance) that may result in environmental impact significance conclusions that the lead agency has determined may be significant. The analysis in Section ES.5 below summarizes the issue areas addressed in the 2018 EIR that have adequately evaluated impacts associated with the proposed project. It has been determined that the proposed project would not result in any new significant impacts or more severe impacts with regard to the following issue areas: aesthetics, agriculture and forestry resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous

materials, hydrology and water quality, mineral resources, noise, population and housing, public services, recreation, tribal cultural resources, and wildfire. The issue areas where there could be new impacts not previously evaluated in the 2018 EIR, or the severity of the impact may be greater than previously analyzed, include air quality, land use and planning, utilities and service systems, and transportation. Therefore, this Draft SEIR evaluates those issue areas in detail and recommends feasible mitigation measures (including prior mitigation measures included in the 2018 EIR still applicable to the proposed project) that could reduce or avoid significant environmental impacts.

ES.2 Project Location

The proposed project site is located within unincorporated Solano County ("County") immediately adjacent to the Specific Plan boundary and the city limits to the south and west, Hawkins Road to the north, and undeveloped agricultural land within the County to the east. Leisure Town Road is located approximately 0.5 miles to the west of the site.

ES.3 Project Description and Background

The proposed project would amend the Specific Plan to include the 33.6-acre proposed project site. As discussed in Chapter 2, Project Description, the proposed project would add approximately 241 single-family residences, a 0.6-acre private park, and 7.2 acres of open space/agricultural buffer to the Specific Plan. This Draft SEIR evaluates the potential environmental effects associated with changes to the previously approved Specific Plan and the accompanying 2018 EIR.

ES.4 Project Objectives

CEQA Guidelines Section 15124(b) require that the Project Description include a statement of the objectives of a project. Section 15124(b) further states that "the statement of objectives should include the underlying purpose of the project and may discuss the project benefits." The underlying purpose of the proposed project is to provide housing in the City.

Specific project objectives are:

- Complete the planning for the geographical area designated by the General Plan for future growth which coincides with the city's designated urban growth boundary.
- Complete the land planning for the area initiated with the Farm at Alamo Creek.
- Develop an economically feasible community that can be reasonably served by existing and proposed public infrastructure in a manner that would foster orderly urban development, discourage leapfrog or piecemeal development.
- Develop a project that will provide needed housing. Provide multiple types of single-family housing to support the City's workforce. Accommodate projected regional growth in proximity to existing and planned infrastructure, urban services, transportation corridors, and major employment centers.
- Create a community that has a positive overall economic impact on the City and achieves a positive fiscal impact on the City's finances.

- Develop a project that will promote efforts to reduce greenhouse gas emissions by implementing green building practices and providing all electric homes that will promote the change from fossil fuels to carbon free alternatives for a more sustainable neighborhood.
- Develop a project that provides a turnkey private park to be maintained by the homeowners association.
- Develop pedestrian and bicycle friendly neighborhoods with open space trails and traffic calming features.
- Provide for the extension of utilities and services including an easement for the construction and maintenance of the 36" sewer line to be located within the agricultural buffer area. The sewer line extension is planned for the agricultural buffer area of the Fields and will ultimately extend north to serve the City's Northeast Growth Area.

ES.5 Issues Adequately Addressed in the 2018 EIR

The SEIR needs to contain only the information required to make the previous 2018 EIR adequate for the proposed project as revised, including any changed circumstances and new information requiring additional environmental review, as set forth in CEQA Guidelines Sections 15162 and 15163. Where existing information and analysis in the 2018 EIR is sufficient to evaluate the impacts of the proposed project, no additional environmental review is warranted. This includes the analysis within the Initial Study (Appendix B to the 2018 EIR) which, consistent with CEQA Guidelines Sections 15168 and 15183, determined whether any impacts from the Specific Plan project would occur that were not adequately covered in the previously certified General Plan EIR (SCH No. 2011022043). The discussion below summarizes the environmental issues for which potential impacts of the proposed project are adequately addressed in the 2018 EIR and no further analysis is required.

Aesthetics

The City does not designate official scenic vistas but recognizes that there are scenic views of large open spaces and hillsides in the East of Leisure Town Road Growth Area (City of Vacaville 2013). The General Plan includes policies that encourage preservation of scenic features including Policy LU-P1.2, which requires the protection of the City's natural environment by integrating natural features into major development plans, and Policy COS-P8.1 intended to preserve the scenic features and view corridors of open space lands. The 2018 EIR determined that the Specific Plan was designed consistent with General Plan policies which would minimize impacts to a level that is less than significant. Similar to the adopted Specific Plan, the proposed project would comply with General Plan policies by integrating open space (e.g., the agricultural buffer area) into the development. The proposed project has been designed to comply with General Plan policies and therefore would not change the impact determination in the 2018 EIR.

The City does not have any designated State Scenic Highways (City of Vacaville 2015). Since there are no designated State Scenic Highways within the City, the 2018 EIR concluded that the Specific Plan would have no impact on scenic resources within a State Scenic Highway. The proposed project site is adjacent to the adopted Specific Plan site and would also have no impact on any State Scenic Highways. Therefore, this impact was adequately addressed and would not change from what was identified in the 2018 EIR.

The General Plan states that most of the City's scenic resources are associated with open space, natural resources, and agricultural uses (City of Vacaville 2015). The General Plan EIR concluded that future development in the East of Leisure Town Road Growth Area, including development of the Specific Plan, would alter the existing rural and agricultural appearance of these undeveloped areas, which would result in a substantial change that cannot be mitigated except by foregoing development (City of Vacaville 2013). Because the Specific Plan was anticipated to be

developed and is within the boundaries of what the General Plan EIR evaluated, it was concluded that impacts were adequately addressed in the General Plan EIR. Likewise, the proposed project is within the East of Leisure Town Road Growth Area and has been anticipated for development. Therefore, this impact was adequately addressed and would not change from what was identified in the 2018 EIR.

The City's Land Use and Development Code (Section 14.09.240) includes guidelines for limiting the amount of light and glare from a project. The General Plan EIR concluded that with implementation of General Plan policies and compliance with the City Code, impacts from new light and glare would be less than significant (City of Vacaville 2013). The 2018 EIR determined that the Specific Plan would meet the City's lighting standards and therefore would not change the impact determination. Similarly, the proposed project would be subject to the Specific Plan development guidelines which are fully compliant with the City's standards for light and glare. Therefore, this impact was adequately addressed and would not change from what was identified in the 2018 EIR.

Agriculture and Forestry Resources

The proposed project site is designated as Prime Farmland on the Department of Conservation Important Farmland Maps (DOC 2022). The site is not under an active Williamson Act contract or a Farmland Security Zone contract (City of Vacaville 2013, Figure 4.2-2). The City's General Plan includes policies that encourage the preservation of existing local agricultural lands and operations in areas outside of the city and development that reduces potential conflicts between existing agricultural areas and adjacent new development. These policies include Policy LU-P2.4 and Policy LU-P5.2, which require preservation of at least one acre of land outside the Urban Growth Boundary for every acre of agricultural land developed, and Policy COS-P4.1, which requires new development east of Leisure Town Road to maintain a 300- to 500-foot-wide buffer along the eastern boundary of all residential developments and existing agricultural lands.

Although the City still contains agricultural land and land designated as Prime Farmland, Farmland of Statewide Importance and Unique Farmland, much of this land within the city has been designated and zoned for development, and in many instances, has been entitled for future development. It is the City's policy to limit the conversion of agricultural lands outside of the city limits. By keeping development within established growth areas, the City seeks to limit urban sprawl into other agricultural regions, thereby helping to minimize or reduce impacts on agricultural resources and operations in more agriculturally productive areas. Infrastructure already exists or is planned for undeveloped areas within the city, signaling the City's intention for urban growth to occur. The General Plan EIR concluded that impacts to agricultural resources, specifically conversion of farmland and land under Williamson Act contracts, that could occur with implementation of the General Plan would be significant and unavoidable (City of Vacaville 2013). Future development of the Specific Plan site was assumed in the General Plan; therefore, the 2018 EIR determined that the impact was adequately addressed in the General Plan EIR. Likewise, the proposed project site has been designated and zoned for development and is within the area analyzed by the General Plan EIR. The General Plan EIR considered the loss of agricultural land from the proposed project and this impact was adequately addressed and would not change from what was identified in the 2018 EIR. Therefore, further evaluation of agricultural resources, including the conversion of land designated as Prime Farmland, Farmland of Statewide Importance or Unique Farmland is not required in this SEIR.

Nonetheless, consistent with General Plan Policies LU-P2.4 and LU-P5.2, the proposed project is required to mitigate for the conversion of prime agricultural land. Additionally, the proposed project must maintain a minimum 300-foot-wide buffer along the eastern boundary of the project site in order to reduce any potential conflicts between existing agricultural areas and areas of new development, consistent with Policy COS-P4.1. The proposed project includes a 300-foot-wide agricultural buffer at the eastern boundary of the project site, but this buffer

includes some non-open space features such as roads and side yard landscaping. To ensure compliance with these General Plan policies, mitigation measures AG-1 and AG-2 are proposed. These mitigation measures restate the General Plan policy requirements specific to the proposed project.

AG-1 The project applicant shall purchase or provide lands with conservation easements to permanently protect agricultural land of equal or greater value at a ratio of 1 acre of conserved agricultural land per 1 acre of developed agricultural land, consistent with the City of Vacaville General Plan Policy LU-P2.4. The conserved agricultural land shall be outside the Urban Growth Boundary but within Pleasants Valley, Upper Lagoon Valley, or Vaca Valley, or any other location that is within 1 mile of the Urban Growth Boundary, consistent with Policy LU-P5.2. Alternatively, to the extent consistent with applicable law, such development may pay an equivalent in-lieu fee as determined by the City in consultation with the Solano Land Trust. Consistent with Policy LU-P5.3, if the Solano County Local Agency Formation Commission (LAFCO) adopts an open space or agricultural land mitigation program applicable to the project site, the project shall be subject only to the requirements of the LAFCO mitigation program unless the requirement described in Policy LU-P5.2 provides greater mitigation than the LAFCO requirement. If so, the incremental difference between the two programs shall be imposed in addition to the LAFCO requirement to the maximum extent permitted by State law.

AG-2 The project applicant shall revise the open space area (within the 300-foot-wide agricultural buffer) to provide landscaping within the agricultural buffer, in compliance with City of Vacaville General Plan Policy COS-P4.1. Uses within the open space area shall be limited to passive open space, such as pedestrian or bike trails, that are not accessed by a large number of people or the general public at one time. The project applicant must implement the changes to the landscape plans for the agricultural buffer area with the Final Landscape Plans prior to their approval.

The General Plan EIR determined that there would be no impact to forest and timberland resources from buildout of the General Plan, and because the Specific Plan is not zoned for forest or timberland and contains no trees meeting these definitions, the 2018 EIR concluded that there would be no change from this impact determination. The proposed project site is also not zoned for forest or timberland and does not contain any trees. Therefore, this impact was adequately addressed and would not change from what was identified in the 2018 EIR.

Cultural and Tribal Cultural Resources

Section 4.3, Cultural and Paleontological Resources, of the 2018 EIR addresses potential impacts to cultural and tribal cultural resources from the Specific Plan and includes mitigation measures that lay out the process to follow in the event any previously undiscovered cultural resources are encountered.

The 2018 EIR determined that since ground-disturbing activities associated with construction of the Specific Plan have the potential to encounter or disturb previously unidentified subsurface archaeological resources or human remains, impacts relating to a substantial adverse change in the significance of an archaeological resource and disturbance of human remains would be potentially significant. The 2018 EIR proposed mitigation measures CUL-1 and CUL-2 which include specific procedures in the event of an inadvertent discovery of a cultural resource or human remains during project construction. Mitigation measure CUL-1 requires work to stop in the event a resource is discovered, consultation be initiated with an archaeologist to determine the appropriate course of action, and

Native American representatives be consulted for their input and concerns. Mitigation measure CUL-2 requires the project applicant to stop work, consistent with General Plan Policies COS-P6.4 and COS-P6.6, and to consult with City's Community Development Department, County Coroner, and an archaeologist that meets the secretary of the interior standards to determine the appropriate course of action in the event human remains are unearthed.

A Cultural Resources Letter Report (Appendix E) was prepared to determine whether the previous cultural resource study for the 2018 EIR adequately addressed the proposed project site. A new records search and pedestrian survey found no new cultural resources that were not identified in the previous study. As indicated in the 2018 EIR, no recorded resources met the eligibility requirements under the CRHR (California Register of Historical Resources) or the NRHP (National Register of Historic Places). Therefore, there are no recorded resources considered historic resources for the purposes of CEQA. Likewise, the proposed project would involve ground-disturbing activities that may unearth or disturb cultural resources or human remains; compliance with mitigation measures CUL-1 and CUL-2 from the 2018 EIR would ensure that the proposed project's impacts to previously undiscovered cultural resources and human remains are mitigated to less-than-significant levels.

The 2018 EIR also determined that while no tribal cultural resources were identified on the Specific Plan site, there may be inadvertent discovery of tribal cultural resources which would be mitigated to a less-than-significant level through mitigation measure CUL-3. Implementation of mitigation measure CUL-3, as modified, would require a monitoring agreement and for the project applicant to stop construction work and consult with the City's Community Development Department and the Yocha Dehe Wintun Nation to determine the appropriate course of action in the event any tribal cultural resource is encountered. The Yocha Dehe Wintun Nation has also expressed interest in consultation for the proposed project. Edits to the original 2018 EIR text are shown in underline. Therefore, compliance with this measure would ensure that the proposed project's potential to impact tribal cultural resources is mitigated to a less-than-significant level.

Because no new records or cultural resources have been identified and the prior mitigation measures would still apply, the analysis of cultural resources and tribal cultural resources included in the 2018 EIR is still adequate and additional review of these resource areas is not required in this SEIR.

Mitigation Measures

CUL-1 If deposits of prehistoric or historical archaeological materials are encountered during construction activities, all work within 25 feet of the discovery shall be redirected until an archaeologist is contracted to assess the finds, consult with agencies and descendant communities (as appropriate), and make recommendations for the treatment of the discovery. If preservation in place is not feasible, an archaeologist that meets the secretary of the interior standards shall evaluate the deposit for its eligibility for listing in the California Register of Historical Resources. If the deposit is not eligible, mitigation is not necessary. If the deposit is eligible, mitigation shall include excavation of the archaeological deposit in accordance with a data recovery plan (see *CEQA Guidelines* Section 15126.4(b)(3)(C)). The City of Vacaville shall ensure that descendant communities are consulted for their input and concerns during the development and implementation of any mitigation plan. Upon completion of the evaluation and/or mitigation, the report shall be submitted to the City of Vacaville, the applicant, the Northwest Information Center at Sonoma State University, and descendant communities.

CUL-2 In the event that human remains are encountered, the on-site construction foreman shall stop all work within 25 feet of the discovery and shall immediately contact the City's Community Development Department and the County Coroner. At the same time, an archaeologist that meets the secretary of the interior standards shall be contacted to assess the situation and consult with agencies, as appropriate. On-site construction workers shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission shall identify a Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate, and in coordination with the recommendations of the Most Likely Descendant. The report shall be submitted to the City of Vacaville Community Development Department and the Northwest Information Center, and descendant communities.

CUL-3 While no tribal cultural resources (TCRs) have been identified that may be affected by the project, the following approach for the inadvertent discovery of TCRs has been prepared to ensure there are no impacts to unanticipated resources.

- Prior to the approval of improvement plans the developer shall execute a Cultural Monitoring Agreement with the Yocha Dehe Wintun Nation. Additionally, the project preconstruction meeting shall include an element of cultural sensitivity training for construction personnel. Evidence of the monitoring agreement shall be provided to the Vacaville Community Development Director prior to the approval of improvement plans.

- Should a potential TCR be inadvertently encountered, construction activities near the encounter shall be temporarily halted and the City's Community Development Department notified. The City shall immediately notify the Yocha Dehe Wintun Nation to evaluate the resource. If the unanticipated resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in Mitigation Measure CUL-1. If the City determines that the potential resource appears to be a tribal cultural resource (as defined by PRC Section 21074), the Yocha Dehe Wintun Nation shall be provided a reasonable period of time to conduct a site visit and make recommendations regarding future ground disturbance activities, as well as the treatment and disposition of any discovered tribal cultural resources. Depending on the nature of the potential resource and Tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations shall be made based on the determination of the City that the approach is reasonable and feasible. All activities shall be conducted in accordance with regulatory requirements.

Energy

Energy impacts from the Specific Plan were discussed in Chapter 5, CEQA Considerations, of the 2018 EIR. The 2018 EIR determined that the Specific Plan would be consistent with the General Plan and the adopted Energy and

Conservation Action Strategy (ECAS), including General Plan Goals COS-10 and COS-11 and their associated policies to promote energy conservation, ECAS measures GB-1 (for green building certification), RE-1 and RE-5 (for solar energy requirements in new developments). Since certification of the 2018 EIR, the City updated the ECAS and certified an SEIR to the General Plan evaluating the update (SCH No. 2020090526). The proposed project has incorporated required measures established in the updated ECAS and is an all-electric development designed to reduce the project's energy usage. Therefore, the proposed project would not result in any new or more severe impacts from those identified in the 2018 EIR.

Geology and Soils

The 2018 EIR determined that the Specific Plan would not result in any adverse effects involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, landslides, unstable soils, or expansive soils because the Specific Plan would comply with General Plan policies under Goal SAF-1 which require that these risks be minimized through compliance with the California Building Code (CBC). All development in California is subject to the requirements of the CBC, which contains more stringent building standards than the Uniform Building Code, specific to conditions in California. Accordingly, the proposed project would comply with the CBC and all applicable General Plan policies to reduce such risks. Therefore, the proposed project would not result in any new or more severe impacts from those identified in the 2018 EIR.

The 2018 EIR determined that compliance with applicable sections of the City's Land Use and Development Code (Title 14 of the City Code), including Chapter 14.20 (California Building Code), and General Plan policies would reduce erosion impacts from the Specific Plan to a less-than-significant level. Since completion of the 2018 EIR, Chapter 14.20 was repealed and replaced by Title 15 (Building, Construction, and Fire Code). Accordingly, all grading and improvement activities under the proposed project would be required to comply with Title 15 as well as Title 14 Chapters 14.19 (Grading) and 14.26 (Urban Storm Water Quality Management and Discharge Control). Grading activities would require a grading permit from the City which requires the provision of proper drainage and appropriate dust control and erosion control measures. Project construction is also subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) permit. Compliance with the requirements of the City Code, the federal NPDES, and General Plan would ensure the potential for substantial soil erosion or loss of topsoil is less than significant. Therefore, the proposed project would not result in any new or more severe impacts from those identified in the 2018 EIR.

Greenhouse Gas Emissions

The 2018 EIR determined that because the Specific Plan would comply with General Plan policies and the ECAS and incorporate measures for sustainable development, impacts from the Specific Plan were adequately addressed in the General Plan EIR. As previously discussed, the City has since updated the ECAS and certified an SEIR to the General Plan evaluating the update (SCH No. 2020090526). The ECAS was updated to support California's 2030 GHG goals which include reducing statewide GHG emissions to 40% below 1990 levels by 2030. As part of the update, the City developed a projection of its 2030 "business as usual" GHG emissions including a target reduction consistent with Senate Bill (SB) 32. Notably, the updated ECAS includes GHG reduction strategies such as outlining that the City adopt an All-Electric New Construction Ordinance (E-3), which would replace natural gas with electricity in new developments. The proposed project has been designed consistent with the updated ECAS and is an all-electric development, which would reduce GHG emissions from the project. Therefore, the proposed project would not result in any new or more severe impacts from those identified in the 2018 EIR.

Hazards and Hazardous Materials

A Phase I Environmental Site Assessment was completed for the 2018 EIR, in which no recognized environmental conditions were found to be present and no hazardous substances, pollutants, contaminants, petroleum or petroleum products were identified on the Specific Plan site. Both the adopted Specific Plan project and the proposed project would be expected to generate limited amounts of household hazardous waste and would not generate hazardous waste equal to quantities regulated by the Solano County Hazardous Waste Plan. Furthermore, the proposed project site is not included in the Cortese List for hazardous waste and substances (DTSC 2023). The proposed project would be required to comply with all applicable federal and state regulations and General Plan policies related to hazards and hazardous materials. Therefore, the proposed project would not result in any new or more severe impacts from those identified in the 2018 EIR.

The Specific Plan is located within Compatibility Zone D in the Travis Air Force Base Land Use Compatibility Plan (Solano County 2015). Compatibility Zone D does not limit residential development or other uses, but would require airspace review for objects greater than 200 feet tall and to address wildlife attractant hazards created by the project. Because the Specific Plan site analyzed in the 2018 EIR is located within the Bird Strike Hazard Zone of the LUCP, the 2018 EIR proposed mitigation measure LU-1 to make the Specific Plan's detention basin less attractive to birds and provide a deterrent for waterfowl, reducing bird strike hazards. The proposed project is just outside of the Bird Strike Hazard Zone of the LUCP and therefore would not be required to implement mitigation measure LU-1. The proposed project also does not propose any structures exceeding 200 feet in height. Therefore, the proposed project would not result in any new or more severe impacts from those identified in the 2018 EIR.

The 2018 EIR concluded that General Plan policies requiring City of Vacaville Fire Department (VFD) review of all development applications would reduce risks related to inadequate emergency access or impairment of the local hazard mitigation plan. The proposed project would be required to get review and approval from the VFD and this impact would not change from what was evaluated in the General Plan EIR. Therefore, the proposed project would not result in any new or more severe impacts from those identified in the 2018 EIR.

Hydrology and Water Quality

The 2018 EIR determined that the Specific Plan would not cause significant impacts relating to the degradation of water quality due to several measures in place such as implementation of Best Management Practices (BMPs) required for coverage under the Construction General Permit and the erosion control provisions required by City ordinances. In accordance with the City's standard conditions of approval, the City Engineer and Director of Public Works must verify that the project meets the requirements of the City's Storm Drain Design Standards, the City's Stormwater Management Plan, and the Small MS4 Permit issued by the SWRCB prior to approval of the project's Improvement Plans, Grading Plans, and Final Map. The proposed project would not result in new circumstances that would result in new or substantially more severe impacts and the proposed project would be subject to the same requirements, measures, and standards as described in the 2018 EIR. As such, this impact was adequately addressed in the 2018 EIR.

The 2018 EIR determined that the Specific Plan would have a less than significant impact regarding stormwater runoff and flooding, because the Specific Plan would include a detention basin to collect runoff and overflow from Old Alamo Creek, and would prepare a Storm Drain Master Plan (SDMP) designed in accordance with the City's Storm Drain Design Standards. The SDMP must also provide the necessary calculations to adequately demonstrate that the proposed drainage facilities would convey the design runoff from the project site and adequately mitigate the impacts of increased runoff. Similarly, the proposed project's plans include a detention basin intended to collect

all drainage on-site and would connect downstream to the storm drain system within the Farm at Alamo Creek Specific Plan Project. The project would comply with the City's design standards for stormwater management and storm drain design. Therefore, no new or substantially more severe impacts would occur and this impact was adequately addressed in the 2018 EIR.

Mineral Resources

The 2018 EIR determined there would be no impact to mineral resources from the Specific Plan because it is not located near Cement Hill or the western hills, which are the only places within the City where mineral resources are known to exist. Additionally, there are no mapped Mineral Resource Zone (MRZ)-2 zones in the City, which are the zones where adequate information indicates the presence or high likelihood of the presence of significant mineral resource deposits. Likewise, the proposed project site is not located in an area known to contain mineral resources or have active or historic mineral resource recovery sites. Therefore, the impact has been adequately addressed in the 2018 EIR and the proposed project would not result in any new or more severe impacts.

Noise

The 2018 EIR determined that noise and vibration impacts would be less than significant because the Specific Plan would be required to comply with all provisions of the City's Noise Ordinance (City Code Section 14.09.240.140) and with General Plan policies related to noise and vibration. This includes Policy NOI-P2.5 which encourages the use of open space, parking, accessory buildings, and landscaping to buffer new and existing development, and Policy NOI-P4.2 which lists construction noise control measures including use of mufflers, location of stationary noise-generation equipment and limited hours of operation. The proposed project would comply with the Noise Ordinance and all relevant General Plan policies for reducing both short-term construction noise and operational noise. Therefore, the proposed project would not result in new or more severe impacts from those identified in the 2018 EIR.

No portion of the City falls within the 60 dBA community noise equivalent level (CNEL) noise contour for Travis Air Force Base. Some portions of the City fall within the 60 dBA CNEL noise contour for the Nut Tree Airport; however, this does not include the Specific Plan or the proposed project site. Therefore, the impact has been adequately addressed in the 2018 EIR and the proposed project would not result in any new or more severe impacts.

Population and Housing

The 2018 EIR determined that the Specific Plan would not contribute to an additional significant impact beyond what was identified in the General Plan EIR. The General Plan EIR concluded that there would be a significant and unavoidable impact because the Association of Bay Area Governments (ABAG) projections for development severely underestimated future (2035) population and housing growth, and it would not be feasible to rescind existing development entitlements or to reduce development to meet ABAG projections. The proposed project would add 241 new housing units and would accommodate approximately 658 new residents. Similar to the adopted Specific Plan, the proposed project is requesting a General Plan Amendment to allow for residential development in excess of the amount specified in Policy LU-17.1 of the General Plan (768 dwelling units under the Specific Plan). In addition to the approved Specific Plan, the total number of new units would be 1,009. It should be noted that the General Plan identifies the project site as appropriate and planned for development as it is within the Urban Growth Boundary and zoned Urban Reserve, which is meant to allow for flexibility in future planning of a development. Therefore, although the new units are not explicitly included in the General Plan assumptions, the proposed project

is assumed to be appropriate for future development and would not contribute to an additional significant impact beyond what was identified in the 2018 EIR and General Plan EIR.

Additionally, the proposed project site is vacant agricultural land and does not contain any housing or people. Therefore, implementation of the proposed project would not displace any housing or people and there would be no impact, the same as identified in the 2018 EIR.

Public Services and Recreation

Fire and Police Services

As discussed in the 2018 EIR, the Farm at Alamo Creek Specific Plan was approved with the understanding the future development would be required to create or annex into a Community Facilities District (CFD) and pay a fair and equitable impact fee to offset for the cost of fire services, emergency medical services, and law enforcement services under General Plan Policies PUB-P1.2 and PUB-P2.3. The Farm at Alamo Creek has not yet developed and has not annexed into a CFD. The Vacaville Fire Department (VFD) evaluated this project and determined future development would require the City to construct a newer and larger fire station facility next to the Vacaville Cultural Center at 1000 Ulatis Drive, and relocate existing city facilities at Fire Station 72 (2001 Ulatis Drive) to this new station. The development of a separate fire station at 1000 Ulatis Drive will be evaluated under a separate CEQA document. To mitigate the impact associated with a new upgraded fire station, the project applicant will create or annex into an existing CFD, which is consistent with the requirements analyzed in the 2018 FEIR for the Farm at Alamo Creek. In addition, annexation and payment into a CFD will help provide finding for Vacaville Police Department (VPD) services. Annexation into a CFD will ensure the project will not result in any new or more severe impacts from what was identified in the 2018 EIR.

School Services

The project would be served by Vacaville Unified School District, and the project proponent would pay school impact fees which is considered full mitigation of new development on school facilities under Section 65996 of the California Government Code. Therefore, the proposed project would not result in any new or more severe impacts from what was identified in the 2018 EIR.

Parks and Recreation Services

The 2018 EIR determined that parkland and recreational facility goals are to be met through compliance with General Plan policies requiring either the construction of new park facilities or payment of in-lieu fees. The proposed project would include a new 0.6-acre private park and 7.2 acres of open space including a pedestrian trail. These areas of land do not satisfy the City's requirements for providing new park land and will be privately maintained by a Homeowners' Association. The obligation to provide parks will be satisfied through paying the required park fees for the provision and/or maintenance of City parkland and recreational facilities. Therefore, the proposed project would not result in any new or more severe impacts from what was identified in the 2018 EIR.

Other Public Facilities

The 2018 EIR determined that adequate library services and facilities would be achieved through compliance with General Plan policies, including Policy PUB-P6.2 which encourages the Solano County Library System and Vacaville Unified School District to maintain or increase library funding, and implementation of future project-specific

mitigation for new library facilities in accordance with CEQA. As previously discussed, although the new units from the proposed project are not explicitly included in the General Plan assumptions, the project site is assumed to be appropriate for future development and therefore would be accommodated by City and County libraries which would be expanded to keep pace with new development as directed by Policy PUB-P6.1. The 2018 EIR did not identify significant impacts regarding the construction of other public facilities, and it is not anticipated that the construction of 241 additional units would require other new or expanded public facilities to serve the project. The project would be required to pay any applicable City or County public facilities fees. Therefore, the proposed project would not contribute to an additional significant impact beyond what was identified in the 2018 EIR.

Wildfire

The 2018 EIR did not include a standalone chapter for wildfire, as the topic was not included in the environmental checklist in Appendix G of the CEQA Guidelines until 2018. However, the Initial Study (Appendix B to the 2018 EIR) included a discussion of wildfire hazards within its discussion of hazards and hazardous materials. The 2018 EIR determined that the Specific Plan site is not in a Very High Fire Hazard Severity Zone mapped by the California Department of Forestry and Fire Protection (CAL FIRE). However, the 2018 EIR acknowledges that open space agricultural lands in eastern Vacaville may pose a risk of grass fires. General Plan Policy SAF-5.2 requires all development in areas with a potential wildland fire risk to include firebreaks adjoining open areas, to provide adequate access to open space, and to provide adequate emergency water flow. Section 15.20.273 of the Title 15 of the City's Building, Construction and Fire Code provides development standards for new construction adjacent to open space where there is a threat of wildfire such as use of fire buffer zones, fire access roads, drainage ditches, and rear/side yard setbacks. The 2018 EIR determined that compliance with the General Plan policies and the City Code would reduce impacts from wildland fires to a less-than-significant level. The proposed project would comply with all policies and development standards necessary to reduce wildfire risk and therefore would not result in any new or more severe impacts from those identified in the 2018 EIR.

ES.6 Summary of Environmental Impacts and Mitigation Measures

Table ES-1, Summary of Environmental Impacts and Mitigation Measures, provides an overview of the impact analysis and a summary of environmental impacts (before and after mitigation) resulting from implementation of the proposed project, pursuant to CEQA Guidelines Section 15123(b)(1). Several mitigation measures are adopted from the 2018 EIR, with modifications to the original text shown in underline or strikethrough. For a more detailed discussion of project impacts, please see Chapter 4 of this Draft SEIR.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.1 Air Quality			
Impact 4.1-1: The project would not conflict with or obstruct implementation of the applicable air quality plan.	Less than Significant	None required.	Less than Significant
Impact 4.1-2: The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	Less than Significant	None required.	Less than Significant
Impact 4.1-3: The project would not expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	None required.	Less than Significant
Impact 4.2-4: The project would not result in a cumulative impact related to air quality.	Less than Significant	None required.	Less than Significant
4.2 Biological Resources			
Impact 4.2-1: Construction of the proposed project could have a substantial adverse effect on special-status wildlife species.	Potentially Significant	**Mitigation Measure BIO-1c (2018 EIR, modified)** Mitigation Measures BIO-1c through BIO-1d are consistent with Avoidance and Minimization Measures BO 1, BO 3, and BO 4 in Section 6.4.9 of the Solano HCP (Solano County Water Agency 2012) and recommendations detailed in the Department of Fish and Game *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The project applicant shall conduct breeding season surveys (a), non-breeding season surveys (b), and, if necessary, a take avoidance survey (c) prior to construction.	Less than Significant

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		a. Breeding Season Survey (February 1 – August 31): Conduct four survey visits as follows: (1) at least one survey shall be conducted between February 15 and April 15, and (2) a minimum of three surveys visits shall occur, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15. Surveys shall follow the methodology of Department of Fish and Game *Staff Report on Burrowing Owl Mitigation*, Appendix D for breeding season surveys. b. Non-breeding season survey (September 1 – January 31): Follow same methodology as above in a) Breeding Season Survey, but conduct at least four visits, spread evenly, throughout the non-breeding season. Surveys shall follow the methodology of Department of Fish and Game *Staff Report on Burrowing Owl Mitigation*, Appendix D for non-breeding season surveys. c. Take Avoidance Survey: If the breeding season surveys or non-breeding season surveys have been completed less than 14 days prior to construction, no further preconstruction surveys for burrowing owl are necessary. If more than 14 days have elapsed since one of the breeding season or non-breeding season surveys have occurred, a qualified biologist meeting requirements listed in the Department of Fish and Game *Staff Report on Burrowing Owl Mitigation* survey methodology shall conduct take avoidance surveys within the project site within 14 days prior to construction to identify burrowing owls or their nesting areas. This survey shall follow survey protocols outlined in the most current draft of the Solano HCP and as developed by the Burrowing Owl Consortium in consultation with CDFW (Solano County Water Agency 2012; CDFG 2012). If no active burrows or burrowing owls are observed, no further mitigation is required. If a lapse in construction of 15 days or longer occurs during the nesting season, additional take avoidance surveys shall be repeated before work may resume. d. If burrowing owls or active burrows are identified within the project site during the surveys described in (a), (b), and (c) above, the following measures shall be implemented. While minimum buffers are suggested below, appropriate buffers shall be determined in consultation with CDFW:	

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		1. During the non-breeding season for burrowing owls (September 1 through January 31), exclusion zones shall be established around any active burrows identified during the survey. The exclusion zone shall be no less than 160 feet in radius centered on the active burrow. With ~~approval from the City after~~ consultation with CDFW, burrowing owls shall be passively evicted and relocated from the burrows using one-way doors. The one-way doors shall be left in place for a minimum of 48 hours and shall be monitored daily to ensure proper function. Upon the end of the 48-hour period, the burrows shall be excavated with the use of hand tools and refilled to discourage reoccupation. 2. During the breeding season (February 1 through August 31), a qualified biologist familiar with the biology and behavior of this species shall establish exclusion zones of at least 250 feet in radius centered on any active burrow identified during the survey. No construction activities shall occur within the exclusion zone as long as the burrow is active and young are present. Once the breeding season is over and young have fledged, passive relocation of active burrows may proceed as described in measure b.1, above. 3. The buffer widths may be reduced with the following measures: ▪ A site specific analysis, reviewed and approved by City after consultation with CDFW, shall be prepared that documents and describes how the nesting or wintering owls would not be adversely affected by construction activities; ▪ Monitoring shall occur by a qualified biologist for a minimum of 10 consecutive days following initiation of construction indicating that the owls do not exhibit adverse reactions to construction activities; ▪ Burrows are not in danger of collapse due to equipment traffic; and	

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ Monitoring is continued at least once a week through the nesting/wintering cycle at the site and no change in behavior by owls is observed; biological monitoring reports shall be submitted to CDFW. This measure may be accomplished in conjunction with Swainson's hawk Mitigation Measure BIO-4d, provided that the project applicant submits a Burrowing Owl Mitigation and Monitoring Plan for review by CDFW and <u>with a copy to</u> the City of Vacaville Community Development Director ~~for approval by the City~~. The Burrowing Owl Mitigation and Monitoring Plan shall include the following components, which require that additional measures are implemented. A Habitat Maintenance Plan shall be prepared and implemented to ensure open space lands within the project site (if habitat remains) and offsite mitigation agriculture mitigation lands are maintained, to extent feasible, to be compatible with use by tricolor blackbird, northern harrier, white-tailed kite, and loggerhead shrike. **Mitigation Measure BIO-1d (2018 EIR, modified)** Mitigation for the permanent loss of burrowing owl foraging habitat, and potential nesting habitat, for urban development or other permanent facilities shall be provided at a 1:1 land/area ratio. Mitigation for nesting habitat shall be provided only if pre-construction surveys (Mitigation Measure BIO-1c) indicate that burrowing owl burrows are present on the project site. If mitigation for nesting habitat is required, the applicant or their designee shall preserve and manage one active burrowing owl nest for each known burrowing owl nest affected by the Project. This shall be accomplished through the two-stage process described under Objective SH 2.2 of the Draft Solano HCP, through targeted acquisition, defined term contracts or agreements, and conservation easements of known active nesting habitat. The irrigated agriculture preserve mitigation provided for Swainson's hawk Mitigation BIO-1f, below, may satisfy the requirements for preserved foraging habitat under Mitigation Measure BIO-1d, provided that the applicant submits a Burrowing Owl Mitigation and Monitoring Plan shall include the following components, which require that:	

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ Grasses and forbs within the owl habitat shall maintain an average effective vegetation height less than or equal to 6 inches from February 1 to April 15, when owls typically select mates and nest burrows. In addition, tree and shrub canopy cover shall be limited to the edges of the set aside area and shall not be within 200 feet of the artificial burrows. ▪ No more than 20 percent of the mitigation area may support tree and shrub canopy or tall, dense grass cover. ▪ ~~At least 5 acres of mitigation area shall be permanently taken out of agricultural production to provide suitable nesting habitat and cover for burrowing owls.~~ If occupied burrows are confirmed on site during pre-construction surveys, at least four artificial burrow complexes (three multi-entrance burrows per complex) shall be installed within the nesting habitat. ▪ Burrowing owl habitat mitigation areas shall be subject to deed restrictions that would limit future urban development. ▪ A Habitat Maintenance Plan shall be prepared and implemented to ensure open space lands within the project site (if habitat remains) and the irrigated agriculture mitigation lands are maintained, to the extent feasible, to be compatible with burrowing owl use. ▪ Adequate funding shall be provided to manage the owl mitigation area in perpetuity as specified in the Burrowing Owl Mitigation and Monitoring Plan. If mitigation for nesting habitat is required, the mitigation lands shall <u>be of the same quality and type of land removed</u> ~~have the following characteristics: preserve land shall be permanently taken out of production to provide suitable nesting habitat and cover for burrowing owls. Mitigation for nesting habitat shall consist of one continuous block of habitat and shall not be located adjacent to a county road, highway, or within 650 feet of Swainson's hawk nesting~~. If natural burrows are not present in sufficient density to the reserve lands, at least two burrow complexes (three burrows per complex) shall be installed and maintained in perpetuity within the nesting habitat set aside for burrowing owls. Artificial burrows shall be monitored annually for effectiveness. Biological monitors shall report on the colonization of the nest burrows by owls and the number of owls fledged	

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		per nest. Within the nesting habitat set aside for burrowing owls, management measures shall be implemented and adequately funded to maintain an average effective vegetation height less than or equal to 6 inches from February 1 to April 15. In addition, the 2 acres of habitat must be kept free of tree or shrub canopy cover in perpetuity. **Mitigation Measure BIO-1f (2018 EIR)** The project applicant shall mitigate for the loss of Swainson's hawk irrigated foraging habitat by preserving a minimum of 1:1 land/area ratio of similar habitat. The final acreage for mitigation calculations shall be determined based on final design of the open space areas within the project site. The preservation of the mitigation area shall be accomplished through purchase of credits from a bank approved by the CDFW to provide such credits, such as the Elsie Gridley Mitigation Bank or the Burke Ranch Conservation Bank (CDFW 2016) or through preservation of irrigated agricultural lands protected in perpetuity by a conservation easement or City approved in-lieu fee program established to preserve irrigated agricultural lands protected in perpetuity by a conservation easement at a minimum of 1:1 land/area ratio. Such an easement or fee program shall include provisions that provide for agricultural uses that are compatible with Swainson's hawk foraging needs. Agricultural foraging habitats shall consist of alfalfa, tomatoes, other annual vegetable row crops, and grain. The mitigation area shall not include crop types and land uses incompatible with Swainson's hawk foraging. The following additional restrictions and prohibited uses, at a minimum, shall also be noted as forbidden within the conservation easement: ▪ Commercial feedlots, which are defined as any open or enclosed area where domestic livestock are grouped together for intensive feeding purposes. ▪ Horticultural specialties, including sod, nursery stock, ornamental shrubs, ornamental trees, Christmas trees, or flowers. ▪ Commercial greenhouses or plant nurseries. ▪ Commercial aquaculture of aquatic plants, animals, and their byproducts. ▪ Planting orchards or vineyards for the production of fruits, nuts, or berries except in designated farmstead areas.	

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ Cultivation of perennial vegetable crops such as artichokes and asparagus, as well as annual crops such as cotton or rice. ▪ Construction, reconstruction, or placement of any building, billboard or sign, antennas, towers, and facilities for generation of electrical power, or any other structure or improvement of any kind, except as may be specifically permitted in site-specific management plan. Acreage occupied by any such existing facilities may not be counted toward mitigation requirements. The City shall consult with CDFW prior to approving the site, conservation easement, and conservation easement holder. **Mitigation Measure BIO-1g (2018 EIR)** Mitigation for the permanent loss of foraging habitat for northern harrier, white-tailed kite, loggerhead shrike, and tricolored blackbird from project urban development or other permanent facilities shall be provided at a 1:1 land/area ratio. The irrigated agriculture preserve mitigation provided for Swainson's hawk Mitigation BIO-1f, above, may satisfy the requirements for BIO-1g, provided the following additional measure is implemented on the Swainson's hawk irrigated agriculture mitigation lands. ▪ A Habitat Maintenance Plan shall be prepared and implemented to ensure open space lands within the project site (if habitat remains) and the irrigated agriculture mitigation lands are maintained, to the extent feasible, to be compatible with use by tricolored blackbird, northern harrier, white-tailed kite, and loggerhead shrike.	
Impact 4.2-2: The proposed project could conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	Potentially Significant	**Mitigation Measure BIO-1d and Mitigation Measure BIO-1f (2018 EIR)**	Less than Significant
Impact 4.2-3: The proposed project would not result in a	Less than Significant	No further mitigation measures required.	Less than Significant

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
cumulative impact on biological resources.			
4.3 Land Use and Planning			
Impact 4.3-1: Implementation of the project would not conflict with a regional land use plan, policy, or regulation.	Potentially Significant	**Mitigation Measure AG-1** The project applicant shall purchase or provide lands with conservation easements to permanently protect agricultural land of equal or greater value at a ratio of 1 acre of conserved agricultural land per 1 acre of developed agricultural land, consistent with the City of Vacaville General Plan Policy LU-P2.4. The conserved agricultural land shall be outside the Urban Growth Boundary but within Pleasants Valley, Upper Lagoon Valley, or Vaca Valley, or any other location that is within 1 mile of the Urban Growth Boundary, consistent with Policy LU-P5.2. Alternatively, to the extent consistent with applicable law, such development may pay an equivalent in-lieu fee as determined by the City in consultation with the Solano Land Trust. Consistent with Policy LU-P5.3, if the Solano County Local Agency Formation Commission (LAFCO) adopts an open space or agricultural land mitigation program applicable to the project site, the project shall be subject only to the requirements of the LAFCO mitigation program unless the requirement described in Policy LU-P5.2 provides greater mitigation than the LAFCO requirement. If so, the incremental difference between the two programs shall be imposed in addition to the LAFCO requirement to the maximum extent permitted by State law. **Mitigation Measure AG-2** The project applicant shall revise the open space area (within the 300-foot-wide agricultural buffer) to provide landscaping within the agricultural buffer, in compliance with City of Vacaville General Plan Policy COS-P4.1. Uses within the open space area shall be limited to passive open space, such as pedestrian or bike trails, that are not accessed by a large number of people or the general public at one time. The project applicant must implement the changes to the landscape plans for the agricultural buffer area with the Final Landscape Plans prior to their approval.	Less than Significant

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.4 Utilities			
Impact 4.4-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	Less than Significant	None required.	Less than Significant
Impact 4.4-2: The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	Less than Significant	None required.	Less than Significant
Impact 4.4-3: The project would not result in a determination by the wastewater treatment provider, which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less than Significant	None required.	Less than Significant
Impact 4.4-4: The project would not generate solid waste in excess of state or local standards, or in excess of the	Less than Significant	None required.	Less than Significant

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.			
Impact 4.4-5: The project would not fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.	Less than Significant	None required.	Less than Significant
Impact 4.4-6: The proposed project, when combined with current and reasonably foreseeable future projects, would not result in cumulatively considerable impacts related to utilities and service systems.	Less than Significant	None required.	Less than Significant
4.5 Transportation and Circulation			
Impact 4.5-1: The project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Potentially Significant	**Mitigation Measure TRAFF-4 (2018 EIR, modified)** The project ~~level site plan~~ improvement plans shall be submitted for each phase of the project development for review and approval by the City to ensure safe and direct facilities for pedestrians, bicyclists, and transit riders are provided and the design does not conflict with adopted plans, policies, and programs related to such facilities.	Less than Significant
Impact 4.5-2: The project could be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	Significant	**Mitigation Measure TRA-1 (General Plan SEIR)** The following transportation demand management (TDM) strategies for residential uses are provided: ▪ improving access to transit ▪ increasing access to common goods and services, such as groceries, schools, and daycare ▪ incorporating affordable housing, including low-income housing, into residential and mixed-use development	Significant and Unavoidable

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ orienting the project toward transit, bicycle and pedestrian facilities ▪ improving pedestrian or bicycle networks, or transit service ▪ implementing traffic calming ▪ providing bicycle parking ▪ unbundling parking costs ▪ providing car-sharing, bike sharing, and ride-sharing programs ▪ providing transit subsidies or passes ▪ providing incentives or subsidies that increase the use of modes other than single-occupant vehicle ▪ increasing project density ▪ increasing the mix of uses within the project or within the project's surroundings ▪ increasing connectivity and/or intersection density on the project site	
Impact 4.5-3: 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).	Less than Significant	None required.	Less than Significant
Impact 4.5-4: The project would not result in inadequate emergency access.	Less than Significant	None required.	Less than Significant
Impact 4.5-5: The project would result in cumulative transportation impacts.	Potentially Significant	No further mitigation measures required.	Significant and Unavoidable
Cultural Resources			
The proposed project could cause a substantial adverse change in the significance of a	Potentially Significant	**Mitigation Measure CUL-1 (2018 EIR)** If deposits of prehistoric or historical archaeological materials are encountered during construction activities, all work within 25 feet of the discovery shall be redirected until an archaeologist is contracted to assess	Less than Significant

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
historical resource pursuant to §15064.5. The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. The proposed project could disturb any human remains, including those interred outside of formal cemeteries.		the finds, consult with agencies and descendant communities (as appropriate), and make recommendations for the treatment of the discovery. If preservation in place is not feasible, an archaeologist that meets the secretary of the interior standards shall evaluate the deposit for its eligibility for listing in the California Register of Historical Resources. If the deposit is not eligible, mitigation is not necessary. If the deposit is eligible, mitigation shall include excavation of the archaeological deposit in accordance with a data recovery plan (see *CEQA Guidelines* Section 15126.4(b)(3)(C)). The City of Vacaville shall ensure that descendant communities are consulted for their input and concerns during the development and implementation of any mitigation plan. Upon completion of the evaluation and/or mitigation, the report shall be submitted to the City of Vacaville, the applicant, the Northwest Information Center at Sonoma State University, and descendant communities. **Mitigation Measure CUL-2 (2018 EIR)** In the event that human remains are encountered, the on-site construction foreman shall stop all work within 25 feet of the discovery and shall immediately contact the City's Community Development Department and the County Coroner. At the same time, an archaeologist that meets the secretary of the interior standards shall be contacted to assess the situation and consult with agencies, as appropriate. On-site construction workers shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission shall identify a Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate, and in coordination with the recommendations of the Most Likely Descendant. The report shall be submitted to the City of Vacaville Community Development Department and the Northwest Information Center, and descendant communities.	

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Tribal Cultural Resources			
The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource that is significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.	Potentially Significant	**Mitigation Measure CUL-3 (2018 EIR, modified)** While no Tribal Cultural Resources (TCRs) have been identified that may be affected by the project, the following approach for the inadvertent discovery of TCRs has been prepared to ensure there are no impacts to unanticipated resources. ▪ Prior to the approval of improvement plans the developer shall execute a Cultural Monitoring Agreement with the Yocha Dehe Wintun Nation. Additionally, the project preconstruction meeting shall include an element of cultural sensitivity training for construction personnel. Evidence of the monitoring agreement shall be provided to the Vacaville Community Development Director prior to the approval of improvement plans. ▪ Should a potential TCR be inadvertently encountered, construction activities near the encounter shall be temporarily halted and the City's Community Development Department notified. The City shall immediately notify the Yocha Dehe Wintun Nation to evaluate the resource. If the unanticipated resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in Mitigation Measure CUL-1. If the City determines that the potential resource appears to be a tribal cultural resource (as defined by PRC Section 21074), the Yocha Dehe Wintun Nation shall be provided a reasonable period of time to conduct a site visit and make recommendations regarding future ground disturbance activities, as well as the treatment and disposition of any discovered tribal cultural resources. Depending on the nature of the potential resource and Tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations shall be made based on the determination of the City that the approach is reasonable and feasible. All activities shall be conducted in accordance with regulatory requirements.	Less than Significant

ES.7 Comments Received in Response to the Notice of Preparation

Pursuant to Section 15082 of the CEQA Guidelines, the City circulated a Notice of Preparation (NOP) from March 24, 2023, to April 24, 2023, to interested agencies, organizations, and parties. A revised NOP was circulated from July 27, 2023, to August 25, 2023, reflecting project revisions that had occurred after circulation of the initial NOP. A total of seven comment letters were received on the initial NOP and three comment letters were received on the revised NOP. Copies of the NOPs and comments received are included in Appendix A.

Written comments in response to the NOP were received from the following agencies and Native American tribes. No comments were received from organizations or members of the public.

Table ES-2. Comments Received in Response to the NOPs

Commenter	Date
Earthjustice	March 28, 2023
Native American Heritage Commission	March 29, 2023
Yocha Dehe Wintun Nation	April 5, 2023
Solano Local Agency Formation Commission	April 18, 2023
California Department of Fish and Wildlife	April 19, 2023
California Department of Toxic Substances Control	April 21, 2023
Central Valley Regional Water Quality Control Board	April 24, 2023
Native American Heritage Commission	August 2, 2023
California Department of Conservation	August 25, 2023
Yocha Dehe Wintun Nation	August 29, 2023

The Earthjustice letter requests that the proposed project incorporate building electrification requirements and avoid the use of natural gas. The proposed project would be an all-electric development and would not connect to the natural gas system.

The Native American Heritage Commission (NAHC) letters state that the Project must comply with AB 52, which requires formal notification and consultation with California Native American tribes. The City sent letters to the list of tribes provided by the NAHC. The last day to request consultation was December 30, 2022.

The Yocha Dehe Wintun Nation letters state that the project is within the aboriginal territories of the Yocha Dehe Wintun Nation. The tribe requested consultation and recommended cultural monitors to be present during development of the project and for cultural sensitivity training to be provided for all project personnel.

The Solano Local Agency Formation Commission (LAFCO) provided comments related to the future annexation application for the proposed project. LAFCO also stated a need for the City to complete the comprehensive update to the Municipal Service Review and Sphere of Influence, consistent with LAFCO law (Government Code 56000 et. al).

The California Department of Fish and Wildlife (CDFW) provided a comment letter with details related to CDFW's area of statutory responsibility that must be included in the SEIR. This includes their role as a Trustee Agency for the project under CEQA.

The Department of Toxic Substances Control (DTSC) provided comments on issues related to hazards and hazardous materials to be evaluated in the SEIR. As previously discussed, hazards and hazardous materials impacts were adequately addressed in the 2018 EIR.

The Central Valley Regional Water Quality Board's letter provided information on the regulatory setting of the proposed project, including the basin plan and antidegradation considerations. The comment letter stated the project must comply with the Construction General Permit, Phase I and II Municipal Separate Storm Sewer System (MS4) Permits, the Industrial Storm Water General Permit, Clean Water Act Section 404 and 401 Permits, Waste Discharge Requirements, and NPDES Permits, if they are applicable to the proposed project. The proposed project would be required to comply with all regulatory permitting requirements, including those listed within the Central Valley Regional Water Quality Board's comment letter.

The California Department of Conservation (DOC) letter advises that the SEIR should address mitigation measures for the loss or conversion of agricultural land.

ES.8 Areas of Controversy/Issues to be Resolved

Section 15123(b)(2) of the CEQA Guidelines requires that areas of controversy known to the lead agency must be stated in the summary prepared as part of an EIR. There are no areas of controversy known to the lead agency.

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR identify issues to be resolved; this includes the choice among alternatives and the requirement of the City to complete its five-year update of the Municipal Service Review consistent with City Code Chapter 14.04.038.

ES.9 Summary of Project Alternatives

Project alternatives analyzed include a No Project/No Development Alternative a Reduced Intensity Alternative, and an Affordable Housing Alternative. CEQA Guidelines require that an EIR identify the environmental superior alternative (Section 15126.6 (e)(2)). If the environmentally superior alternative is the "No Project" Alternative, the EIR must identify an environmentally superior alternative from among the other alternatives. As shown in Table ES-3, the No Project/No Development Project is the environmentally superior alternative.

After the No Project/No Development Project Alternative, the next most environmentally superior alternative is Alternative 3, the Affordable Housing Alternative, which would avoid the significant and unavoidable VMT impact and would not require mitigation measure AG-2 to ensure a sufficient barrier between existing agricultural operations and future residential uses. However, this Alternative would increase the severity of other impacts relative to the proposed project (but would not change significance determinations with the exception of Impact 4.4-1 related to water and wastewater conveyance, which would be potentially significant). Accordingly, this alternative would not achieve the project objective of developing a community that can be reasonably served by existing and proposed infrastructure. However, other project objectives would be fully achieved, including the objective of providing housing to accommodate regional growth, which would be achieved to a greater extent compared to the proposed project.

Table ES-3. Comparison of Impacts of Project Alternatives

Threshold Question	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Intensity	Alternative 3: Affordable Housing
4.1 Air Quality				
4.1-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	LTS	NI▼	LTS▼	LTS▲
4.1-2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	LTS	NI▼	LTS▼	LTS▲
4.1-3: Would the project expose sensitive receptors to substantial pollutant concentrations?	LTS	NI▼	LTS▼	LTS▲
4.2 Biological Resources				
4.2-1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	LTS with MM BIO-1c, -1d, -1f, -1g	NI▼	LTS with MM BIO-1c, -1d, -1f, -1g▼	LTS with MM BIO-1c, -1d, -1f, -1g(–)
4.2-2: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	LTS with MM BIO-1d, -1f	NI▼	LTS with MM BIO-1d, -1f▼	LTS with MM BIO-1d, -1f(–)
4.3 Land Use and Planning				
4.3-1: Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	LTS with MM AG-1, AG-2	NI▼	LTS with MM AG-1, AG-2(–)	LTS with MM AG-1▼
4.4 Utilities and Service Systems				
4.4-1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	LTS	NI▼	LTS▼	PS▲

Threshold Question	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Intensity	Alternative 3: Affordable Housing
4.4-2: Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	LTS	NI▼	LTS▼	LTS▲
4.4-3: Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	LTS	NI▼	LTS▼	LTS▲
4.4-4: Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	LTS	NI▼	LTS▼	LTS▲
4.4-5: Would the project fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	NI	NI(–)	NI(–)	NI(–)
4.5 Transportation				
4.5-1: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	LTS with MM TRAFF-4	NI▼	LTS with MM TRAFF-4(–)	LTS with MM TRAFF-4(–)
4.5-2: Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	SU with MM TRA-1	NI▼	SU with MM TRA-1(–)	LTS▼
4.5-3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	LTS	NI▼	LTS(–)	LTS(–)
4.5-4: Would the project result in inadequate emergency access?	LTS	NI▼	LTS(–)	LTS(–)

Notes:
▲ Alternative is likely to result in greater impacts to issue when compared to proposed project.
(–) Alternative is likely to result in similar impacts to issue when compared to proposed project.
▼ Alternative is likely to result in reduced impacts to issue when compared to proposed project.
NI = No impact
LTS = Less-than-significant impact
PS = Potentially significant impact
SU = Significant and unavoidable impact
MM = Mitigation Measure

ES.10 References

City of Vacaville. 2013. General Plan EIR (SCH No. 2011022043). https://www.ci.vacaville.ca.us/government/community-development/advanced-planning/adopted-plans/general-plan/general-plan-and-ecas-eir-documents

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City of Vacaville. 2018. The Farm at Alamo Creek Specific Plan Environmental Impact Report (SCH No. 2017062068).

City of Vacaville. 2021. General Plan Transportation Element and Energy Conservation Action Strategy Update (SCH no. 2020090526). https://www.ci.vacaville.ca.us/government/community-development/advanced-planning/adopted-plans/general-plan/general-plan-and-ecas-eir-documents

DOC (Department of Conservation). 2022. California Important Farmland Finder. https://maps.conservation.ca.gov/DLRP/CIFF/

DTSC (Department of Toxic Substances Control). 2023. EnviroStor database. https://www.envirostor.dtsc.ca.gov/public/

Solano County. 2015. Travis Air Force Base Airport Land Use Compatibility Plan. https://www.solanocounty.com/civicax/filebank/blobdload.aspx?BlobID=34765

1 Introduction and Scope of the SEIR

1.1 Purpose and Intended Use of this SEIR

This Supplemental Environmental Impact Report (SEIR) updates the analysis in the *Farm at Alamo Creek Specific Plan Environmental Impact Report* (SCH No. 2017062068) that was certified in November 2018 ("2018 EIR") to inform responsible agencies, trustee agencies, the general public, the local community, other interested public agencies, and the Vacaville City Council regarding the potential significant environmental effects resulting from implementation of the proposed Fields at Alamo Creek project ("proposed project"), as well as feasible measures to mitigate those significant effects. Specifically, this document addresses potential impacts to Air Quality, Biological Resources, Land Use, Utilities and Service Systems, and Transportation.

The lead agency for the proposed project is the City of Vacaville ("City"). The City has determined that a SEIR is the appropriate CEQA action in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15163 because the changes to the certified 2018 EIR are minor and do not rise to the level that requires preparation of a Subsequent EIR, pursuant to Section 15162 of the CEQA Guidelines. This Draft SEIR was prepared in accordance with the requirements of the City and in compliance with CEQA which includes the CEQA Guidelines contained within the California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387 (CCR or CEQA Guidelines), while the CEQA statute is codified as Public Resources Code Sections 21000-21189.57 (PRC or CEQA Statute). As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses the reasonably foreseeable environmental impacts of a proposed project, as well as identifies potentially feasible mitigation measures and alternatives to a proposed project that could reduce or avoid adverse environmental impacts. This SEIR is an informational document intended for use by both decision makers and the public.

As the designated lead agency, the City has assumed responsibility for preparing this document. The decision to implement the proposed project is within the purview of the Vacaville City Council. When deciding whether to approve the proposed project, the City Council will use the information provided in this SEIR to consider potential impacts to the physical environment associated with the proposed project. The City Council will consider all written comments received on the Draft SEIR during the 45-day public review period, as well as any communications received prior to the close of the administrative record in this proceeding, in making its decision to certify the SEIR as complete and in compliance with CEQA and in making its determination on whether to approve or deny the proposed project.

1.2 Project Background and Overview

In 2018, the City approved the Farm at Alamo Creek Specific Plan ("Specific Plan") and certified the 2018 EIR. The Specific Plan includes development of 210.5 acres of land located at the northeast corner of Leisure Town Road (future Jepson Parkway) and Elmira Road. The Specific Plan includes 584 detached single-family homes and 184 duet homes for a total of 768 homes, over 45 acres of various parks, trails, and open space, 7.4 acres for neighborhood commercial use, a landscaped detention basin, a new street network, and roadway improvements. The 2018 EIR concluded that development would result in significant and unavoidable impacts associated with operational air emissions due to the increase in reactive organic gases (ROG) and nitrogen dioxide (NO_x), in addition to level of service traffic impacts at three intersections. The remaining impacts could all be reduced to less-than-significant with mitigation.

Project Location

The approximately 34-acre project site is located within unincorporated Solano County immediately adjacent to the Farm at Alamo Creek Specific Plan and the city limits to the south and west, Hawkins Road to the north, and undeveloped agricultural land within Solano County to the north and east. Leisure Town Road is located approximately 0.5 miles to the west of the project site.

Project Description

The proposed project includes a tentative subdivision map to develop a mix of up to 241 attached and detached single-family residential units, a 0.6-acre private park, and 7.2 acres of open space agricultural buffer along the eastern boundary of the project site along with connections to required infrastructure.

1.3 Scope of the SEIR

This SEIR evaluates the proposed project to the extent feasible which includes establishing the existing environmental resources or conditions within the project site, analyzing potential impacts on those resources due to implementation of the proposed project, and identifying mitigation measures to reduce significant impacts. Where project specific information is available, this SEIR quantifies and/or evaluates project impacts at a level of detail commensurate with information available at the time the analysis was conducted.

1.4 CEQA Process

CEQA (California PRC, Section 21000 et seq.) requires the preparation and certification of an EIR for any project that a lead agency determines may have a significant effect on the environment. According to Section 21002.1(a) of the PRC, "[T]he purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project and to indicate the manner in which those significant effects can be mitigated or avoided." CEQA also establishes mechanisms whereby the public and decision makers can be informed about the nature of the project being proposed, as well as the extent and types of impacts that the project and its alternative would have on the environment if implemented.

According to CEQA Guidelines Section 15162(a)(3)(A), when an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows that the project will have one or more significant effects not discussed in the previous EIR.

CEQA Guidelines Section 15163(a) states: "A Lead or Responsible Agency may prepare a supplement to an EIR rather than a Subsequent EIR if: (1) any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and (2) only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation."

Furthermore, per Section 15163(e) of the CEQA Guidelines "when the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the Supplemental EIR (CEQA Guidelines, Section 15163[e]). A finding under Section 15091 shall be made for each significant effect shown in the previous EIR."

The SEIR needs to contain only the information required to analyze the proposed changes to the prior adopted project, including any changed circumstances and new information requiring additional environmental review, as set forth in CEQA Guidelines Sections 15162 and 15163. According to CEQA Guidelines Section 15163, the supplement to a prior certified EIR needs to only contain information necessary to ensure the prior EIR adequately addresses any changes to the project, including changed circumstances and new information requiring additional environmental review. Where the existing information and analysis in the 2018 EIR is sufficient to evaluate the impacts of the proposed project, no additional environmental review is required. Based on the analysis in the 2018 EIR, including the environmental checklist prepared for the project and provided in Appendix B, the 2018 EIR has adequately evaluated impacts associated with the proposed project and would not result in any significant impacts in the following issue areas: aesthetics, agriculture and forestry resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, population and housing, public services, recreation, tribal cultural resources, and wildfire. Please see the discussion in the Executive Summary that addresses those topics not further addressed in this SEIR.

Project alternatives are analyzed in Chapter 5, Alternatives, and include a No Project/No Development Alternative, a Reduced Intensity Alternative, and an Affordable Housing Alternative.

To address the proposed changes to the Specific Plan and 2018 EIR due to the proposed project, it was determined the topics of air quality, biological resources, land use, utilities and service systems, and transportation be considered in greater detail. Therefore, this SEIR contains revised impact analyses for these resource areas.

Notice of Preparation

In accordance with CEQA Guidelines Section 15082, a NOP was circulated for public and agency review from March 24, 2023, to April 24, 2023. The purpose of the NOP is to provide notification that a SEIR for the proposed project was to be prepared and to solicit guidance on the scope and content of the document. A revised NOP was circulated from July 27, 2023, to August 25, 2023, reflecting project revisions that had occurred after circulation of the initial NOP. The changes included minor changes to the number of residential units and lot sizes. Copies of the NOPs and comments received are included in Appendix A. The City received 7 comment letters on the initial NOP and 3 comment letters on the revised NOP from the following agencies and organizations. No comments were received from the public.

- California Department of Conservation
- Earthjustice
- Native American Heritage Commission (NAHC)
- Yocha Dehe Wintun Nation
- Solano Local Agency Formation Commission
- California Department of Fish and Wildlife
- Department of Toxic Substances Control
- Central Valley Regional Water Quality Control Board

Native American Consultation

In compliance with AB 52 and SB 18, the City sent letters to California Native American tribes that are traditionally and culturally affiliated with the project area. The Yocha Dehe Wintun Nation responded and requested consultation for the project. The City has met with the tribe and consultation is ongoing.

The 2018 EIR includes an Initial Study (included as Appendix B to the 2018 EIR) which addressed potential impacts to cultural resources and included mitigation measures to reduce impacts to less-than-significant levels. A new records search at the Northwest Information Center was conducted to determine if any new resources were identified since the 2018 EIR was certified. Additionally, a field survey was conducted in August 2023. No new resources have been recorded and no new cultural resources were identified during the field survey. Because no new records were identified and the prior mitigation measures would still apply, the analysis of cultural resources and tribal cultural resources included in the 2018 EIR is still adequate and additional review of these resource areas is not required to be evaluated in this SEIR.

Draft Supplemental EIR and Public Review

This Draft SEIR is being circulated for public review and comment for a period of 45 days pursuant to CEQA Guidelines Section 15105. The 45-day public review period for the Draft EIR will be from February 14, 2024, through April 1, 2024. The public can review the Draft SEIR at the following address during normal business hours (Monday through Friday, 8 a.m. to 5:30 p.m.) or on the City's website at: www.cityofvacaville.gov/TheFieldsatAlamoCreek.

City of Vacaville Community Development Department
650 Merchant Street
Vacaville, CA 95688

The City encourages all comments on the Draft SEIR to be submitted in writing. All comments or questions regarding the Draft SEIR should be addressed to:

Albert Enault, Senior Planner
City of Vacaville Community Development Department
650 Merchant Street
Vacaville, CA 95688
albert.enault@cityofvacaville.com
Phone: (707) 449-5364

Final Supplemental EIR

Upon completion of the Draft SEIR public review period, a Final SEIR will be prepared that will include written responses to all substantive comments received during the public review period on the adequacy of the Draft SEIR. The Final SEIR will also include a Mitigation Monitoring and Reporting Program (MMRP) prepared in accordance with CEQA Guidelines Section 15097. The MMRP will include applicable mitigation measures from the 2018 EIR as well as any other mitigation measures required as part of the proposed project. The Final SEIR will address any revisions to the Draft SEIR made in response to agency or public comments. The Draft SEIR and Final SEIR together will comprise the SEIR for the proposed project. Before the City can approve the project, it must first certify that the SEIR has been completed in compliance with CEQA, that the City has reviewed and considered the information in the SEIR, and that the SEIR reflects the independent judgment of the City. The City also would be required to adopt Findings of Fact, along with a Statement of Overriding Considerations if there are any significant and unavoidable impacts where no feasible mitigation is available to reduce the severity of the impact to a less-than-significant level (see CEQA Guidelines Sections 15091 and 15093).

SEIR Adequacy

The level of detail contained throughout this SEIR is consistent with Section 15151 of the CEQA Guidelines, which states the following:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

1.5 Lead, Responsible and Trustee Agencies

Lead Agency

In accordance with CEQA Guidelines Sections 15050 and 15367, the City has been designated the "'lead agency," which is defined as the "public agency which has the principal responsibility for carrying out or disapproving a project." The lead agency is also responsible for determining the scope of the environmental analysis, preparing the SEIR, and responding to comments received on the Draft SEIR. Prior to making a decision to approve a project, the lead agency is required to certify that the SEIR has been completed in compliance with CEQA, that the decision-making body has reviewed and considered the information in the SEIR, and that the SEIR reflects the independent judgment of the lead agency.

Responsible Agencies

Responsible agencies are state and local public agencies, other than the lead agency, that have some authority to carry out or approve a project or that are required to approve a portion of the project or approve a permit for which a lead agency is preparing or has prepared an EIR or Initial Study/Negative Declaration (CEQA Guidelines Section 15813). The following agencies would potentially act as a responsible agency for the purposes of this project:

- Solano County Air Pollution Control District
- Solano County Local Agency Formation Commission

Trustee Agencies

Trustee agencies are designated public agencies with legal jurisdiction over natural resources that are held in trust for the people of California and that would be affected by a project, whether or not the agencies have authority to approve or implement the project (CEQA Guidelines Section 15386). The following agency was identified as a trustee agency with potential jurisdiction over the proposed project:

- California Department of Fish and Wildlife

1.6 Use of Previously Prepared Environmental Documentation

This Draft SEIR relies in part on data, environmental evaluations, mitigation measures, and other components of EIRs and plans prepared by the City for areas within the project vicinity. These documents are listed below and used as source documents for this SEIR. All documents are available for public review during normal business hours (Monday through Friday, 8 a.m. to 5:30 p.m.) at the City of Vacaville Community Development Department, 650 Merchant Street, Vacaville, CA and on the City's website at: https://www.cityofvacaville.gov/government/community-development/planning-and-development.

- The Farm at Alamo Creek Specific Plan Final Environmental Impact Report (SCH No. 2017062068) – September 2018
- The Farm at Alamo Creek Specific Plan, adopted November 2018, Resolution #2018-132
- City of Vacaville General Plan, Adopted August 11, 2015. Resolution 2015-074
- City of Vacaville General Plan Update and Energy and Conservation Action Strategy Draft (October 2013) and Final (August 2015) Environmental Impact Report (SCH No. 2011022043)
- City of Vacaville General Plan Transportation Element Update and Energy and Conservation Action Strategy Supplemental Environmental Impact Report (SCH No. 2020090526) – September 2023
- City of Vacaville Addendum to the General Plan EIR and SEIR prepared for the 2023-2031 Housing Element Update, Housing Element Programs Implementation, Safety Element Update, and Community Health Policies, Resolution #2023-060

1.7 Organization of the Draft SEIR

The Draft SEIR is organized in the following chapters: Executive Summary, Introduction and Scope of the EIR, Project Description, Introduction to the Environmental Analysis, Impacts and Mitigation Measures (Setting, Impacts, and Mitigation Measures), CEQA Considerations, List of Preparers.

Chapter ES, Executive Summary—Provides an overview of areas of known controversy and issues to be resolved, a summary of those issue areas not required to be evaluated in the SEIR, and lists the project alternatives. This chapter also summarizes the elements of the proposed project and the environmental impacts that could result from implementation of the project and provides a table which lists impacts, describes proposed mitigation measures, and indicates the level of significance of impacts before and after mitigation. This section also summarizes the environmental topics dismissed from detailed discussion in this SEIR.

Chapter 1, Introduction—Provides an introduction and overview of the SEIR process and describes the intended use of the SEIR and the review process.

Chapter 2, Project Description—Provides a detailed description of the proposed project, including its location, background information, project history, project objectives, and technical characteristics.

Chapter 3, Introduction to the Environmental Analysis—Provides an introduction to the Environmental Analysis, section organization, and terminology used in the SEIR.

Chapter 4, Environmental Analysis—Describes the baseline environmental setting and provides an assessment of potential project impacts for the technical issue areas addressed in the Draft SEIR. The section is divided into four sub-sections: Introduction, Environmental Setting, Regulatory Background, and Impacts and Mitigation Measures (project-specific and cumulative).

Chapter 5, Alternatives— Analyzes alternatives to the project that would avoid or substantially lessen any significant effects from the project. This chapter identifies the proposed project objectives, describes the project alternatives, and evaluates the comparative effects of the alternatives relative to the proposed project.

Chapter 6, Other CEQA Considerations— Provides information required by CEQA regarding impacts that would result from the proposed project, including a summary of cumulative impacts, potential secondary impacts resulting from growth inducement, and significant irreversible changes to the environment.

Chapter 7, List of Preparers—Lists report authors who provided technical assistance in the preparation and review of the SEIR.

Appendices—Includes various documents and data that support the analysis presented in the Draft SEIR.

1.8 References

City of Vacaville. 2013. General Plan EIR (SCH No. 2011022043). https://www.ci.vacaville.ca.us/government/community-development/advanced-planning/adopted-plans/general-plan/general-plan-and-ecas-eir-documents

City of Vacaville. 2015. City of Vacaville General Plan. https://www.ci.vacaville.ca.us/government/community-development/advanced-planning/adopted-plans/general-plan/general-plan-documents

City of Vacaville. 2018. The Farm at Alamo Creek Specific Plan Environmental Impact Report (SCH No. 2017062068).

City of Vacaville. 2021. General Plan Transportation Element and Energy Conservation Action Strategy Update (SCH no. 2020090526). https://www.ci.vacaville.ca.us/government/community-development/advanced-planning/adopted-plans/general-plan/general-plan-and-ecas-eir-documents

City of Vacaville. 2023. Resolution 2023-060. https://vacaville.granicus.com/MetaViewer.php?view_id=5&clip_id=1895&meta_id=106270

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2 Project Description

This chapter describes the location, background, objectives, characteristics, design features, and discretionary actions for the proposed Fields at Alamo Creek Project ("proposed project") in the City of Vacaville ("City"). G&W Holdings LLC (project applicant) requests approval of various discretionary entitlements in support of the proposed project, including a General Plan Amendment, Specific Plan Amendment, and Tentative Subdivision Map. Project information has been provided by the project applicant and City staff. The following project description serves as the basis for the environmental analysis contained in this Supplemental Environmental Impact Report (SEIR).

2.1 Introduction

The proposed project is located immediately adjacent to the eastern boundary of the Farm at Alamo Creek Specific Plan ("Specific Plan") and development of this site was anticipated in the *Farm at Alamo Creek Specific Plan Environmental Impact Report* (SCH No. 2017062068) ("2018 EIR"). The proposed project includes amending the boundaries of the Specific Plan to include the project site and supplementing the 2018 EIR to include more residential units, a small private park, and open space, along with the extension of roads and utilities. The 2018 EIR contemplated development would occur to the east and included future roadway and utility connections. To address proposed changes to the Specific Plan, a SEIR to the 2018 EIR has been prepared to disclose relevant information concerning the potential environmental effects associated with the addition of these new project elements.

2.2 Project Location

The proposed project includes a 33.6-acre parcel of land (assessor's parcel number [APN] 0138-010-040) located in unincorporated Solano County south of Hawkins Road and Katleba Lane, east of Leisure Town Road, as shown on Figure 2-1, Project Location. The city limits and the approved Specific Plan boundary is immediately adjacent to the western and southern boundary of the project site, as shown on Figure 2-1. Leisure Town Road is located approximately 0.5 miles to the west. Adjacent uses include agricultural lands to the east and a former ranch and agricultural lands to the north.

The proposed project includes a request to the Solano County Local Agency Formation Commission (Solano LAFCO) to annex the project site into the city, including the portion of Hawkins Road immediately adjacent to the northern boundary of the project site. The project site is located inside of the City's proposed Sphere of Influence and Urban Growth Boundary (UGB), within an area designated as Urban Reserve in the City's General Plan with a portion of the site designated Agricultural Buffer (City of Vacaville 2015).

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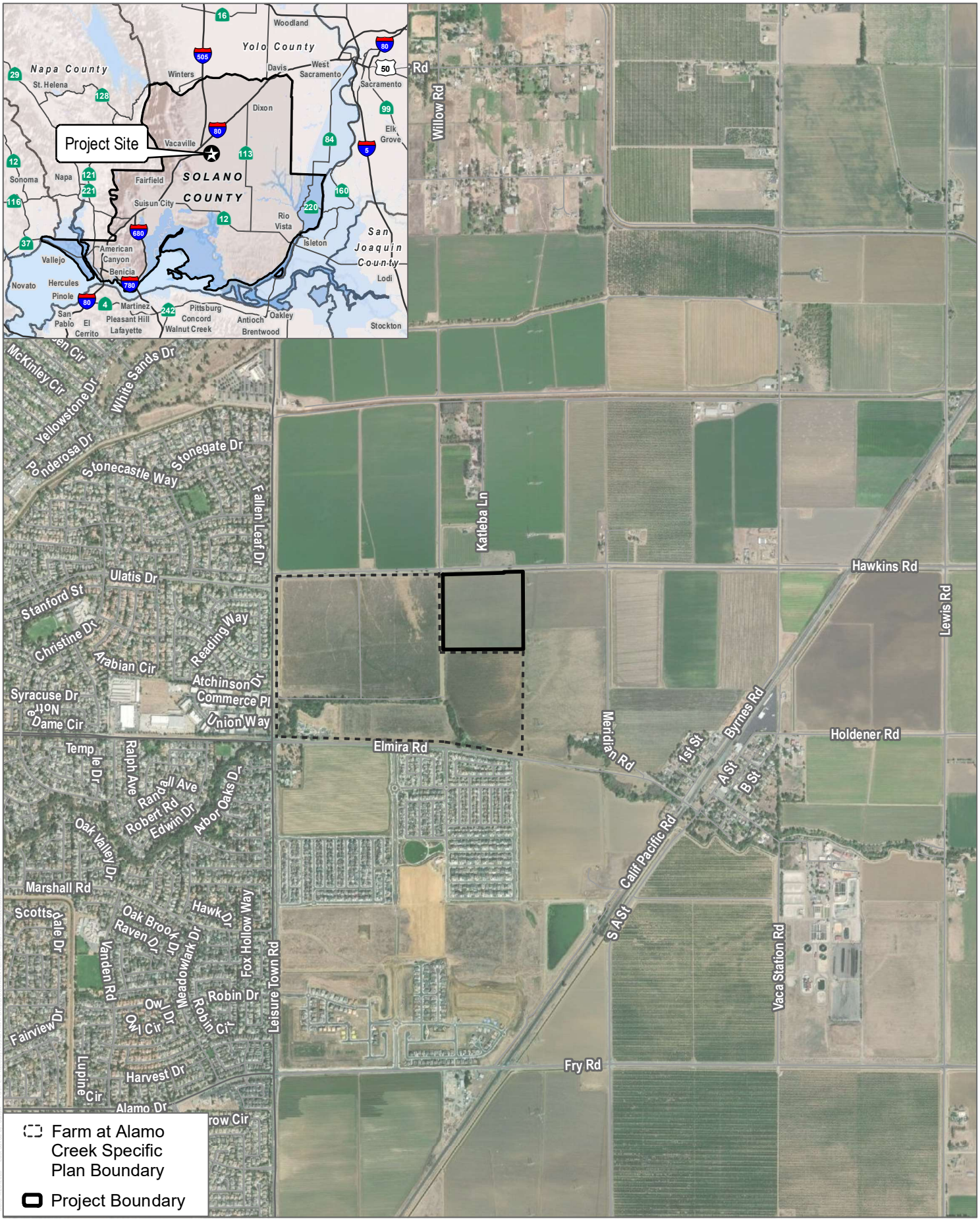

SOURCE: DigitalGlobe 2017, Open Street Map 2019

DUDEK

0 1,000 2,000 Feet

FIGURE 2-1

Project Location

Fields at Alamo Creek

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2.3 Project Background

In 2018, the City approved the Farm at Alamo Creek Specific Plan Project and certified the *Farm at Alamo Creek Specific Plan Environmental Impact Report* (SCH No. 2017062068) or 2018 EIR. The prior approved project includes development of 210.5 acres of land located at the northeast corner of Leisure Town Road (future Jepson Parkway) and Elmira Road. The Specific Plan includes 768 units, over 45 acres of parks, trails, and open space, 7.4 acres for neighborhood commercial use, a landscaped detention basin, a new street network, and roadway improvements. The 2018 EIR concluded that development of the Specific Plan would result in significant and unavoidable impacts associated with operational air emissions due to the increase in reactive organic gases (ROG) and nitrogen dioxide (NO_x), in addition to level of service traffic impacts at three intersections. The remaining impacts could all be reduced to less than significant with mitigation.

A copy of the Specific Plan and 2018 EIR is available for public review at the City of Vacaville Planning Division, 650 Merchant Street, Vacaville, California 95688 and on the City's website: https://www.cityofvacaville.gov/government/community-development/planning-and-development/development-activity/residential-activity/the-farm-at-alamo-creek. The information contained in the 2018 EIR is hereby incorporated by reference into this document.

2.4 Existing Project Site

The topography of the project site is generally flat and located between 78 to 82 feet above mean sea level. The project site is undeveloped and has been tilled and is used for active agriculture. The project site contains land designated by the California Department of Conservation (DOC) as Prime Farmland (DOC 2022) and does not contain any trees or buildings. A Solano Irrigation District (SID) canal runs adjacent to Hawkins Road along the north side of the property.

Surrounding Land Uses and Setting

The area surrounding the project site to the east and south is characterized as undeveloped agricultural land, with some land fallow and other land under active agricultural use. Across Hawkins Road to the north are the remnants of a former ranch and agricultural land. The project site abuts the Specific Plan on the west and south, which includes land that is no longer actively farmed. There is an existing PG&E easement east of the project site for 500 kilovolt (kV) and 230 kV overhead transmission lines that are part of the statewide electrical system.

Land Use and Zoning

The project site is located in the East of Leisure Town Growth Area and designated Urban Reserve and Agricultural Buffer in the City's General Plan (City of Vacaville 2015) and designated Agriculture and zoned A-40, Exclusive Agricultural 40 acres in the Solano County General Plan (Solano County 2008). The UR designation is for lands outside of the city which the City has determined appropriate for future urban development and annexation. The project site does not currently include City zoning because it is located outside of the city limits. Figures 2-2 and 2-3 show the existing and proposed land use and zoning.

As noted above, the project site is located within the City's Sphere of Influence and UGB. The site is designated as a future Specific Plan in the City's General Plan (City of Vacaville 2015, Figure LU-2) and is also designated as a growth area as part of the East of Leisure Town Road Growth Area (City of Vacaville 2015, Figure LU-3).

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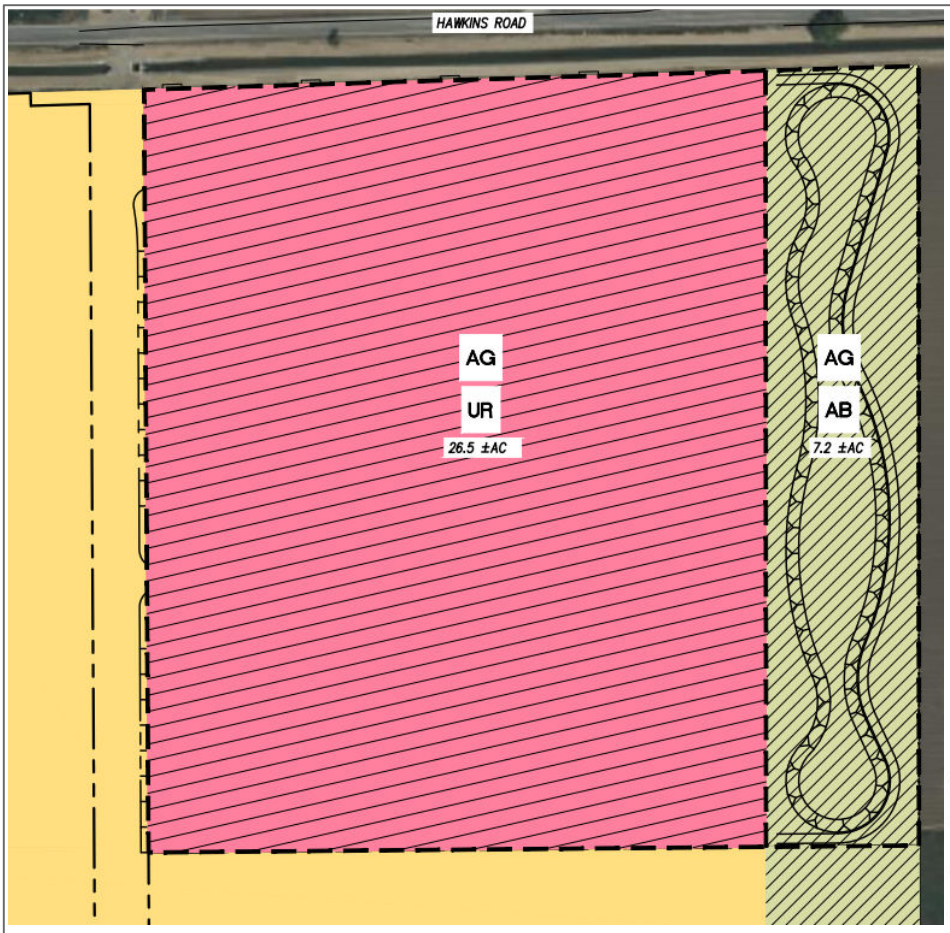
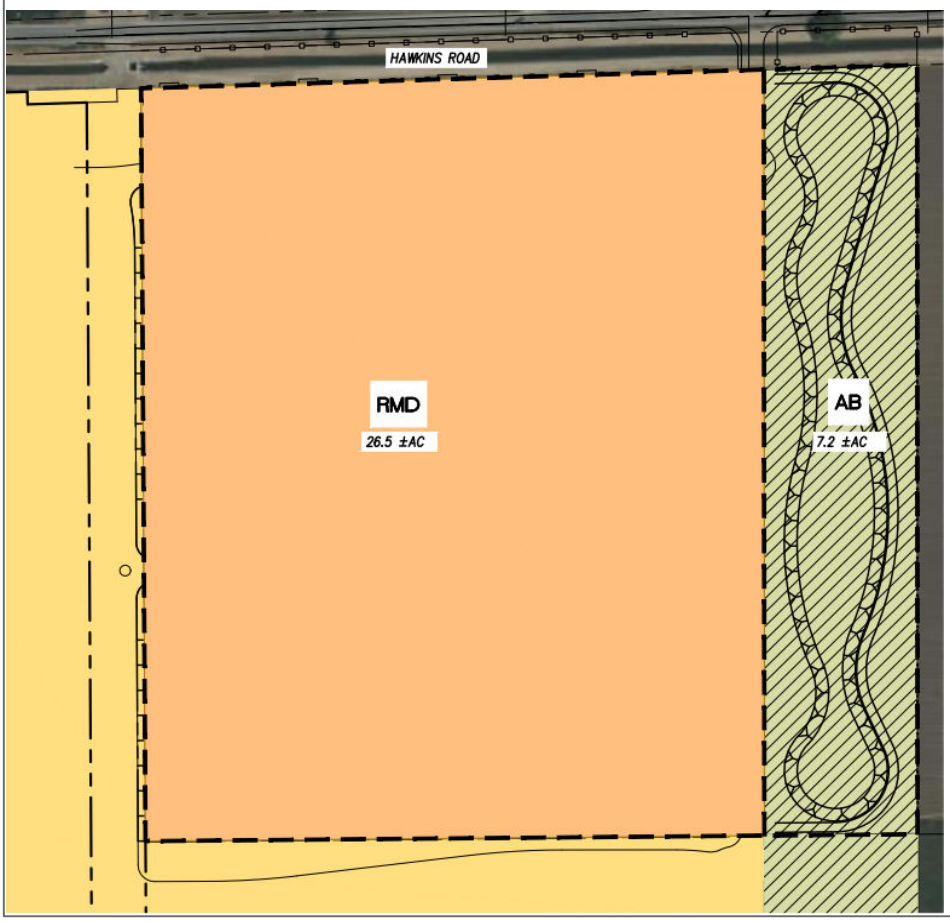


EXISTING LAND USE DESIGNATION

LEGEND

SOLANO COUNTY: AGRICULTURAL (AG)
CITY OF VACAVILLE: URBAN RESERVE (UR)

SOLANO COUNTY: AGRICULTURAL (AG)
CITY OF VACAVILLE: AGRICULTURAL BUFFER (AB)



PROPOSED LAND USE DESIGNATION

LEGEND

RESIDENTIAL MEDIUM DENSITY (RMD)

AGRICULTURAL BUFFER (AB)

SOURCE: City of Vacaville 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 2-2

Existing and Proposed Land Use

Fields at Alamo Creek

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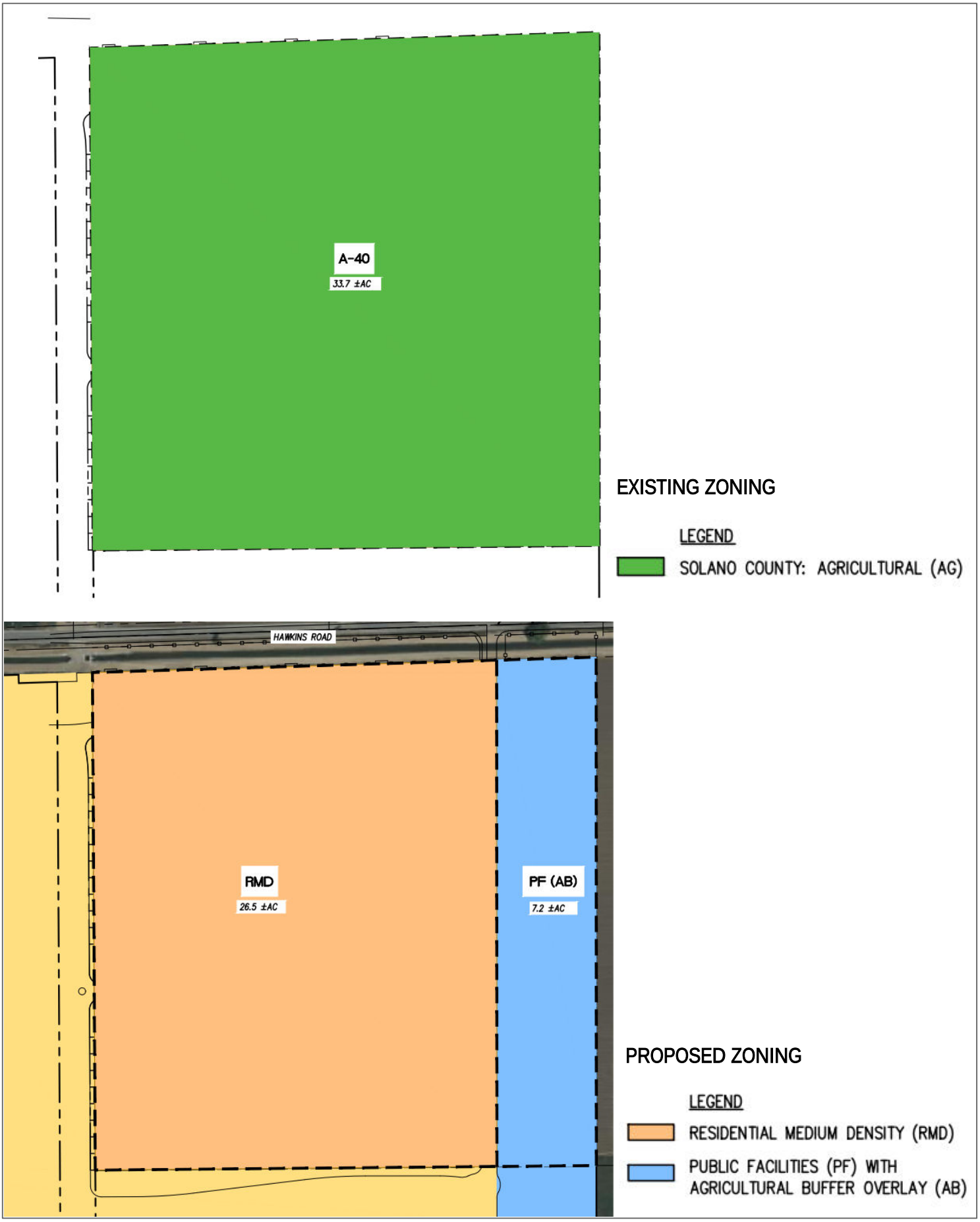

SOURCE: City of Vacaville 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 2-3

Existing and Proposed Zoning

Fields at Alamo Creek

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The project site is located within Zone D of the Travis Air Force Base Land Use Compatibility Plan. Limitations on the height of structures (over 200 feet above ground level) and notice of aircraft overflights are the only compatibility factors within this zone (Solano County 2015). The project site is not located within the Nut Tree Airport Land Use Compatibility Plan (Solano County 1988).

2.5 Proposed Project Description

Project Objectives

California Environmental Quality Act (CEQA) Guidelines Section 15124(b) require that the Project Description include a statement of the objectives of the project. Section 15124(b) further states that "the statement of objectives should include the underlying purpose of the project and may discuss the project benefits." The underlying purpose of the proposed project is to provide housing for the City.

Specific project objectives are:

- Complete the planning for the geographical area designated by the General Plan for future growth which coincides with the city's designated urban growth boundary.
- Complete the land planning for the area initiated with the Farm at Alamo Creek.
- Develop an economically feasible community that can be reasonably served by existing and proposed public infrastructure in a manner that would foster orderly urban development, discourage leapfrog or piecemeal development.
- Develop a project that will provide needed housing. Provide multiple types of single-family housing to support the City's workforce. Accommodate projected regional growth in proximity to existing and planned infrastructure, urban services, transportation corridors, and major employment centers.
- Create a community that has a positive overall economic impact on the City and achieves a positive fiscal impact on the City's finances.
- Develop a project that will promote efforts to reduce greenhouse gas emissions by implementing green building practices and providing all-electric homes that will promote the change from fossil fuels to carbon free alternatives for a more sustainable neighborhood.
- Develop a project that provides a turnkey private park to be maintained by the homeowners' association.
- Develop pedestrian and bicycle friendly neighborhoods with open space trails and traffic calming features.
- Provide for the extension of utilities and services including an easement for the construction and maintenance of the 36" sewer line to be located within the agricultural buffer area. The sewer line extension is planned for the agricultural buffer area of the Fields and will ultimately extend north to serve the City's Northeast Growth Area.

Project Components

The proposed project would provide up to 241 attached and detached single-family residential units, a small 0.6-acre private park, open space, and associated roadways and utility connections. The proposed tentative map is shown on Figure 2-4 and a breakdown of the proposed land uses is provided in Table 2-1.

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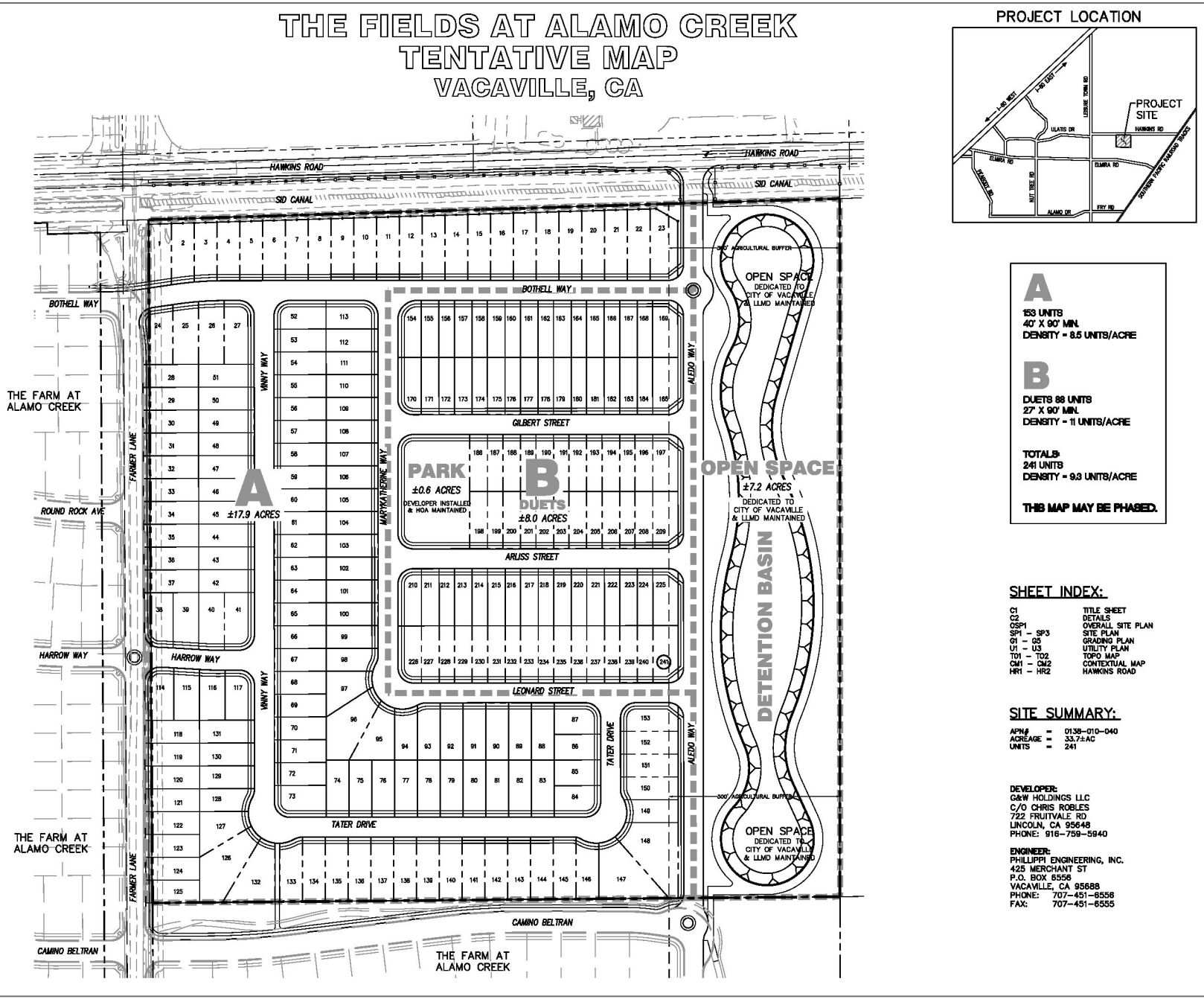

Source: Phillippi Engineering 2023

FIGURE 2-4

Tentative Map

Fields at Alamo Creek

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Table 2-1. Fields at Alamo Creek Land Use Summary

Proposed General Plan Land Use Designation	Proposed Zoning	Acres	Residential Units	Average Density
Residential Medium Density (RMD)	RMD	26.4	241	9.3[1]
Agricultural Buffer (AB)	Public Facilities (PF) with AB Overlay	7.2	-	-
Total		33.6	241	9.3

Source: G&W Holdings, LLC.
Note: [1] Density calculation does not include the 0.6-acre private park.

Residential

The proposed project includes of 26.4 acres of RMD (including a 0.6-acre private mini-park also under the RMD land use designation/zoning) that would support up to 241 medium density residential units. This would be in addition to the 768 units already contemplated in the existing Specific Plan. There would be 153 single-family lots with minimum dimensions of 40-feet wide by 90-feet deep (3,600 square feet) and 88 half-plex lots with minimum dimensions of 29-feet wide by 90-feet deep (2,610 square feet). Based on the number of proposed residential units and the City's average persons per household (2.73)[1], the project would accommodate approximately 658 new residents.

The project would comply with the established land use pattern and design characteristics set forth in the adopted Specific Plan.

Parks and Open Space

The project includes a 0.6-acre private mini-park located generally in the central portion of the site. Along the eastern boundary, a 15-foot-wide pedestrian and maintenance trail is proposed surrounding a new detention basin within the 7.2-acre agricultural buffer/open space area. The trail would connect to the Specific Plan's multi-use trail that abuts the project boundary on the south.

Infrastructure, Landscaping and Lighting

The proposed project would include new water, sewer, and storm drain infrastructure on site to serve the residential development designed in compliance with City specifications. Currently there are no water, sewer, or storm drain facilities within the project site, only an irrigation canal to the north. The project's on-site water, sewer, and storm drain lines are proposed to be located within the road/driveway rights-of-way within the project site.

The project's 8- to 12-inch water lines and 8-inch sewer lines would connect to the adjacent Specific Plan infrastructure to the south and west where water, sewer and storm drain connections would be available. The increase in sewer conveyance and water demand has been factored into the sizing of the Specific Plan's

[1] Calculated based on the 2020 Census Demographic Profile (Census Bureau 2020) total population in households (95,446) divided by total households (34,932).

infrastructure. The project site would also include a new detention basin within the 7.2-acre agricultural buffer/open space area which would collect storm overflows from Old Alamo Creek.

The project is proposing to either create or join an existing Landscaping and Lighting Maintenance District for maintenance of lighting along roadways and in other public spaces, including landscaping along the trail, medians and parkway strips. The Specific Plan's Homeowners Association (HOA) would maintain the mini-park as well. Consistent with the Specific Plan, lighting would be designed to minimize light levels for any given application and to direct the lighting onto the high use areas or objects to be lit. Lighting would be designed to provide continuity along street corridors and promote the safety of residents and users. Ornamental, pedestrian scale pole lights no taller than 20-feet are proposed for local street lighting, with optics and shields that direct the light towards the ground.

Along Hawkins Road on the northern boundary of the project site, the project may construct a six-foot high fence would prevent access to the SID canal that runs parallel to the roadway. If constructed, the fence would be designed consistent with the Specific Plan Community Design guidelines as would all other project fencing.

Circulation

The project's roadway network would serve vehicles, pedestrians and bicyclists, as shown in Figure 2-5. The roadway network would tie into the adjacent Specific Plan roadway network to the west and south and would also provide access to Hawkins Road to the north. This connection to Hawkins Road would allow both left turn movements in and out of the plan area. The on-site roadway network would consist of residential streets and would include 5-foot-wide separated sidewalks on all roadways. The proposed detention basin would also have a 15-foot-wide pedestrian and maintenance path that would connect to the Farm at Alamo Creek trail system.

Off-Site Improvements

The proposed project would continue improvements to Hawkins Road initiated under the Specific Plan. The portion of Hawkins Road to the north of the project site would continue in a 2-lane configuration and would be widened to 36 feet for the left turn pocket in and out of Aledo Way.

Sustainability Measures

The proposed project includes a variety of sustainable features including the following:

- All residences would be all-electric without natural gas connections. Residences would comply with the current California Building Code for Energy Efficiency.
- Consistent with the Specific Plan, all outdoor site lighting fixtures shall be bi-level LED, which would reduce the demand for electricity.
- An Agricultural Buffer would be provided on the east end of the project site to separate the residential community from agricultural operations in the County.
- A 15-foot-wide pedestrian and maintenance trail for biking and walking would be provided surrounding the detention basin within the Agricultural Buffer that would connect to the Specific Plan trail system.
- The landscape palette would emphasize native, drought tolerant plant species.
- Use of biofiltration-swales and vegetated swales in medians and other public spaces to pre-treat stormwater before entering the stormwater system.

VEHICLE CIRCULATION SYSTEM

- PROPOSED ARTERIAL ROAD WIDENING
- EXISTING ARTERIAL ROAD
- PROPOSED MINOR ARTERIAL ROAD
- PROPOSED ENHANCED RESIDENTIAL ROAD
- PROPOSED RESIDENTIAL ROAD

PATHS AND TRAILS

- 10' MULTI-USE PATH
- 4' WIDE JOGGING TRAIL

SOURCE: City of Vacaville 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 2-5

Roadway Network

Fields at Alamo Creek

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- The development pattern is designed to provide connectivity between neighborhoods and project amenities. In addition, the orientation of the streets in a north-south and east-west direction enhancing the opportunities for rooftop solar panels.
- Streets would be designed, if feasible, with parkway strips that would include trees for shading of streets and sidewalks.

Project Construction/Phasing

Site preparation, grading and trenching for utilities and construction of roads would take approximately 12 months followed by residential construction. The residential construction would be built-out consistent with market demands. This plan is also subject to City revision over time. Grading would balance the soils on site and would not require the export or import of soils. All construction equipment and parking for construction workers would be staged onsite during the duration.

2.6 Required Approvals

The following discretionary approvals would be required by the City for the project:

- Certification of the SEIR;
- (Pre) Zone the site, including approval for annexation;
- Specific Plan Amendment to The Farm at Alamo Creek Specific Plan;
- General Plan Amendment; and
- Tentative map.

Responsible and Trustee Agencies

The SEIR prepared for the proposed project would be used by responsible agencies and trustee agencies that may have some approval authority over the proposed project (i.e., to issue a permit). The project applicant would obtain all permits, as required by law. The following agencies have been identified as having potential discretionary authority over approval of certain project elements, or alternatively, may serve in a ministerial capacity:

- California Department of Fish and Wildlife;
- Central Valley Regional Water Quality Control Board;
- Solano County Local Area Formation Commission;
- Yolo-Solano Air Quality Management District;
- Solano County Airport Land Use Commission;
- Solano County; and
- Solano Irrigation District.

2.7 References

City of Vacaville. 2015. *City of Vacaville General Plan.* Adopted August 11, 2015. Resolution 2015-074.

DOC (California Department of Conservation). 2022. California Important Farmland Finder. Accessed April 13, 2023. https://maps.conservation.ca.gov/DLRP/CIFF/

Solano County. 1988. *Airport/Land Use Compatibility Plan – Nut Tree Airport and Vacaville Gliderport.* May 1988. https://www.solanocounty.com/civicax/filebank/blobdload.aspx?BlobID=37014

Solano County. 2008. *Solano County General Plan.* Adopted August 5, 2008. http://www.co.solano.ca.us/depts/rm/planning/general_plan.asp.

Solano County. 2015. *Travis Air Force Base Land Use Compatibility Plan.* Adopted October 8, 2015. https://www.solanocounty.com/civicax/filebank/blobdload.aspx?BlobID=34765

3 Introduction to the Environmental Analysis

3.1 Scope of the SEIR Analysis

This chapter of the Supplemental Environmental Impact Report (SEIR) describes the environmental and regulatory setting, impacts, and mitigation measures for each of the following technical sections included within Chapter 4 (Sections 4.1 through 4.5):

- 4.1 Air Quality
- 4.2 Biological Resources
- 4.3 Land Use and Planning
- 4.4 Utilities and Service Systems
- 4.5 Transportation

Implementation of the Fields at Alamo Creek Project ("proposed project") must be consistent with the City of Vacaville ("City") General Plan (City of Vacaville 2015) goals and policies, the Farm at Alamo Creek Specific Plan ("Specific Plan"), and all applicable regulations, such as California Building Code standards. Therefore, such policies and standards are not required to be identified as mitigation, and compliance with relevant goals, policies, and federal, state or City requirements are instead described within the impact analysis.

The SEIR needs to contain only the information required to analyze the proposed changes to the prior adopted project, the Specific Plan, including any changed circumstances and new information requiring additional environmental review, as set forth in California Environmental Quality Act (CEQA) Guidelines Sections 15162 and 15163. Where existing information and analysis in the *Farm at Alamo Creek Specific Plan Environmental Impact Report* (SCH No. 2017062068) certified in November 2018 ("2018 EIR") are sufficient to evaluate the impacts of the proposed project, no additional environmental review is warranted. The Executive Summary provides a summary of environmental issues for which potential impacts of the proposed project are adequately addressed in the 2018 EIR and no further analysis is required.

3.2 Technical Studies

A number of technical studies were prepared for the proposed project to support the analysis contained in Chapter 4 of this SEIR, which evaluates potential environmental impacts not addressed in the 2018 EIR. Studies prepared specifically for the project include a Biological Resources Assessment (Appendix C), a Transportation Technical Memorandum (Appendix D), and a Cultural Resources Letter Report (Appendix E)[1].

[1] Dudek prepared a letter report updating the previous cultural resource report prepared for the 2018 EIR. No technical section was prepared for cultural resources; see the Executive Summary for a discussion on how existing documentation is considered adequate.

3.3 Environmental Setting

According to subdivision (a) of Section 15125 of the CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project as they exist at the time when the Notice of Preparation (NOP) is published. This "environmental setting" will normally constitute the "baseline condition" against which project-related impacts are compared. Therefore, the baseline conditions for this SEIR, unless noted otherwise, are based on conditions that existed in July 2023, when the revised NOP was published and circulated. The CEQA Guidelines recognize that the data for establishing an environmental baseline cannot be rigid. Because physical environmental conditions may vary over a range of time, the use of environmental baselines that differ from the date of the NOP is reasonable and appropriate in certain circumstances when doing so results in a more accurate or conservative environmental analysis.

The City's General Plan included an evaluation of proposed land use designations within the City's Sphere of Influence (SOI), which included the proposed project site. The project applicant is requesting the project area be annexed into the City. Therefore, the SEIR evaluates potential impacts consistent with the City's General Plan goals and policies, the City's Municipal Code, and other City development requirements and standards.

3.4 Section Format

Each section in Chapter 4 begins with a description of the project's **environmental setting** and **regulatory setting** as it pertains to a particular issue.

The environmental setting identifies the existing conditions present on the project site. The regulatory setting provides a summary of applicable federal, state, and local regulations, plans, policies, and laws that are relevant to each issue area. The regulatory setting description is followed by a discussion of **project-level impacts**. The project-specific impacts discussion is followed by an analysis of the **cumulative impacts** of the project. The impact portion includes an impact statement, prefaced by a number for ease of identification, followed by an analysis of that impact and a determination of whether the impact would be significant (that is, exceed the applicable threshold) or less than significant (that is, below the applicable threshold). If a significant impact is identified, mitigation measures are recommended, if available, to reduce the severity of the impact. All **mitigation measures** are identified at the end of each impact discussion. The degree to which the identified mitigation measure(s) would reduce the impact is also described.

In determining the level of significance of environmental impacts associated with the proposed project, the analysis in this Draft SEIR assumes that the proposed project would comply with relevant federal and state laws and regulations, relevant City General Plan policies, City ordinances, other adopted City documents, policies, and development standards and design guidelines contained in the Specific Plan, unless otherwise noted. Therefore, such mandatory policies, ordinances, and standards are not identified as mitigation measures, but rather are discussed as part of the "Regulatory Setting" governing the proposed project. Compliance with these requirements often mitigates potential impacts.

An example of an impact statement is shown below.

Impact 4.2-1. The proposed project could have a substantial adverse effect on a candidate, sensitive, or special-status species.

A discussion of potential impacts of the proposed project is presented in paragraph form. The impacts associated with construction and operation of the project are evaluated and compared to the threshold of significance for the particular impact. The analysis discusses the applicable local (including General Plan goals, policies, implementing actions, etc.), State, and federal laws and regulations/standards that would reduce impacts, and assumes that the project would comply with them. In many instances, the actions that are necessary to reduce a project impact are already required by compliance with existing laws or requirements. Further, it is assumed that the project applicant would obtain all necessary permits and comply with all required conditions of those permits. The impact analysis concludes with a determination of the impact's significance in **bold type** (e.g., **significant impact/significant and unavoidable impact/potentially significant impact/less-than-significant impact/no impact**).

Mitigation Measures

Following each impact analysis is a discussion of the applicable mitigation measures identified to reduce the significance of an impact, if required.

In Chapter 4, this section includes a statement indicating whether the mitigation measure will reduce the impact to a less-than-significant level. A discussion of how the mitigation would reduce the impact is included before the mitigation measure. In some instances, mitigation measures from the 2018 EIR are applicable to the project. The mitigation measures from the 2018 EIR are reprinted, and in some cases, minor updates have been made to the language (shown in underline and strikethrough).

Mitigation measures, if applicable, are numbered and presented in the following format.

BIO-1 Statement of what, if any, mitigation measures are required.

Note that CEQA Guidelines Section 15370 defines mitigation as:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree of magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- Compensating for the impact by replacing or providing substitute resources or environments.

In some instances, contribution of a project's fair-share to an established program provided there is a "reasonable plan for mitigation" and fair-share contributions are clearly designated to mitigate the impact are considered adequate mitigation for both project and cumulative impacts under CEQA.[2]

[2] See *Save Our Peninsula Com. v. Monterey County Bd. of Supervisors,* (2001) 87 Cal.App.4th 99, 141; and CEQA Guidelines, §15130, subd. (a)(3) ([recognizing that a project's contribution to a cumulative impact may be less than cumulatively considerable where "the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact"]). See also *Anderson First Coalition v. City of Anderson,* (2005) 130 Cal.App.4th 1173).

3.5 Cumulative Analysis

According to CEQA, "cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). CEQA requires that cumulative impacts be discussed when the "project's incremental effect is cumulatively considerable" (CEQA Guidelines, Section 15130 (a)).

An analysis of cumulative impacts follows the evaluation of project impacts under existing conditions in each section in Chapter 4. As defined in CEQA Guidelines Section 15355, cumulative impacts refer to two or more past, present and/or reasonably foreseeable future actions which, when considered together, result in a significant impact. The cumulative impacts analyze the extent to which the project would contribute to cumulative impacts, and whether that contribution would be considerable (i.e., would cause a cumulative condition to be significant and/or substantially increase the severity of a cumulative impact that would be significant whether or not the project was developed). An introductory statement that defines the cumulative analysis methodology and the cumulative context for the respective sections (e.g., buildout of the City's General Plan, development within the Sacramento Valley Air Basin) is at the beginning of the "Cumulative Analysis" discussion. In some instances, a project-specific impact may be considered less than significant but its contribution would be considered potentially significant in combination with other past, present, or reasonably foreseeable development within the surrounding area. Or, in some instances, a potentially significant impact could result on a project level but would not result in a cumulatively considerable impact. The cumulative impacts analysis is presented in the same format as the impacts section, shown above.

3.6 Terminology Used in the SEIR

This Draft SEIR uses the following terminology to describe environmental effects of the proposed project:

- **Standards of Significance:** A set of criteria used by the lead agency to determine at what level or "threshold" an impact would be considered significant. Standards of significance used in this EIR include those set forth in CEQA Guidelines Section 15065 (Mandatory Findings of Significance) and those derived from questions set forth in Appendix G to the CEQA Guidelines; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the City of Vacaville General Plan and other applicable planning documents. In fashioning criteria based on these sources, City staff and the SEIR preparers have also relied on their own professional judgment and experience in some instances. In determining the level of significance, the analysis assumes that the proposed project would comply with relevant federal, state, and local regulations and ordinances.
- **Less-than-Significant Impact:** A project impact is considered less than significant when it does not reach the standard of significance, indicating that there would be no substantial change in the environment. No mitigation is required for less-than-significant impacts.
- **Potentially Significant Impact:** A potentially significant impact is an environmental effect that could cause a substantial adverse change in the environment; however, additional information is needed regarding the extent of the impact to make the determination of significance. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.
- **Significant Impact:** A project impact is considered significant if it results in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project

effects in the context of specified significance criteria. When available, potentially feasible mitigation measures and/or project alternatives are identified to reduce these effects to the environment.

- **Significant and Unavoidable Impact:** A project impact is considered significant and unavoidable if it results in a substantial adverse change in the physical conditions of the environment and there are no potentially feasible mitigation measures and/or project alternatives available to reduce these effects to less than significant.

3.7 References

City of Vacaville. 2018. The Farm at Alamo Creek Specific Plan Environmental Impact Report (SCH No. 2017062068).

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4 Environmental Analysis

4.1 Air Quality

4.1.1 Introduction

This section describes the existing air quality conditions present within and around the Fields at Alamo Creek ("proposed project") site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. The Executive Summary of this Supplemental Environmental Impact Report (SEIR) provides a summary of environmental issues for which potential impacts of the proposed project are adequately addressed in the Farm at Alamo Creek Specific Plan ("Specific Plan") Environmental Impact Report (SCH No. 2017062068) that was certified in November 2018 ("2018 EIR") and for which no further analysis is required. This SEIR analysis focuses on those impacts that are novel to the proposed project and are substantially different from those described in the 2018 EIR.

One comment letter was received from Earthjustice in response to the Notice of Preparation (NOP) issued on March 24, 2023, which included concerns regarding health and air quality impacts due to the project's connection to the existing natural gas infrastructure system. The project is not proposing to use natural gas and is designed to be all-electric. Therefore, concerns regarding natural gas usage are not applicable to the project. No comment letters related to air quality were received in response to the revised NOP issued on July 23, 2023. The NOPs and comments received are provided in Appendix A.

Information contained in this section is based on the latest version of California Emissions Estimator Model (CalEEMod), Version 2022.1.1.19, to estimate the proposed project's criteria air pollutant emissions from both construction and operations. For the relevant data, refer to Appendix B, Air Quality Calculations. Additional sources reviewed to prepare this section include the City of Vacaville General Plan (City of Vacaville 2015), City of Vacaville General Plan and Energy and Conservation Action Strategy Final EIR (City of Vacaville 2021), and the Yolo-Solano Air Quality Management District (YSAQMD) Handbook for Assessing and Mitigating Air Quality Impacts (YSAQMD 2007).

4.1.2 Environmental Setting

This section details the existing environmental setting for air quality and updates the information provided in the 2018 EIR included in Section 4.1.2, Air Quality starting on page 4.1-1.

Environmental Setting

Ambient air quality is generally affected by climatological conditions, the topography of the air basin, the type and amounts of pollutants emitted, and, for some pollutants, sunlight. The proposed project site is located the within Sacramento Valley Air Basin (SVAB). Topographical and climatic factors in the SVAB create the potential for high concentrations of regional and local air pollutants. This section describes relevant characteristics of the air basin, types of air pollutants, health effects, and existing air quality levels.

The SVAB includes Sacramento, Shasta, Tehama, Butte, Glenn, Colusa, Sutter, Yuba, Yolo, and portions of Solano and Placer counties. The SVAB extends from south of Sacramento to north of Redding and is bounded on the west

by the Coast Ranges and on the north and east by the Cascade Range and Sierra Nevada. The San Joaquin Valley Air Basin is located to the south.

Climate and Topography

Hot dry summers and mild rainy winters characterize the Mediterranean climate of the valley. During the year, the temperature may range from 20 to 115 degrees Fahrenheit (°F) with summer highs usually in the 90s and winter lows occasionally below freezing. The high average summer temperatures, combined with very low relative humidity, produces hot, dry summers that contribute to ozone (O_3) buildup. Average annual rainfall is about 20 inches with snowfall being very rare. The prevailing winds are moderate in strength and vary from moist clean breezes from the south to dry land flows from the north.

Weather patterns throughout the SVAB are affected by geography. Mountain ranges tend to buffer the basin from the marine weather systems that originate over the Pacific. However, the Carquinez Strait creates a breach in the Coast Range on the west of this basin, which exposes the midsection of the SVAB to marine weather. This marine influence moderates climatic extremes, such as the cooling that sea breezes provide in summer evenings. These breezes also help to move pollutants out of the valley. During about half of the days from July to September, however, a phenomenon called the "Schultz Eddy" prevents this from occurring. Instead of allowing for the prevailing wind patterns to move north carrying the pollutants out of the valley, the Schultz Eddy causes the wind pattern to circle back south. This effect exacerbates the pollution levels in the area and increases the likelihood of violating federal or state standards. The effect normally dissipates around noon when the delta sea breeze arrives.

The mountains surrounding the valley can also contribute to elevated pollutant concentrations during periods of inversions. These inversions are most common in late summer and fall. Surface inversions are formed when the air close to the surface cools more rapidly than the warm layer of air above it. Elevated inversions occur when a layer of cool air is suspended between warm air layers above and below it. Both situations result in air stagnation. Air pollutants accumulate under and within inversions, subjecting people in the region to elevated pollution levels and associated health concerns. The surface concentrations of pollutants are highest when these conditions are combined with smoke from agricultural burning or when temperature inversions trap cool air, fog, and pollutants near the ground.

Pollutants and Effects

Information regarding criteria and noncriteria air pollutant emissions are provided in the 2018 EIR included in Section 4.1.2, Air Quality, Pollutants and Effects, starting on page 4.1-2.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). Nearby sensitive receptors to the proposed project include residential development to the west and south of the project site along Leisure Town and Elmira Roads, approximately 2,680 feet and 1,580 feet from the project boundary.

Regional and Local Air Quality Conditions

This section details the existing regional and local air quality conditions within the proposed project area and updates the information provided in the 2018 EIR included in Section 4.1, Air Quality starting on page 4.1-6.

Both the federal and state Clean Air Acts have established standards identifying the maximum allowable concentration of criteria air pollutants. The U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) use air quality monitoring data to determine if each air basin or county is in compliance with the applicable standards. If the concentration of a criteria air pollutant is lower than the standard or not monitored in an area, the area is classified as attainment or unclassified (unclassified areas are treated as attainment areas). If an area exceeds the standard, the area is classified as nonattainment for that pollutant.

The EPA has designated the Solano County portion of the SVAB as a nonattainment area for the federal 8-hour O_3 standard, and CARB has designated Solano County as a nonattainment area for the state 1-hour and 8-hour O_3 standards. Solano County has been designated as a nonattainment area for the state 24-hour and annual PM_{10} standards, nonattainment area for the federal 24-hour and annual $PM_{2.5}$ standards. Solano County is designated as unclassified or attainment for the other criteria air pollutants. The status of the Solano County portion of the SVAB with respect to the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) are summarized in Table 4.1-1.

Table 4.1-1. Solano County Attainment Classification

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone (O_3) – 1-hour	No federal standard	**Nonattainment/transitional**
Ozone (O_3) – 8-hour	**Nonattainment/extreme**	**Nonattainment**
Nitrogen dioxide (NO_2)	Unclassifiable/attainment	Attainment
Carbon monoxide (CO)	Unclassifiable/attainment	Attainment
Sulfur dioxide (SO_2)	Unclassifiable/attainment	Attainment
Respirable particulate matter (PM_{10})	Attainment	**Nonattainment**
Fine particulate matter ($PM_{2.5}$)	**Nonattainment**	Unclassified
Lead (Pb)	Unclassifiable/attainment	Attainment
Sulfates (SO_4)	No federal standard	Attainment
Hydrogen sulfide (H_2S)	No federal standard	Unclassified
Vinyl chloride	No federal standard	No designation
Visibility-reducing particles	No federal standard	Unclassified

Sources: EPA 2022 (national); CARB 2022 (California).
Notes: Attainment = meets the standards; Attainment (maintenance) = achieves the standards after a nonattainment designation; Nonattainment = does not meet the standards; Unclassified or unclassifiable = insufficient data to classify; Unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

Local Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. The proposed project site's local ambient air quality is monitored by the YSAQMD. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data from 2020 to 2022 are presented in Table 4.1-2. The UC Davis monitoring station, located at Campbell

Road/Hutchinson Drive, Davis, California 95616, is the nearest air quality monitoring station to the project site, approximately 14.8 miles to the northeast of the project site. Air monitoring data was also collected from the Woodland-Gibson Road monitoring station, which is located at 41929 East Gibson Road, Woodland, California 95776, approximately 23.0 miles to the northeast of the project site. The data collected at these stations are considered representative of the air quality experienced in the project vicinity. The number of days exceeding the ambient air quality standards is also shown in Table 4.1-2.

Table 4.1-2. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2020	2021	2022	2020	2021	2022
Ozone (O_3) – Davis-UCD Campus									
Maximum 1-hour concentration	ppm	State	0.12	0.090	0.088	0.078	0	0	0
Maximum 8-hour concentration	ppm	State	0.070	0.068	0.081	0.071	0	3	1
		Federal	0.070	0.068	0.081	0.071	0	2	1
Nitrogen Dioxide (NO_2) – Davis-UCD Campus									
Maximum 1-hour concentration	ppm	State	0.18	0.065	0.072	0.060	0	0	0
		Federal	0.100	0.065	0.072	0.060	0	0	0
Annual concentration	ppm	State	0.030	0.012	0.011	0.011	—	—	—
		Federal	0.053	0.012	0.012	0.011	—	—	—
Coarse Particulate Matter (PM_{10})[a] – Woodland-Gibson Road									
Maximum 24-hour concentration	µg/m³	State	50	224.2	68.7	64.9	ND (11)	0.0 (0)	0.0 (0)
		Federal	150	223.9	68.2	64.2	ND (1)	0 (0)	ND (0)
Annual concentration	µg/m³	State	20	ND	20.8	20.3	—	—	—
Fine Particulate Matter ($PM_{2.5}$)[a] – Woodland-Gibson Road									
Maximum 24-hour concentration	µg/m³	Federal	35	134.0	33.8	34.8	ND (4)	0.0 (0)	0.0 (0)
Annual concentration	µg/m³	State	12	ND	ND	8.3	—	—	—
		Federal	12.0	ND	8.8	8.3	—	—	—

Sources: CARB 2023; EPA 2022.
Notes: ppm = parts per million by volume; ND = insufficient data available to determine the value; — = not available; µg/m³ = micrograms per cubic meter.
Data taken from CARB iADAM (http://www.CARB.ca.gov/adam) and EPA AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year.
Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.
The UC Davis monitoring station is located at Campbell Road/Hutchinson Drive, Davis, California.
The Woodland-Gibson Road monitoring station is located at 41929 East Gibson Road, Woodland, California.
[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

4.1.3 Regulatory Setting

This section updates the regulatory setting that has changed since the 2018 EIR.

Federal

The Federal regulatory setting is the same as described in the 2018 EIR (see Section 4.1.3 beginning on page 4.1-10).

State

The State regulatory setting is the same as described in the 2018 EIR (see Section 4.1.3 beginning on page 4.1-11).

Local

This section details local regulations and updates the information provided in the 2018 EIR included in Section 4.1.3, Air Quality starting on page 4.1-14.

Yolo-Solano Air Quality Management District

The YSAQMD is the primary local agency responsible for protecting human health and property from the harmful effects of air pollution for all of Yolo County and northeastern Solano County. The YSAQMD develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The YSAQMD's air quality management plans include control measures and strategies to be implemented to attain state and federal ambient air quality standards within the jurisdiction. The YSAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. Applicable YSAQMD attainment plans include:

- **Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions):** The 8-Hour Ozone Attainment and Reasonable Further Program Plan (2013 Ozone Plan) describes measures to be implemented by the air districts in the Sacramento Federal Nonattainment Area (SFNA) to achieve the 1997 O_3 NAAQS. The 2013 Ozone Plan shows that the region continues to meet federal progress requirements and demonstrates that the region will meet the 1997 O_3 NAAQS by 2018. The 2013 Ozone Plan updates the emissions inventory, provides photochemical modeling results, updates the reasonable further progress and attainment demonstrations, revises adoption dates for control measures, and sets new motor vehicle emission budgets for transportation conformity purposes. The 2013 Ozone Plan also includes a vehicle miles traveled (VMT) offset demonstration that showed the emissions reduction from transportation control measures are sufficient to offset the emissions increase due to VMT growth.
- **$PM_{2.5}$ Maintenance Plan and Redesignation Request for Sacramento $PM_{2.5}$ Nonattainment Area:** On May 9, 2012, CARB submitted a request that EPA find the Sacramento region in attainment for the 2006 24-hour $PM_{2.5}$ NAAQS. On August 14, 2013, the EPA officially determined that the SFNA had attained the 24-hour $PM_{2.5}$ NAAQS by the attainment deadline. On October 24, 2013, the YSAQMD, Sacramento Metropolitan Air Quality Management District, El Dorado County Air Quality Management District, and the Placer County Air Pollution Control District approved the $PM_{2.5}$ maintenance plan and request for redesignation for the 2006 $PM_{2.5}$ NAAQS to meet the EPA redesignation requirements. On May 10, 2017, EPA found that the area attained the 2006 $PM_{2.5}$ standard by the attainment date of December 31, 2015 (82FR21711). This finding

was based on complete, quality assured and certified $PM_{2.5}$ monitoring data for 2013-2015. The $PM_{2.5}$ Maintenance Plan and Redesignation Request was updated and submitted based on the clean data finding made by the EPA.

- **Triennial Assessment and Plan Update:** This plan is intended to comply with the requirements of the California Clean Air Act as related to bringing the region into compliance with the CAAQS for O_3. The YSAQMD has prepared several triennial progress reports that build upon the 1992 Triennial Plan. The *Triennial Assessment and Plan Update* (YSAQMD 2019) is the most recent report which covers 2015-2017. The triennial progress report describes historical trends in air quality, includes updated emissions inventories, and identifies feasible control measures the YSAQMD will study or adopt over the triennial period.

In addition, the YSAQMD has several rules that relate to the proposed project, which are summarized below.

- **Rule 2.3 – Ringelmann Chart:** Prohibits individuals from discharging into the atmosphere from any source of emissions whatsoever any air contaminant whose opacity exceeds certain specified limits.
- **Rule 2.5 – Nuisance:** To protect the public health, Rule 2.5 prohibits any person from discharging such quantities of air contaminants that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public.
- **Rule 2.14 – Architectural Coatings:** Sets ROG content limits for coatings that are supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the YSAQMD.
- **Rule 2.28 – Cutback and Emulsified Asphalts:** Asphalt paving operations that may be associated with implementation of the project would be subject to Rule 2.28. This rule applies to the manufacture, storage, and use of cutback asphalt and emulsified asphalt for paving and maintenance operations.
- **Rule 2.40 – Wood Burning Appliances:** This rule establishes which types of wood burning appliances can be sold, supplied, and installed in new or existing development.
- **Rule 3.1 – General Permit Requirements:** Requires any project that includes the use of certain equipment capable of releasing emissions to the atmosphere to obtain an Authority to Construct and Permit to Operate from the YSAQMD.

The YSAQMD issued its *Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD 2007) to assist lead agencies in determining when potential air quality impacts would be considered significant under CEQA. The analysis herein uses this YSAQMD guidance document to determine the proposed project's significance with respect to air pollutant emissions.

City of Vacaville General Plan

As discussed in the City of Vacaville General Plan Land Use Element and Conservation and Open Space Element, goals, policies, and actions pertaining to improving air quality applicable to the project are listed below (City of Vacaville 2023):

Goal LU-11 Improve community health and reduce pollution exposure and health risks across the city and reducing asthma, especially in low-income and impacted communities.

Policy LU-P11.1 Prohibit, or control land uses that pose potential health and environmental hazards to residents, especially land uses that generate air pollutants.

Policy LU-P11.2 Consider community health issues and impacts associated with land use decisions, especially where land use decisions would cause adverse health effects on residents.

Goal LU-12 Reduce risk of asthma and other adverse health effects by promoting safe and sanitary homes and neighborhoods for Vacaville residents.

Policy LU-P12.1 Work with Solano County Public Health Department to reduce risk of asthma through land use planning and programs across Vacaville.

Policy LU-P12.2 Disseminate information to tenants and property owners about methods to reduce asthma and other health issues by improving indoor air quality, including through adding air conditioning and reducing and preventing indoor mold growth.

Goal COS-12 Maintain and Improve Air Quality.

Policy COS-P12.2 Encourage community participation in air quality planning. Ensure that residents who would be affected by a project that would emit air pollutants be notified well in advance of community engagement opportunities.

Policy COS-P12.3 Encourage project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that reduce vehicle trips and promote energy efficiency.

Policy COS-P12.4 Require a Health Risk Assessment to be prepared for proposed sources of air pollution that will generate significant new and unmitigable air quality impacts or expose sensitive receptors to substantial increases in harmful emissions of toxic air pollutants. The Health Risk Assessment shall be required to include mitigation measures consistent with the YSAQMD's Handbook for Assessing and Mitigating Air Quality Impacts.

Policy COS-P12.5 Require that development projects implement best management practices and Best Available Control Technologies to reduce air pollutant emissions associated with the construction and operation of the project.

Policy COS-P12.6 Require dust control measures as a condition of approval for subdivision maps, site plans, and all grading permits.

Policy COS-P12.7 Consistent with the YSAQMD's standards, require that any fireplaces in new and significantly renovated residential projects, or commercial projects are pellet-fueled heaters, EPA Phase II-certified wood burning heaters, or gas fireplaces.

Policy COS-P12.11 Encourage the use of roadway materials that minimize particulate emissions.

Action COS-A12.1 Amend the Land Use and Development Code to identify land use sources of toxic air contaminants and sensitive users.

City of Vacaville Energy and Conservation Action Strategy Update

The City of Vacaville Energy and Conservation Action Strategy (ECAS) Update includes the following measures pertaining to improving air quality applicable to the project listed below (City of Vacaville 2021):

Measure C-1 Plant Trees. A major tree planting initiative can work to provide carbon sequestration and offset some of the emissions that Vacaville is creating. Additional emission reductions can be had by strategically placing these trees in line with buildings and sunlight so as to shade buildings and reduce the need to heat and cool buildings.

Measure T/LU-3 Implement Transportation Demand Management for New Development. New projects that are subject to CEQA review will be required to develop and implement transportation demand management programs. Transportation demand management programs are used widely throughout California to reduce the number of trips taken by single occupancy vehicles. New residential, office, retail, and industrial developments will be held to similar standards. Residential developments will separate parking from leases and charge for off-street parking.

Measure E-3 Adopt an All-Electric New Construction Preferred Ordinance. The City will implement this an all-electric ordinance and enforcing it through building inspections. Special exception will be made for industrial, hospital, and similar uses that demonstrate there is no viable electrification option for important equipment due to technological constraints.

Measure O-1 Increase Renewable and Alternative Fuel for Construction. Construction equipment is a source of both GHG emissions and air pollution from the heavy-duty equipment used. Many large pieces of equipment do not yet have feasible alternative fuel sources; however, reducing the emissions of construction equipment in Vacaville holistically will result in meaningful GHG reductions. The City will revise its construction bid process so that to be eligible for City construction contracts, a bidder must submit documentation that their fleet will reduce conventional fuel use by 20% by 2035.

4.1.4 Impacts and Mitigation Measures

Methodology

Construction Emissions

Emissions from the construction phase of the project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.19. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the project applicant and CalEEMod default values when project specifics were not known.

For purposes of estimating project emissions, and based on CalEEMod defaults, construction would begin in July 2024 for a duration of 47 months, with buildout in May 2028. The analysis contained herein is based on the following assumptions provided by the project applicant (duration of phases is approximate):

- Site Preparation: 30 days (July 1, 2024 – August 9, 2024)
- Grading: 17 weeks (August 10, 2024 – December 6, 2024)
- Building Construction: 3 years (December 7. 2024 – December 9, 2027)
- Paving: 3 months (December 10, 2027 – February 25, 2028)

- Architectural Coating: 3 months (February 26, 2028 – May 13, 2028)

Default values for construction-worker estimates, vendor and haul truck trips by construction phase were used. Haul truck trips during each grading phase were based on approximate earthwork quantities. Grading for the proposed was estimated by the applicant's engineer to involve a total of 26,000 cubic yards of soil cut which would be backfilled throughout the project site. CalEEMod default trip length values were used for the distances for worker and vendor trips. Fugitive dust generated during truck loading is included in CalEEMod as an on-site source of fugitive dust emissions and is calculated based on estimated throughput of loaded and unloaded material.

The construction equipment mix and vehicle trips used for estimating the project-generated construction emissions are shown in Table 4.1-3. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site 5 days per week (22 days per month) during project construction.

Table 4.1-3. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Workers Trips	Average Daily Vendor Truck Trips	Average Daily Haul Truck Trips	Type	Quantity	Usage Hours
Site Preparation	18	0	0	Rubber Tired Dozers	3	8
				Tractors/Loaders/ Backhoes	4	8
Grading	20	0	0	Graders	1	8
				Excavators	2	8
				Tractors/Loaders/ Backhoes	2	8
				Scrapers	2	8
				Rubber Tired Dozers	1	8
Building Construction	87	26	0	Forklifts	3	8
				Generator Sets	1	8
				Cranes	1	7
				Welders	1	8
				Tractors/Loaders/ Backhoes	3	7
Paving	15	0	0	Pavers	2	8
				Paving Equipment	2	8
				Rollers	2	8
Architectural Coating	17	0	0	Air Compressors	1	6

Source: Appendix B.
Notes: Equipment types noted in parenthesis represent the equipment equivalent used in CalEEMod construction modeling.

Operational Emissions

Emissions from the operational phase of the project were estimated using CalEEMod Version 2022.1.1.19. Year 2029 was assumed as the first full year of operations after completion of construction.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with space heating, water heating, and stoves are calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2022). Consumer product ROG emissions are estimated in CalEEMod based on the floor area of residential buildings and on the default factor of pounds of ROG per building square foot per day.

ROG off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers used during building maintenance. CalEEMod calculates the ROG evaporative emissions from application of residential surface coatings based on the ROG emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage with 75% assumed for interior coating and 25% assumed for exterior surface coating. For the asphalt surfaces, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide (CAPCOA 2022).

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per residential dwelling unit per day and grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. For Solano County, the average annual operational days for landscape equipment are estimated at 180 days per year (CAPCOA 2022).

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gas (GHG) emissions in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site.

In CalEEMod 2022.1, the default energy use from residential land uses is based on the 2019 Residential Appliance Saturation Survey (RASS). The Commercial Forecast and RASS datasets derive energy intensities of different end use categories for different land use subtypes for electricity demand forecast zones (EDFZ) throughout the state. However, the energy use estimates are based on existing buildings and residences and are not representative of those constructed in compliance with energy efficiency requirements of the latest Title 24 Building Energy Efficiency Standards (e.g., the average residence surveyed in the RASS was constructed in 1974).

Notably, the City's ECAS Update includes GHG reduction strategies such as outlining that the City adopt an All-Electric New Construction Ordinance (E-3), which would replace natural gas with electricity. The proposed project is planned to be an all-electric development. However, CalEEMod default values were conservatively applied in order to estimate the criteria air pollutants associated with natural gas consumption.

Mobile Sources

Mobile sources for the project would primarily be motor vehicles (automobiles and light-duty trucks) traveling to and from the project site. Motor vehicles may be fueled with gasoline, diesel, or alternative fuels. The anticipated trip generation, including the trip rates and total trips, are based on the proposed project's transportation assessment (Fehr and Peers 2023). CalEEMod default data, including temperature, trip characteristics, variable start information, emissions factors, were conservatively used for the model inputs to estimate daily emissions from proposed vehicular sources. Project-related traffic was assumed to include a mixture of vehicles in accordance with the model outputs for traffic. Emission factors representing the vehicle mix and emissions for 2029 were used to estimate emissions associated with full buildout of the proposed project.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the proposed project would do any of the following:

- conflict with or obstruct implementation of the applicable air quality plan;
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;
- expose sensitive receptors to substantial pollutant concentrations; or
- result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The YSAQMD further defines the thresholds of significance as follows:

- Generation of ROG or NO_x emissions for construction or operations in excess of 10 tons per year; or
- Generation of PM_{10} emissions for construction or operations in excess of 80 pounds per day.
- The YSAQMD does not have a board adopted threshold for $PM_{2.5}$ emissions; the YSAQMD recommends using an adopted $PM_{2.5}$ threshold from another jurisdiction in the nonattainment area (Jones 2016). As such, the Sacramento Metropolitan Air Quality Management District (SMAQMD) threshold of 82 pounds per day of $PM_{2.5}$ emissions has been applied to this analysis during construction and operations.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for O_3 precursors). The YSAQMD further defines the threshold of significance as follows:
    - Emissions would be considered cumulatively considerable if they are individually significant;
    - CO impacts are also cumulatively considerable when an exceedance of CO air quality standards results from project CO emissions combined with and CO emissions from other planned projects.
    - Expose sensitive receptors to substantial pollutant concentrations

Threshold Criteria not Applicable to the Proposed Project

Impacts related to odors were determined to be less than significant in the 2018 EIR, as discussed on page 4.1-28. No substantial changes in the project circumstances have occurred since the certification of the 2018 EIR; therefore, odors have been adequately addressed in that document and are not further evaluated in this section.

Project Impacts

Impact 4.1-1. The project would not conflict with or obstruct implementation of the applicable air quality plan.

The Citty's General Plan included land use assumptions for future development of the Specific Plan site. The 2018 EIR determined that because the General Plan EIR concluded there would be no conflict with or obstruction due to implementation of applicable air quality plans it was not further evaluated. The General Plan did not assume specific land uses for the proposed project; therefore, the project-specific effects of including an additional 241 units is included below.

The YSAQMD plans applicable to the project include the Sacramento Regional 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan and the Triennial Assessment and Plan Update.

The Sacramento Regional 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan was prepared using population and employment data assumptions based on the City's General Plan (City of Vacaville 2013, p. 4.3-18). The City's current General Plan did not increase the 2035 population or employment forecast. According to the Specific Plan, there would be a total of 768 dwelling units at full buildout. The proposed project is proposing to amend the Specific Plan to add 241 dwelling units. Overall, the Specific Plan and project site would consist of a total of 1,009 dwelling units. The General Plan EIR assumed low-density residential uses would be developed on the portion of the site designated UR, area designated for future development (City of Vacaville 2013). In 2021, the City prepared a SEIR (SCH No. 2020090526) to update the City's General Plan Transportation Element and ECAS ("General Plan SEIR"). The General Plan SEIR concluded that implementation of policies in the City's ECAS would reduce the total vehicle miles traveled (VMT) in a manner consistent with state guidance on VMT and the 2015 General Plan. This would ensure future development, including the proposed project, would not conflict with air quality assumptions in the Sacramento Regional 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan, which was adopted for the purpose of reducing air quality emissions.

The Triennial Assessment and Plan Update includes rules and regulations to reduce emissions from sources that are regulated by YSAQMD including agricultural sources, industrial sources and vehicle emissions. The Triennial Assessment and Plan Update includes commitments to implementing feasible measures to attain emissions reductions including controls on architectural coatings, industrial and commercial boilers, steam generators and heaters, graphic arts, internal combustion engines, and large water heaters (YSAQMD 2019). The General Plan SEIR determined that the General Plan policies and ECAS policies would not conflict with the fulfillment of these commitments and would contribute to a reduction in air quality emissions by implementing measures to reduce regional VMT (City of Vacaville 2021). The General Plan EIR determined that buildout under the General Plan would not conflict with plans adopted for the purpose of reducing air emissions and the impact would be less than significant. The proposed project would comply with all applicable General Plan and ECAS policies. Furthermore, as discussed under Impact 4.1-2, the proposed project would result in less-than-significant impacts during construction and long-term operations and would not result in adverse air quality impacts. Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan and impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Impact 4.1-2. The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

The 2018 EIR determined that emissions of O_3 precursors due to implementation of the Specific Plan would be considerable resulting in a significant contribution to a significant and unavoidable impact. The additional 241 units from this proposed project were not considered in the 2018 EIR; therefore, an analysis of potential cumulative impacts is included below.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and ROG off-gassing from architectural coatings and asphalt pavement application) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emissions levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts.

As discussed in Section 4.1.4, Methodology (Construction), criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod based on the construction scenario presented in Table 4.1-3. Construction schedule assumptions, including phase type, duration, and sequencing, were based on CalEEMod defaults and information provided by the project applicant and are intended to represent a reasonable scenario based on the best information available. Default values provided in CalEEMod were used where detailed project information was not available.

Implementation of the proposed project would generate criteria air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The proposed project would be required to comply with General Plan Policy COS-P12.5 to control dust emissions generated during the earthmoving activities. Standard construction practices that were assumed to be employed to reduce fugitive dust emissions and were quantified in CalEEMod include watering of the active site twice a day, depending on weather conditions, and limitation of vehicle travel to 15 mph on unpaved roads. Internal-combustion engines used by construction equipment, haul trucks, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of ROGs, NO_x, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce ROG emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of YSAQMD's Rule 2.14 (Architectural Coatings).

Table 4.1-4 shows annual construction emissions of O_3 precursors (ROGs and NO_x), PM_{10}, and $PM_{2.5}$ during proposed project construction. Details of the emissions calculations are provided in Appendix B.

Table 4.1-4. Construction Criteria Air Pollutant Emissions

Year	ROGs	NO_x	PM_{10}	$PM_{2.5}$
	Tons per Year or Pounds per Day			
Annual Emissions				
2024	0.22	2.11	2.29	0.40
2025	0.19	1.51	13.00	1.36
2026	0.18	1.43	12.98	1.35
2027	0.17	1.33	12.31	1.28
2028	1.46	0.16	0.74	0.08
YSAQMD Thresholds	*10*	*10*	*NA*	*NA*
Exceed Threshold?	**No**	**No**	**No**	**No**
Daily Emissions				
Summer				
2024	3.72	36.00	12.42	5.75
2025	1.50	11.51	19.46	2.43
2026	1.43	10.86	19.40	2.38
2027	1.34	10.36	19.36	2.34
2028	52.50	0.84	3.15	0.35
Maximum Daily (Summer)	**52.50**	**36.00**	**19.46**	**5.75**
YSAQMD Thresholds	*NA*	*NA*	*80*	*82*
Exceed Threshold?	**No**	**No**	**No**	**No**
Winter				
2024	3.59	34.36	19.52	3.14
2025	1.47	11.66	19.46	2.43
2026	1.38	11.00	19.40	2.38
2027	1.32	10.48	19.36	2.34
2028	52.50	6.67	3.15	0.52
Maximum Daily (Winter)	**52.50**	**34.36**	**19.52**	**3.14**
YSAQMD Thresholds	*NA*	*NA*	*80*	*82*
Exceed Threshold?	**No**	**No**	**No**	**No**

Notes: ROGs = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; YSAQMD = Yolo Solano Air Quality Management District; NA = not applicable.
YSAQMD has adopted annual construction thresholds for ROG and NO_x, as well as a daily threshold for PM_{10}. Because no significance thresholds exist for daily emissions of ROG and NO_x and annual emissions of PM_{10} and $PM_{2.5}$, 'NA' has been inserted under these pollutants. The SMAQMD threshold for daily $PM_{2.5}$ emissions was also applied to this analysis.
See Appendix B for complete results.

As shown in Table 4.1-4, daily construction emissions of PM_{10} and $PM_{2.5}$ and annual emissions of ROG and NO_x would not exceed the applicable YSAQMD significance thresholds during any construction year. In addition, air pollutant emissions are projected to be reduced in future years based on the required phase-in of higher tier engines that would meet lower emission standards. EPA has adopted multiple tiers of emission standards in which higher tier engines would reduce diesel exhaust emissions compared with older equipment by integrating engine and fuel controls. Therefore, construction emissions for the proposed project would be **less than significant**.

Operational Emissions

Operation of the proposed project would generate criteria air pollutant (including ROG, NO_x, PM_{10}, and $PM_{2.5}$) emissions from mobile sources (vehicular traffic), area sources (consumer products, architectural coatings, and landscaping equipment), and energy sources. CalEEMod was used to estimate the annual and daily emissions from proposed project-related operational sources. Table 4.1-5 summarizes the operational criteria air pollutant emissions that would be generated from the proposed project and compares estimated emissions to the YSAQMD operational daily thresholds.

Table 4.1-5. Operational Criteria Air Pollutant Emissions

Year	ROGs	NO_x	PM_{10}	$PM_{2.5}$
	Tons per Year or Pounds per Day			
Annual Emissions				
Mobile	1.34	1.00	1.51	0.39
Area	1.66	0.01	<0.01	<0.01
Energy	0.02	0.32	0.03	0.03
Total	**3.02**	**1.33**	**1.54**	**0.42**
YSAQMD Thresholds	*10*	*10*	*NA*	*NA*
Exceed Threshold?	**No**	**No**	**No**	**No**
Daily Emissions				
Summer				
Mobile	8.26	5.12	8.65	2.25
Area	9.70	0.13	0.01	<0.01
Energy	0.10	1.77	0.14	0.14
Total Daily (Summer)	**18.06**	**7.02**	**8.80**	**2.40**
YSAQMD Thresholds	*NA*	*NA*	*80*	*82*
Exceed Threshold?	**No**	**No**	**No**	**No**
Winter				
Mobile	7.51	6.01	8.65	2.25
Area	8.51	0.00	0.00	0.00
Energy	0.10	1.77	0.14	0.14
***Total Daily* (Winter)**	**16.12**	**7.78**	**8.79**	**2.39**
YSAQMD Thresholds	*NA*	*NA*	*80*	*82*
Exceed Threshold?	**No**	**No**	**No**	**No**

Notes: ROGs = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; YSAQMD = Yolo Solano Air Quality Management District; NA = not applicable; <0.01 = reported value less than 0.01.
YSAQMD has adopted annual construction thresholds for ROG and NO_x, as well as a daily threshold for PM_{10}. Because no significance thresholds exist for daily emissions of ROG and NO_x and annual emissions of PM_{10} and $PM_{2.5}$, 'NA' has been inserted under these pollutants. The SMAQMD threshold for daily $PM_{2.5}$ emissions was also applied to this analysis.
See Appendix B for complete results.

As shown in Table 4.1-5, daily operational emissions of PM_{10} and $PM_{2.5}$ and annual emissions of ROG and NO_x would not exceed the YSAQMD applicable significance thresholds, thus, the proposed project would have a **less-than-significant impact** in relation to regional operational emissions.

Health Effects of Criteria Air Pollutants

ROGs and NO_x are precursors to O_3, for which the SVAB is designated as nonattainment with respect to the NAAQS and CAAQS. As discussed previously, the health effects associated with O_3 are generally associated with reduced lung function. The contribution of ROGs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SVAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the ROG emissions would occur because exceedances of the O_3 CAAQS/NAAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Thus, a project's ROG and NO_x emissions are evaluated in the context of the YSAQMD significance thresholds, which define the levels of emissions that can occur without causing or contributing to violations of the NAAQS or CAAQS. In turn, the NAAQS and CAAQS define the pollutant concentrations above which adverse health effects are expected to occur. Because ROG and NO_x emissions associated with proposed project construction would be **less than significant**, the proposed project would minimally contribute to regional O_3 concentrations and the associated health effects.

Health effects that result from NO_2 and NO_x include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, construction and operation of the proposed project is not anticipated to contribute to exceedances of the NAAQS or CAAQS for NO_2 because the SVAB is designated as in attainment of the NAAQS and CAAQS for NO_2, and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS thresholds. Further, proposed project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the project site and would not be concentrated in one portion of the site at any one time.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots is discussed in Impact 4.1-3 and is determined to be a **less-than-significant impact**. Furthermore, the existing CO concentrations in the area are well below the NAAQS and CAAQS standards. Thus, the proposed project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction and operation of the proposed project would not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct the SVAB from coming into attainment for these pollutants. Additionally, the proposed project would implement fugitive dust reduction measures per General Plan Policy COS-P12.5. Due to the minimal contribution of particulate matter during construction and operation, the proposed project is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$.

There are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, and there are currently no modeling tools that can provide reliable and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects within YSAQMD's jurisdiction. Currently, YSAQMD, CARB, and EPA have not approved a quantitative method to reliably, meaningfully, and consistently translate the mass emission estimates for the criteria air pollutants resulting from the proposed project to specific health effects.

In summary, because construction and/or operation of the proposed project would not exceed the YSAQMD significance thresholds for ROG, NO_x, PM_{10}, and $PM_{2.5}$, and because the YSAQMD thresholds are based on levels that the SVAB can accommodate without affecting the attainment date for the AAQS and the AAQS are established

to protect public health and welfare, the proposed project would result in **less than significant** health effects associated with criteria air pollutants.

Mitigation Measures

No mitigation measures are required.

Impact 4.1-3. The project would not expose sensitive receptors to substantial pollutant concentrations.

The 2018 EIR determined that the potential for implementation of the Specific Plan to expose existing and proposed sensitive receptors to substantial levels of TACs during both short-term construction and long-term project operation would be less than significant. The 241 new units from this proposed project were not considered in the 2018 EIR; therefore, an analysis of project-specific impacts is included below.

Toxic Air Contaminants

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. Nearby sensitive receptors to the proposed project include residential development to the west and south of the project site along Leisure Town and Elmira Roads, approximately 2,680 feet and 1,580 feet.

TACs are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The YSAQMD recommends an incremental cancer risk threshold of 10 in 1 million for stationary sources. "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard Office of Environmental Health Hazard Assessment (OEHHA) risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. The YSAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) effects. TACs that would potentially be emitted during construction activities associated with project development would be DPM.

During proposed project construction, DPM emissions would be emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB's Airborne Toxic Control Measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025). According to the OEHHA, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the project. Since the proposed project involves phased construction activities in several areas across the site, the proposed project would not require the extensive use of heavy-duty construction equipment or diesel trucks in any one location over the duration of development, which would limit the exposure of any proximate individual sensitive receptor to TACs. In addition, due to the relatively short period of exposure at any individual sensitive receptor (less than four years) and minimal particulate emissions generated on-site, potential health risk impacts associated with proposed project construction would be **less than significant**.

Regarding proposed project operation, the proposed project does not include stationary sources that would emit air pollutants or TACs, such as commercial uses that could generate emissions, large boilers, emergency generators, or manufacturing facilities or result in a substantial increase in diesel vehicles (i.e., delivery trucks).

Therefore, proposed project operations would not result in TAC generation from on-site sources during long-term operations and potential health risk impacts associated with proposed project operations would be **less than significant**.

Local Carbon Monoxide Concentrations

Motor vehicles are the primary source of CO in the SVAB. The YSAQMD *Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD 2007) provides screening criteria to determine whether air quality modeling to evaluate CO concentrations is necessary. In regard to screening for CO impacts, if either the following criteria is true of any intersection affected by project traffic, then the project would have the potential to create a violation of the CO standard:

- A traffic study for the project indicates that the peak-hour Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to an unacceptable LOS (typically LOS E or F); or
- A traffic study for the project indicates that the project will substantially worsen an already existing peak-hour LOS F on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes situations where delay would increase by 10 seconds or more when project-generated traffic is included.

Based on the traffic analysis prepared for the proposed project, the project would pass the above screening criteria because the proposed project's trip generation would not reduce any intersection within the project vicinity to an unacceptable LOS, nor would the proposed project worsen an already existing peak hour LOS F on an existing street. Therefore, the proposed project would not generate traffic volumes that necessitate CO modeling. The project would not generate traffic volumes that could cause CO hotspots at local intersections and would not adversely affect sensitive receptors. This impact would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Cumulative Impacts

The cumulative context of an air pollutant is dependent on the specific pollutant being considered. O_3 precursors are a regional pollutant; therefore, the cumulative context would be existing and future development within the entire SVAB. This means that O_3 precursors generated in one location do not necessarily have O_3 impacts in that area. Instead, precursors from across the region can combine in the upper atmosphere and be transported by winds to various portions of the SVAB. Consequently, all O_3 precursors generated throughout the SVAB are part of the cumulative context.

The geographic scope of the area for the project's cumulative analysis includes the City of Vacaville and surrounding areas within the SFNA for O_3. The SFNA includes the counties of Sacramento, Yolo, Solano (partial), Sutter (partial), Placer (except Lake Tahoe Air Basin), and El Dorado (except Lake Tahoe Air Basin). The YSAQMD establishes emissions thresholds for regional emissions for projects within its jurisdiction.

Impact 4.1-4. The project could result in a cumulative impact related to air quality.

According to the YSAQMD *Handbook for Assessing and Mitigating Air Quality Impacts*, projects that would individually exceed the YSAQMD thresholds (annual ROG and NO_x thresholds, or daily PM_{10} thresholds) would also

be considered cumulatively considerable and significant. As discussed in Impact 4.1-2, the proposed project's construction and operational emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$ would not exceed the YSAQMD's significance thresholds; therefore, the proposed project's contribution to an existing cumulative impact would not be considerable and the impact is **less than significant.**

Mitigation Measures

No mitigation measures are required.

4.1.5 References

13 CCR 2025. Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles.

CAPCOA (California Air Pollution Control Officers Association). 2022. California *Emissions Estimator Model (CalEEMod) User's Guide Version* 2022.1. Prepared in collaboration with Sacramento Metropolitan Air Quality Management District and the California Air Districts. https://caleemod.com/user-guide.

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4.2 Biological Resources

4.2.1 Introduction

This section describes the existing biological resources present within and around the Fields at Alamo Creek ("proposed project") site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. The Executive Summary of this Supplemental EIR (SEIR) provides a summary of environmental issues for which potential impacts of the proposed project are adequately addressed in the Farm at Alamo Creek Specific Plan ("Specific Plan") Environmental Impact Report (SCH No. 2017062068) that was certified in November 2018 ("2018 EIR") for which no further analysis is required. This SEIR analysis focuses on those impacts that are novel to the proposed project and are substantially different from those described in the 2018 EIR.

One comment letter was received from the California Department of Fish and Wildlife (CDFW) in response to the Notice of Preparation (NOP) issued on March 24, 2023, which included recommended biological content for the SEIR per CEQA guidelines. The content guidelines outlined in the letter are addressed in this section. No comment letters related to biological resources were received in response to the revised NOP issued on July 23, 2023. The NOPs and comments received are provided in Appendix A.

Information contained in this section is based on the Biological Resources Assessment (Appendix C) and the 2018 EIR available on the City's website at: https://www.cityofvacaville.gov/government/community-development/planning-and-development/development-activity/residential-activity/the-farm-at-alamo-creek.

4.2.2 Environmental Setting

This section details the existing environmental setting for biological resources and updates the information described In Section 4.2, Biological Resources, starting on page 4.2-1 of the 2018 EIR.

Vegetation Communities and Land Cover Types

The proposed project site supports one non-natural land cover type, General Agriculture (Table 4.2.-1). A detailed description of the General Agriculture land cover is provided in Appendix C.

Table 4.2-1. Summary of Vegetation Communities and Land Cover Types

Abbreviation	Vegetation Community/ Land Cover Type	Vegetation Alliance and CDFW Alliance Code	Sensitive? (Y/N)	Acreage
Land Cover				
DEV	General Agriculture	NA	No	33.6
			Total:	**33.6**

Notes: NA: not applicable.

Special-Status Biological Resources

Special-status biological resources occurring or potentially occurring in or near the proposed project site were determined based on Dudek's extensive literature review and results of a reconnaissance field survey conducted within the proposed project site in 2023.

Sensitive Natural Communities

Sensitive natural communities are "natural communities" (of vegetation) or "vegetation types" that have been evaluated by CDFW using NatureServe's Heritage Methodology (Faber-Langendon et al. 2012) and vegetation community classifications from A Manual of California Vegetation (Sawyer et. al. 2009), and are ranked by rarity and threat. Evaluation is done at both the global (i.e., full natural range within and outside of California) and state (i.e., within California) levels, resulting in a single 'G' (global) and 'S' (state) rank ranging from 1 (i.e., very rare and threatened) to 5 (i.e., demonstrably secure). Natural communities with an S rank of S1, S2, or S3 are considered "sensitive" by CDFW and are typically addressed during the CEQA review process. There are no CDFW sensitive vegetation communities within the proposed project site.

Riparian vegetation communities occur along streams, ponds, rivers, and lakes and are considered sensitive because of their high habitat value for native wildlife. There are no riparian vegetation communities within the proposed project site.

Special-Status Plants

Special-status plants include those listed, or candidates for listing, as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) and/or CDFW, and species identified as rare by the California Native Plant Society (CNPS) (particularly CRPR 1A – presumed extinct in California; CRPR 1B – rare, threatened, or endangered throughout its range; and CRPR 2 – rare or endangered in California, more common elsewhere).

Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status plant species to occur within the proposed project site. Out of 56 special-status plant species identified as occurring in the proposed project site region, none are expected to occur on the project site due to the lack of suitable habitat identified during the February 2023 reconnaissance survey, the lack of documented occurrences near the Project site, and/or the site being outside of the species' known geographic or elevation range (Appendix C).

Special-Status Wildlife

Special-status wildlife include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW, and those designated as species of special concern by CDFW and sensitive by USFWS. Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status wildlife species to occur within the proposed project site. Of the eight special-status wildlife species identified as potentially occurring in the proposed project site, six were determined to have a moderate or higher potential to occur (Table 4.2-2). For detailed descriptions of the special-status wildlife species refer to Appendix C. There is USFWS-designated critical habitat for Delta smelt, vernal pool fairy shrimp, and vernal pool tadpole shrimp within 5 miles of the biological survey area, however there is no critical habitat within the project boundary itself (USFWS 2023).

Table 4.2-2. Special-Status Wildlife Species with a Moderate or High Potential to Occur in the Proposed Project Site

Common Name	Scientific Name	Federal/State	Potential to Occur in Proposed Project Site
Birds			
Swainson's hawk	*Buteo swainsoni*	None/CT	**High.** Swainson's hawk has a high potential to forage within the proposed project site. Species was observed foraging within the 2018 EIR study area, immediately adjacent to the proposed project site. The agricultural lands throughout the proposed project site provide foraging habitat.
Burrowing owl	*Athene cunicularia*	BCC/SSC	**Moderate.** Burrowing owl has a moderate potential to nest and forage within the proposed project site. Agricultural habitat on site is suitable for nesting and foraging, although no suitable nesting burrows were detected during the February 2023 survey.
Mountain plover	*Charadrius montanus*	BCC/SSC	**Moderate.** Mountain plover has a moderate potential to overwinter within the proposed project site. Suitable grain field habitat is present.
White-tailed kite	*Elanus leucurus*	None/CFP	**High.** White-tailed kite has a high potential to forage within the proposed project site. The trees in the vicinity of the proposed project site provide nesting habitat, and the agricultural fields of the proposed project site provide foraging habitat.
Northern harrier	*Circus hudsonius*	None/SSC	**High.** Northern harrier has a high potential to forage within the proposed project site. Species was observed foraging within the adjacent area analyzed in the 2018 EIR. The agricultural fields within the proposed project site provide foraging habitat.
Short-eared owl	*Asio flammeus*	None/SSC	**Moderate.** Short-eared owl has a moderate potential to winter and forage within the proposed project site. The agricultural fields provide winter foraging habitat.
Ferruginous hawk	*Buteo regalis*	None/SSC	**Moderate.** Ferruginous hawk has a moderate potential to forage within the proposed project site. The agricultural fields provide winter foraging habitat.
Loggerhead shrike	*Lanius ludovicianus*	None/SSC	**Moderate.** Loggerhead shrike has a moderate potential to forage within the proposed project site. The agricultural fields provide foraging habitat.

Source: CDFW 2023. Appendix C, Attachment 3b.
Notes: Status Legend
Federal
BCC: USFWS bird of conservation concern
State
CT: California Threatened; SSC: California Species of Special Concern; CFP: California Fully Protected

Jurisdictional Aquatic Resources

Jurisdictional aquatic resources include waters (i.e., wetlands and non-wetland waters) of the United States under U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the federal Clean Water Act (CWA), waters of the state under Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act, and streams and lakes under CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code (CFGC). There are no potentially jurisdictional features within the proposed project site.

Wildlife Corridors/Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals, and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal.

The proposed project site has low suitability as a wildlife corridor for terrestrial species due to the history of human disturbance associated with agricultural activities. The proposed project site is not recognized as an important regional wildlife corridor by any state agency or jurisdiction, and it is not considered critical to the ecological functioning of adjoining watersheds and open space areas.

4.2.3 Regulatory Setting

The regulatory setting for the proposed project site is generally as described in the 2018 EIR. However, some regulations or implementing rules have changed since the preparation of that document. These changes are described below.

Federal

Clean Water Act

Refer to the 2018 EIR for a general description of the CWA. Various court proceedings, rule makings, and congressional acts have attempted to change the definitions of waters of the US, and accordingly the extent of federal jurisdiction under the Clean Water Act. The two most recent rulemakings and court decisions are described below.

On January 18, 2023, the U.S. Environmental Protection Agency (EPA) and USACE published a final rule establishing a new definition of “waters of the United States” that restores federal jurisdiction over waters that were protected prior to 2015 under the Clean Water Act for traditional navigable waters, the territorial seas, interstate waters, as well as upstream water resources that significantly affect those waters.

However, on May 25, 2023, the U.S. Supreme Court issued its long-anticipated decision in *Sackett v. EPA*., in which it rejected the EPA's claim that "waters of the United States," as defined in the CWA, includes wetlands with an

ecologically significant nexus to traditional navigable waters. The Supreme Court held that only those wetlands with a continuous surface water connection to traditional navigable waterways would be afforded federal protection under the CWA. Specifically, to assert jurisdiction over an adjacent wetland under the CWA, a party must establish that (1) the adjacent body of water constitutes water[s] of the United States' (i.e., a relatively permanent body of water connected to traditional interstate navigable waters) and (2) the wetland has a continuous surface connection with that water, making it difficult to determine where the water ends and the wetland begins. The Rule was modified by EPA in September 2023 in light of this decision, substantially reducing the extent of federal jurisdiction over aquatic resources.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code Division 7, Section 13000 et seq.) established the State Water Resources Control Board (SWRCB) and RWQCBs (collectively Water Boards) as the principal state agencies responsible for the protection of water quality in California. The Central Valley RWQCB has regulatory authority over the project site. The Porter-Cologne Water Quality Control Act provides that "All discharges of waste into the waters of the State are privileges, not rights." Waters of the State are defined in Section 13050(e) of the Porter-Cologne Water Quality Control Act as "…any surface water or groundwater, including saline waters, within the boundaries of the state." All dischargers are subject to regulation under the Porter-Cologne Water Quality Control Act, including both point and nonpoint source dischargers. The RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction. On April 2, 2019, the SWRCB adopted by Resolution 2019-0015 the "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State" ("Procedures") for inclusion in the Water Quality Control Plans for Inland Surface Waters, Enclosed Bays, and Estuaries of California. The Procedures became effective on May 28, 2020; however, the Procedures have been the subject of a legal judgement by the California Superior Court.[1]

In adopting the Procedures, the SWRCB noted that under the Porter-Cologne Water Quality Control Act, discharges of dredged or fill material to waters of the state are subject to waste discharge requirements or waivers. The SWRCB further explained that "although the state has historically relied primarily on requirements in the Clean Water Act to protect wetlands, U.S. Supreme Court rulings reducing the jurisdiction of the Clean Water Act over wetland areas by limiting the definition of 'waters of the United States' have necessitated the use of California's independent authorities under the Porter-Cologne Act to protect these vital resources."

By adopting the Procedures, the SWRCB mandated and standardized the evaluation of impacts and protection of waters of the state from impacts due to dredge and fill activities. The Procedures include: (1) a wetland definition; (2) a jurisdictional framework for determining if a feature that meets the wetland definition is a water of the state; (3) wetland delineation procedures; and 4) procedures for application submittal, and the review and approval of dredge or fill activities.

[1] On January 26, 2021, the Superior Court in *San Joaquin Tributaries Authority v. California State Water Resources Control Board* issued a judgment and writ enjoining the SWRCB from applying, via the Water Quality Control Plan for Inland Surface Waters and Enclosed Bays [and Estuaries], the Procedures to waters other than those for which water quality standards are required by the Federal Clean Water Act. The SWRCB subsequently adopted another resolution on April 2, 2021 confirming that the Board's April 2, 2019 action relied, in part, on Water Code Section 13140, that allows the SWRCB to formulate and adopt state policy for water quality control and that the Procedures are therefore effective for all waters of the state as state policy for water quality control.

The Procedures define an area as a wetland if it meets three criteria: wetland hydrology, wetland soils, and (if vegetated) wetland plants. An area is a wetland if: (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. This modified three-parameter definition is similar to the federal definition in that it identifies three wetland characteristics that determine the presence of a wetland: wetland hydrology, hydric soils, and hydrophytic vegetation. However, unlike the federal definition, the Procedures' wetland definition allows for the presence of hydric substrates as a criterion for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland.

4.2.4 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts of the proposed project on biological resources. Where appropriate, the analysis references the analysis from the 2018 EIR. The section identifies the thresholds of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the proposed project's impacts and contribution to significant cumulative impacts, if any are identified. Mitigation measures are presented for identified significant or potentially significant impacts, and the level of significance with mitigation is also identified.

Methodology

Potential impacts to biological resources were identified based on the results of the literature review and field surveys summarized in Appendix C and the known or potential location of such resources relative to the proposed project. Additional information on how impacts were analyzed is provided below.

Impact Evaluation Approach

Impacts are evaluated with respect to the thresholds of significance described above. Both direct and indirect impacts are considered.

- **Direct impacts** refer to removal of a biological resource and may be permanent or temporary. Direct permanent impacts refer to the complete and permanent loss of a resource while direct temporary impacts refer to the short-term removal of a resource where the resource is expected to fully recover its function upon project completion. For purposes of this SEIR, direct impacts, whether permanent or temporary, refer to areas within the project site where vegetation clearing, grubbing, or excavation removes biological resources.
- **Indirect impacts** are reasonably foreseeable effects caused by the proposed project but that occur at a different time or place. Indirect impacts may include short-term, temporary impacts on biological resources outside the project site during construction (i.e., occur at a different place), or long-term, permanent impacts on biological resources inside or outside the project site after project completion (i.e., occur at a different time). Temporary indirect impacts during construction may include increased dust, noise, and human activity that disrupts normal wildlife behavior, and construction-related soil erosion and runoff.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the proposed project would do any of the following:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Additionally, CEQA Guidelines Section 15065(a)(1) sets forth three mandatory findings of significance related to degradation of biological resources. Therefore, a significant impact to biological resources related to these mandatory findings would occur if the proposed project would:

- substantially reduce the habitat of a fish or wildlife species.
- cause a fish or wildlife population to drop below self-sustaining levels.
- threaten to eliminate a plant or animal community.
- substantially reduce the number or restrict the range of a rare or endangered plant or animal.

Threshold Criteria not Applicable to the Proposed Project

Impacts related to wildlife corridors and native wildlife nursery sites (Threshold D above) were determined to be less than significant in the 2018 EIR. No substantial changes in the project or the project circumstances have occurred since the certification of the 2018 EIR and therefore the impact was adequately addressed in that document and is not further evaluated in this section.

Additionally, the proposed project would have no impact with respect to the following thresholds of significance as described below:

- **Interfere Substantially with Riparian Habitat or Other Sensitive Natural Community (Significance Threshold B).** There is no riparian habitat or any sensitive natural vegetation communities within the proposed project site.
- **Interfere Substantially with State or Federally Protected Wetlands (Significance Threshold C).** There are no potentially state or federally protected aquatic resources within the proposed project site.
- **Conflicts with Local Policies or Ordinances, such as Tree Preservation Policy or Ordinance (Significance Threshold E).** There are no local ordinances that would affect the proposed project. Additionally, there are no protected trees within the proposed project site.
- **Cause a Fish or Wildlife Population to Drop Below Self-Sustaining Levels or Threaten to Eliminate a Plant or Animal Community (Mandatory Findings of Significance Thresholds B and C).** The proposed project would not cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant

or animal community. None of the proposed project components, either individually or collectively, would cause the elimination of entire plant or animal communities. There are no natural or sensitive vegetation communities within the project site.

After elimination of thresholds that either do not apply or which would have no impact due to absence of relevant resources on the project site, the remaining thresholds of significance that are subject to analysis in this SEIR are limited to Thresholds A and F.

Project Impacts

Impact 4.2-1 Construction of the proposed project could have a substantial adverse effect on special-status wildlife species.

The 2018 EIR determined that conversion of undeveloped land due to implementation of the Specific Plan would result in a potentially significant impact on special-status wildlife species and their habitat. However, compliance with mitigation measures proposed in the 2018 EIR would ensure that special-status species are identified and protected during project construction, and any impacted nesting or foraging habitat be replaced and preserved in perpetuity. The proposed project site was not included in the biological resources study area boundary in the 2018 EIR; therefore, a project-specific analysis is included below, and any mitigation measures from the 2018 EIR applicable to the proposed project are identified.

Special Status Species

Foraging Special-Status Bird Species

Multiple species of special-status birds such as burrowing owl, Swainson's hawk, northern harrier, ferruginous hawk, short-eared owl, white-tailed kite, loggerhead shrike, mountain plover, and tricolored blackbird have potential to forage on site. The proposed project would result in the conversion of 33.6 acres of agricultural land, 26.4 acres of which would be for residential development and would no longer provide foraging value for these species. The project includes a 7.2-acre agricultural buffer along the eastern boundary of the site, but landscaping maintenance operations as well as the construction of a new detention basin and trail would still impact foraging habitat in this area. Therefore, the impact of the proposed project would be **potentially significant**.

Common Nesting Birds

The proposed project provides foraging habitat for non-special-status local and migratory birds, which are protected by CDFW and the federal Migratory Bird Act (MBTA). The project site also contains potentially suitable nesting habitat for ground-nesting bird species. If conducted during the nesting season (February 1 to August 31), construction activities could directly impact any ground-nesting birds and increased human disturbance and construction-generated noise and vibration could cause nest abandonment and subsequent nest failure. Therefore, the proposed project's impact would be considered **potentially significant**.

Mitigation Measures

Mitigation measures BIO-1c (burrowing owl avoidance), BIO-1d (burrowing owl habitat mitigation), BIO-1f (Swainson's hawk foraging habitat mitigation), and BIO-1g (special-status bird avoidance and foraging habitat mitigation) from the 2018 EIR, as modified, would apply to this impact and would reduce impacts to a **less-than-significant level** by requiring identification and protection of special-status species during project construction, and

replacement of nesting or foraging habitat. Edits to the original 2018 EIR language are shown in underline and strikethrough. No new mitigation measures would be required.

BIO-1c Mitigation Measures BIO-1c through BIO-1d are consistent with Avoidance and Minimization Measures BO 1, BO 3, and BO 4 in Section 6.4.9 of the Solano HCP (Solano County Water Agency 2012) and recommendations detailed in the Department of Fish and Game *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The project applicant shall conduct breeding season surveys (a), non-breeding season surveys (b), and, if necessary, a take avoidance survey (c) prior to construction.

a. Breeding Season Survey (February 1 – August 31): Conduct four survey visits as follows: (1) at least one survey shall be conducted between February 15 and April 15, and (2) a minimum of three surveys visits shall occur, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15. Surveys shall follow the methodology of Department of Fish and Game *Staff Report on Burrowing Owl Mitigation*, Appendix D for breeding season surveys.

b. Non-breeding season survey (September 1 – January 31): Follow same methodology as above in a) Breeding Season Survey, but conduct at least four visits, spread evenly, throughout the non-breeding season. Surveys shall follow the methodology of Department of Fish and Game *Staff Report on Burrowing Owl Mitigation*, Appendix D for non-breeding season surveys.

c. Take Avoidance Survey: If the breeding season surveys or non-breeding season surveys have been completed less than 14 days prior to construction, no further preconstruction surveys for burrowing owl are necessary. If more than 14 days have elapsed since one of the breeding season or non-breeding season surveys have occurred, a qualified biologist meeting requirements listed in the Department of Fish and Game *Staff Report on Burrowing Owl Mitigation* survey methodology shall conduct take avoidance surveys within the project site within 14 days prior to construction to identify burrowing owls or their nesting areas. This survey shall follow survey protocols outlined in the most current draft of the Solano HCP and as developed by the Burrowing Owl Consortium in consultation with CDFW (Solano County Water Agency 2012; CDFG 2012). If no active burrows or burrowing owls are observed, no further mitigation is required. If a lapse in construction of 15 days or longer occurs during the nesting season, additional take avoidance surveys shall be repeated before work may resume.

d. If burrowing owls or active burrows are identified within the project site during the surveys described in (a), (b), and (c) above, the following measures shall be implemented. While minimum buffers are suggested below, appropriate buffers shall be determined in consultation with CDFW:

    1. During the non-breeding season for burrowing owls (September 1 through January 31), exclusion zones shall be established around any active burrows identified during the survey. The exclusion zone shall be no less than 160 feet in radius centered on the active burrow. With ~~approval from the City after~~ consultation with CDFW, burrowing owls shall be passively evicted and relocated from the burrows using one-way doors. The one-way doors shall be left in place for a minimum of 48 hours and shall be monitored daily to ensure proper function. Upon the end of the

48-hour period, the burrows shall be excavated with the use of hand tools and refilled to discourage reoccupation.

2. During the breeding season (February 1 through August 31), a qualified biologist familiar with the biology and behavior of this species shall establish exclusion zones of at least 250 feet in radius centered on any active burrow identified during the survey. No construction activities shall occur within the exclusion zone as long as the burrow is active and young are present. Once the breeding season is over and young have fledged, passive relocation of active burrows may proceed as described in measure b.1, above.
3. The buffer widths may be reduced with the following measures:
   - A site specific analysis, reviewed and approved by City after consultation with CDFW, shall be prepared that documents and describes how the nesting or wintering owls would not be adversely affected by construction activities;
   - Monitoring shall occur by a qualified biologist for a minimum of 10 consecutive days following initiation of construction indicating that the owls do not exhibit adverse reactions to construction activities;
   - Burrows are not in danger of collapse due to equipment traffic; and
   - Monitoring is continued at least once a week through the nesting/wintering cycle at the site and no change in behavior by owls is observed; biological monitoring reports shall be submitted to CDFW.

This measure may be accomplished in conjunction with Swainson's hawk Mitigation Measure BIO-4d, provided that the project applicant submits a Burrowing Owl Mitigation and Monitoring Plan for review by CDFW and with a copy to the City of Vacaville Community Development Director ~~for approval by the City~~. The Burrowing Owl Mitigation and Monitoring Plan shall include the following components, which require that additional measures are implemented. A Habitat Maintenance Plan shall be prepared and implemented to ensure open space lands within the project site (if habitat remains) and offsite mitigation agriculture mitigation lands are maintained, to extent feasible, to be compatible with use by tricolor blackbird, northern harrier, white-tailed kite, and loggerhead shrike.

BIO-1d Mitigation for the permanent loss of burrowing owl foraging habitat, and potential nesting habitat, for urban development or other permanent facilities shall be provided at a 1:1 land/area ratio. Mitigation for nesting habitat shall be provided only if pre-construction surveys (Mitigation Measure BIO-1c) indicate that burrowing owl burrows are present on the project site. If mitigation for nesting habitat is required, the applicant or their designee shall preserve and manage one active burrowing owl nest for each known burrowing owl nest affected by the Project. This shall be accomplished through the two-stage process described under Objective SH 2.2 of the Draft Solano HCP, through targeted acquisition, defined term contracts or agreements, and conservation easements of known active nesting habitat. The irrigated agriculture preserve mitigation provided for Swainson's hawk Mitigation BIO-1f, below, may satisfy the requirements for preserved foraging habitat under Mitigation Measure BIO-1d, provided that the applicant submits a Burrowing Owl Mitigation and Monitoring Plan shall include the following components, which require that:

- Grasses and forbs within the owl habitat shall maintain an average effective vegetation height less than or equal to 6 inches from February 1 to April 15, when owls typically select mates and nest burrows. In addition, tree and shrub canopy cover shall be limited to the edges of the set aside area and shall not be within 200 feet of the artificial burrows.
- No more than 20 percent of the mitigation area may support tree and shrub canopy or tall, dense grass cover.
- ~~At least 5 acres of mitigation area shall be permanently taken out of agricultural production to provide suitable nesting habitat and cover for burrowing owls.~~ If occupied burrows are confirmed on site during pre-construction surveys, at least four artificial burrow complexes (three multi-entrance burrows per complex) shall be installed within the nesting habitat.
- Burrowing owl habitat mitigation areas shall be subject to deed restrictions that would limit future urban development.
- A Habitat Maintenance Plan shall be prepared and implemented to ensure open space lands within the project site (if habitat remains) and the irrigated agriculture mitigation lands are maintained, to the extent feasible, to be compatible with burrowing owl use.
- Adequate funding shall be provided to manage the owl mitigation area in perpetuity as specified in the Burrowing Owl Mitigation and Monitoring Plan.

If mitigation for nesting habitat is required, the mitigation lands shall <u>be of the same quality and type of land removed</u> ~~have the following characteristics: preserve land shall be permanently taken out of production to provide suitable nesting habitat and cover for burrowing owls. Mitigation for nesting habitat shall consist of one continuous block of habitat and shall not be located adjacent to a county road, highway, or within 650 feet of Swainson's hawk nesting~~. If natural burrows are not present in sufficient density to the reserve lands, at least two burrow complexes (three burrows per complex) shall be installed and maintained in perpetuity within the nesting habitat set aside for burrowing owls. Artificial burrows shall be monitored annually for effectiveness. Biological monitors shall report on the colonization of the nest burrows by owls and the number of owls fledged per nest. Within the nesting habitat set aside for burrowing owls, management measures shall be implemented and adequately funded to maintain an average effective vegetation height less than or equal to 6 inches from February 1 to April 15. In addition, the 2 acres of habitat must be kept free of tree or shrub canopy cover in perpetuity.

BIO-1f The project applicant shall mitigate for the loss of Swainson's hawk irrigated foraging habitat by preserving a minimum of 1:1 land/area ratio of similar habitat. The final acreage for mitigation calculations shall be determined based on final design of the open space areas within the project site. The preservation of the mitigation area shall be accomplished through purchase of credits from a bank approved by the CDFW to provide such credits, such as the Elsie Gridley Mitigation Bank or the Burke Ranch Conservation Bank (CDFW 2016) or through preservation of irrigated agricultural lands protected in perpetuity by a conservation easement or City approved in-lieu fee program established to preserve irrigated agricultural lands protected in perpetuity by a conservation easement at a minimum of 1:1 land/area ratio. Such an easement or fee program shall include provisions that provide for agricultural uses that are compatible with Swainson's hawk foraging needs. Agricultural foraging habitats shall consist

of alfalfa, tomatoes, other annual vegetable row crops, and grain. The mitigation area shall not include crop types and land uses incompatible with Swainson's hawk foraging. The following additional restrictions and prohibited uses, at a minimum, shall also be noted as forbidden within the conservation easement:

- Commercial feedlots, which are defined as any open or enclosed area where domestic livestock are grouped together for intensive feeding purposes.
- Horticultural specialties, including sod, nursery stock, ornamental shrubs, ornamental trees, Christmas trees, or flowers.
- Commercial greenhouses or plant nurseries.
- Commercial aquaculture of aquatic plants, animals, and their byproducts.
- Planting orchards or vineyards for the production of fruits, nuts, or berries except in designated farmstead areas.
- Cultivation of perennial vegetable crops such as artichokes and asparagus, as well as annual crops such as cotton or rice.
- Construction, reconstruction, or placement of any building, billboard or sign, antennas, towers, and facilities for generation of electrical power, or any other structure or improvement of any kind, except as may be specifically permitted in site-specific management plan. Acreage occupied by any such existing facilities may not be counted toward mitigation requirements.

The City shall consult with CDFW prior to approving the site, conservation easement, and conservation easement holder.

BIO-1g Mitigation for the permanent loss of foraging habitat for northern harrier, white-tailed kite, loggerhead shrike, and tricolored blackbird from project urban development or other permanent facilities shall be provided at a 1:1 land/area ratio. The irrigated agriculture preserve mitigation provided for Swainson's hawk Mitigation BIO-1f, above, may satisfy the requirements for BIO-1g, provided the following additional measure is implemented on the Swainson's hawk irrigated agriculture mitigation lands.

- A Habitat Maintenance Plan shall be prepared and implemented to ensure open space lands within the project site (if habitat remains) and the irrigated agriculture mitigation lands are maintained, to the extent feasible, to be compatible with use by tricolored blackbird, northern harrier, white-tailed kite, and loggerhead shrike.

Impact 4.2-2 The proposed project could conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The 2018 EIR determined that conversion of irrigated agricultural lands from the Specific Plan project would conflict with the Solano County Draft Habitat Conservation Plan (HCP), because the Specific Plan site is within an area mapped by the HCP as potential reserve for Swainson's hawk and designated as Irrigated Agricultural Conservation Area (a target area for conservation of both Swainson's hawk and burrowing owl due to similar habitat requirements). Therefore, the 2018 EIR considered this a potentially significant impact and proposed mitigation

measures BIO-1d and BIO-1f to replace foraging habitat at a 1:1 ratio, thereby reducing the impact to a less-than-significant level.

Although the Solano HCP is still in draft form and has not yet been finalized or adopted, the City's General Plan mandates that the measures covered in the most current draft of the Solano HCP shall be used (City of Vacaville 2015). Thus, the draft Solano HCP is treated in this SEIR as an accepted plan for the purposes of analyzing and mitigating potential impacts. The conversion of 33.6 acres of agricultural lands conflicts with the HCP goal for conservation of lands for special-status species. The analysis in the 2018 EIR is applicable to the proposed project, as the project site is also located within potential reserve areas for Swainson's hawk (see Figure 4-27 in the Administrative Draft HCP) and within areas designated as an Irrigated Agriculture Conservation Area (see Figure 4-22 in the Administrative Draft HCP). These areas were mapped by the HCP as high quality, irrigated and non-irrigated agricultural lands and adjacent grasslands that are within the known nesting distribution in the County. Therefore, the impact of the proposed project would be **potentially significant**.

Mitigation Measures

Mitigation measures BIO-1d and BIO-1f from the 2018 EIR require the loss of burrowing owl foraging habitat and Swainson's hawk foraging habitat be replaced at a 1:1 ratio, consistent with the Administrative Draft HCP. Compliance with these mitigation measures would ensure consistency with the Administrative Draft HCP and would reduce the impact of the proposed project to **less than significant**.

Cumulative Impacts

This section identifies and evaluates potential cumulative impacts on biological resources from the proposed project and past, present, and reasonably foreseeable future projects, and as relevant to this topic. The geographic area considered in the cumulative analysis for this topic is the greater Solano County area. The cumulative projects considered include other past, present or reasonably foreseeable construction/development projects proposed by the County or entities within the County, including the City of Vacaville (City). Cumulative projects in the project vicinity would be those that would contribute to construction- or operations-related biological resources resulting from the proposed project.

Impact 4.2-3 The proposed project could contribute to cumulative impacts on biological resources.

In conjunction with other past, current, and reasonably foreseeable urban development projects in the City and surrounding municipalities, a large amount of historic foraging and nesting habitat for special-status raptors, bats and birds has been and will continue to be removed from the region. The Solano HCP anticipated conversion of more than 14,000 acres of current habitat over the next 30 years, including agricultural lands to urban uses and loss of wetlands (Solano County Water Agency 2012). This is considered a significant cumulative impact.

Development of the project site was considered in the HCP and the City's General Plan EIR. The City's General Plan includes Policy COS-P1.1 and Action COS-A1.1, which supports implementing the HCP, thereby reducing the proposed General Plan's contribution to the cumulative impacts of the loss/conversion of habitats for future development within the city and the county. The General Plan EIR identified impacts associated with the loss and conversion of habitat as less than significant provided that the HCP (or the analogous mitigation included in the General Plan EIR) was implemented.

Other future projects within the County could result in project-level impacts to biological resources. However, these projects would be subject to review and approval by the relevant jurisdiction on a case-by-case basis. Independent CEQA review would be required for all future projects with the potential to impact biological resources and mitigation would be incorporated into such projects to the extent feasible. Thus, it can be reasonably assumed that these projects would be designed or otherwise conditioned to avoid and minimize impacts to biological resources and would be required to comply with federal, state, and local regulations, policies, and ordinances.

Implementation of the proposed project could result in project-level impacts to nesting birds and loss of foraging habitat. Mitigation measures have been identified to reduce and avoid potential impacts to special-status wildlife species resulting from project implementation to less-than-significant levels. Burrowing owl and Swainson's hawk foraging habitat mitigation land would be preserved in perpetuity. Therefore, construction and post-construction impacts to nesting birds and special-status wildlife species would be less than significant at the project level with mitigation and would ensure that the project's contribution to the existing cumulative impact is not considerable and would be **less than significant**.

Mitigation Measures

Compliance with mitigation measures BIO-1c, BIO-1d, BIO-1f, and BIO-1g would ensure that the project's contribution to cumulative impacts on nesting birds as well as the loss of foraging and breeding habitat for special status species remains less than significant.

4.2.5 References

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California Native Plant Society (CNPS). 2023. Inventory of Rare and Endangered Plants (online edition, v8-03). Sacramento, California: CNPS, Rare Plant Program. Accessed September 2023. http://www.rareplants.cnps.org/.

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4.3 Land Use and Planning

4.3.1 Introduction

This section evaluates the existing land uses of the Fields at Alamo Creek ("proposed project") site, identifies applicable land use plans, and evaluates the consistency of the proposed project with those plans. As discussed in the Executive Summary, the proposed project would not result in new information or changes to the Farm at Alamo Creek Specific Plan ("Specific Plan") Environmental Impact Report (SCH No. 2017062068) that was certified in November 2018 ("2018 EIR") regarding the physical division of an established community (City of Vacaville 2018). Therefore, impacts to this issue area would remain less than significant and are not further evaluated in this Supplemental EIR (SEIR). This SEIR analysis focuses on those impacts that are novel to the proposed project or are substantially different from those described in the 2018 EIR.

One comment letter was received from the Solano Local Agency Formation Commission (LAFCO) in response to the Notice of Preparation (NOP) issued on March 24, 2023, which included comments on LAFCO's role as a responsible agency for the project and applicability of the LAFCO's local policies and standards to the project. No comment letters related to Land Use and Planning were received in response to the revised NOP issued on July 23, 2023. The NOPs and comments received are provided in Appendix A.

Information contained in this section is based on the 2018 EIR, the City of Vacaville ("City") General Plan, updated Housing Element, and new community health policies (City of Vacaville 2015, 2023a, 2023b), the City's General Plan and Energy Conservation Action Strategy (ECAS; City of Vacaville 2021), the Solano County ("County") General Plan (Solano County 2008), the Travis Air Force Base Land Use Compatibility Plan (Solano ALUC 2015), the County's Zoning Ordinance (Chapter 28 of the County Code), the City's Land Use and Development Code (Title 14 of the Municipal Code) and information provided by the City and project applicant.

4.3.2 Environmental Setting

This section details the existing environmental setting for Land Use and Planning and updates the information described in Section 4.5 starting on page 4.5-1 of the 2018 EIR.

Existing Site Conditions and Planning Designations

The proposed project includes a 33.6-acre parcel of land (assessor's parcel number [APN] 0138-010-040) located in unincorporated Solano County south of Hawkins Road and Katleba Lane, east of Leisure Town Road. The city limits and the approved Specific Plan boundary is immediately adjacent to the western and southern boundary of the project site. The proposed project site is undeveloped and has been tilled and is used for active agriculture. The proposed project site contains land designated by the California Department of Conservation (DOC) as Prime Farmland (DOC 2022) and does not contain any trees or buildings. A Solano Irrigation District (SID) canal runs adjacent to Hawkins Road along the north side of the property.

The proposed project site is designated Urban Reserve and Agricultural Buffer in the City's General Plan (City of Vacaville 2015) and designated Agriculture and zoned A-40, Exclusive Agricultural 40 acres in the Solano County General Plan (Solano County 2008). The Urban Reserve designation is for lands outside of the city, which the City has determined appropriate for future urban development and annexation; however, no specific land uses (i.e., residential or commercial) were designated for this area in the City's General Plan. The proposed project site does

not currently include City zoning because it is located outside of the city limits. Figures 2-2 and 2-3 in Chapter 2, Project Description, show the existing and proposed land use designations and zoning.

The proposed project site is located within the City's Sphere of Influence and Urban Growth Boundary. The site is designated as a future Specific Plan in the City's General Plan (City of Vacaville 2015, Figure LU-2) and is also designated as a growth area as part of the East of Leisure Town Road Growth Area (City of Vacaville 2015, Figure LU-3).

The proposed project site is located within Zone D of the Travis Air Force Base Land Use Compatibility Plan. Limitations on the height of structures (over 200 feet above ground level) and notice of aircraft overflights are the only compatibility factors within this zone (Solano County 2015). The proposed project site is not located within the Nut Tree Airport Land Use Compatibility Plan (Solano County 1988).

Surrounding Land Uses

The surrounding site conditions as described in the 2018 EIR are generally still applicable to the proposed project site. The area surrounding the proposed project site to the east and south is characterized as undeveloped agricultural land, with some land fallow and other land under active agricultural use. Across Hawkins Road to the north, there are the remnants of a former ranch and agricultural land. The project site abuts the Specific Plan on the west and south, which includes land that is no longer actively farmed. There is an existing PG&E easement east of the proposed project site for 500 kilovolt (kV) and 230 kV overhead transmission lines that are part of the statewide electrical system.

General Plan Land Use Designation Descriptions

The discussion below provides a brief overview of the County and City's General Plan land use designations, the County's zoning, and the proposed City zoning for the project site.

Solano County General Plan

The Solano County General Plan designates the proposed project site Agriculture. This designation provides area for agricultural uses and allows for secondary uses that support the economic viability of agriculture. These areas are protected from intrusion by non-agricultural uses and other uses not directly supporting the viability of agricultural uses (Solano County 2008, p. LU-19).

City of Vacaville General Plan

The City of Vacaville General Plan designates the proposed project site with a mix of land uses described as follows:

Agricultural Buffer: This designation is used to identify lands that border urban development and intensive or irrigated agriculture. The primary use for this designation is to provide a buffer between urban development and agricultural uses adjacent to the eastern boundary of the project site. Proposed uses in these buffer lands include passive open space uses such as pedestrian and bicycle trails or public infrastructure improvements.

Urban Reserve: This designation is applied to relatively large, contiguous, and undeveloped geographic areas where comprehensive planning must occur prior to urbanization. The purpose of assigning the Urban Reserve designation, rather than specific land use designations in the East of Leisure Town Road Growth Area, is to demonstrate that

the City eventually expects urban development in these areas, while also allowing flexibility in planning for these uses in the future.

Municipal Code – Zoning Descriptions

Solano County

Exclusive Agriculture 40 acres (A-40): This zoning district is intended to provide for agricultural land uses and to preserve vitality of agricultural operations through allowing agricultural-related support uses, excluding incompatible uses and protecting viability of the family farm. Allowable uses within this zoning district include, but are not limited to, agricultural sensory structures, cultivated and irrigated farming, non-irrigated and non-cultivated farming, grazing or pasture livestock, nursery with public sales and small wineries.

City of Vacaville

The City of Vacaville Municipal Code, Title 14 Land Use and Development Code, Division 14.09 Zoning is designed to protect and promote the public health, safety, and general welfare of the citizens of Vacaville and provides the purpose, permitted and conditional uses, and any special district provisions for the City's various zoning districts. The proposed project site does not currently include City zoning because it is located outside of the city limits. The project proposes the following zoning for the site:

Residential Medium Density (RMD): The RMD district is intended to provide for a variety of housing types at densities between 8.1 to 14.0 dwelling units per acre, including duplexes, townhouses, apartments, detached single-unit residential development on small lots, and other compatible uses appropriate in a medium density residential environment. The RMD district implements the Residential Medium Density General Plan Land Use Designation.

Open Space (OS): The OS-Open Space district provides for the preservation of public open space lands such as hillsides, ridgelines, and scenic areas. The OS district also includes areas with limited development potential due to physical characteristics of the land or lack of access.

4.3.3 Regulatory Setting

Federal

There are no federal plans, policies, regulations or laws applicable to the proposed project.

State

Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000

The Cortese-Knox-Hertzberg Local Government Reorganizations Act encourages the orderly formation of Local Government Formation Commissions (LAFCOs) and protects agricultural land resources by discouraging urban sprawl and coordinating logically and timed changes in local government boundaries. Solano County LAFCO regulates boundary changes, annexations, and sphere of influence for cities, agencies and special districts within the county (Solano LAFCO 2015). Solano County LAFCO has discretionary approval over the City's request to annex the project site into the City of Vacaville city limits and is a responsible agency under the California Environmental Quality Act (CEQA). Solano County LAFCO will review reorganization of services currently provided by the Solano

Irrigation District, County Lighting Service Area, Vacaville Fire Protection District, Vacaville Elmira Cemetery District, and the Solano Resource Conservation District.

Local

Solano County General Plan

The Solano County General Plan, adopted on August 5, 2008, is a long-range planning document to guide land use in the unincorporated areas of the County including areas outside the Vacaville city limits but within the City's planned Urban Growth Boundary. Currently, the proposed project site is not within the city limits and is governed by the Solano County General Plan.

The following goals and policies from the County's General Plan Land Use Element are applicable to the proposed project.

Goal LU.G-1. Preserve and protect the current development pattern of distinct and identifiable cities and communities.

Goal LU.G-2. Encourage a development pattern that first seeks to maintain existing communities, second to develop vacant lands within existing communities presently served by public services, and third to develop lands immediately adjacent to existing communities where services can easily be provided.

Goal LU.G-3. Create sustainable communities with areas for employment, shopping, housing, public facilities and services, and recreation in close proximity to each other.

Goal LU-G-4. Encourage land use development patterns and circulation and transportation systems that promote health and wellness and minimize adverse effects on agriculture and natural resources, energy consumption, and air quality.

Policy LU.P-4. Designate as municipal service areas those areas where future development is to be provided with municipal or urban type uses through city annexation.

Policy LU-P-11. Within municipal service areas, work with cities to protect and maintain designated urban-agricultural buffers within city jurisdiction compatible with adjoining agricultural uses.

Policy LU.P-13. Provide sufficient residential lands jointly with the cities to meet Solano County's projected housing needs.

Policy LU-P-17. Encourage clustering of residential development when necessary to preserve agricultural lands, natural resource areas and environmental quality, to provide for the efficient delivery of services and utilities, and to mitigate potential health and safety hazards.

Policy LU.P-18. Require a variety of housing types (affordable and market-rate) near jobs, services, transit, and other alternative-transportation serving locations (e.g., rideshare lots).

Solano County Zoning Ordinance

The Solano County Zoning Code was adopted October 6, 2015. The Zoning Ordinance includes the zoning map and regulations governing the use of land and placement of improvements and buildings within various designations. Regulations include, but are not limited to, property development standards, general site use and regulations, parking standards and procedures for administering the ordinance.

The proposed project site is currently zoned A-40. This zoning district is intended to provide for agricultural land uses and to preserve vitality of agricultural operations. As part of the proposed project, the project applicant is requesting the proposed project site be annexed into the city limits. The project applicant is also requesting a General Plan amendment and that the project site be pre-zoned, consistent with the City's current land use designations.

Solano County Airport Land Use Commission

The Solano County Airport Land Use Commission (ALUC) guides airport development in the county and governs the areas surrounding airports in order to prevent land use issues related to noise and safety. The ALUC prepares Airport Land Use Compatibility Plans (ALUCPs) to ensure that cities within the county have policies and regulations in compliance with provisions of the plans.

Solano County Local Agency Formation Commission

Solano County LAFCO is an independent agency with countywide jurisdiction over changes in organization and boundaries of cities and special districts including annexations, detachments, incorporations and formations. LAFCO has to observe four basic statutory purposes: the discouragement of urban sprawl; the preservation of open space and prime agricultural land resources; the efficient provision of government services; and the encouragement of orderly growth boundaries based upon local conditions and circumstances. LAFCO's powers, procedures, and functions are set forth in the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, (Government Code Section 56000 et seq.). As a Responsible Agency for the proposed project, LAFCO has discretionary approval over the City's annexation application and relevant submittal documents. LAFCO has adopted eleven standards to address regional concerns and goals, six of which are mandatory and require full compliance for a project to be approved (Standards 1-6), and five of which are discretionary where LAFCO may choose to approve a proposal even if a project is not fully compliant (Standards 7-11). These standards are paraphrased as follows (for the full text, refer to the LAFCO Standards and Procedures document [LAFCO 2019]):

Standard No. 1 Consistency with Sphere of Influence Boundaries. This Standard requires that the applicant shall demonstrate that the affected territory is within the Sphere of Influence of the affected agency. This is to be shown on the required mapping submittal in response to Standard No. 7.

Standard No. 2 Change of Organization and Reorganization to the Limits of the Sphere of Influence (SOI) Boundaries. This Standard applies to any application for annexation that extends to the limits of the SOI boundary and contains lands designated for open space use under the applicable general plan. In such cases, the application shall include an analysis, justification, and/or appropriate mapping demonstration that the open-space lands relate to specific needs of the annexation agency or is an integral part of the project's design.

Standard No. 3 Consistency With Appropriate City General Plan, Specific Plan, Area-Wide Plan and Zoning Ordinance. This standard requires that the applicant submit copies of the resolution approved by the city council of an affected city which certifies that the proposed change of organization or reorganization is consistent with the agency's general plan or specific plans, area-wide plans and zoning ordinance.

Standard No. 4 Consistency With the County General Plan of Proposed Change of Organization or Reorganization Outside of a City's Sphere of Influence Boundary. This standard requires that for district changes of organization or reorganizations in unincorporated territory outside cities' Sphere of Influence, the applicant submit copies of the resolution approved by the Board of Supervisors which certifies that the proposed change of organization or reorganization is consistent with the Solano County General Plan and Zoning Regulations.

Standard No. 5 Requirement for Pre-approval. This standard requires that an application for a city change of organization or reorganization shall be accompanied by copies of the agency's ordinance prezoning the affected territory or a copy of a specific plan or equivalent and resolution of adoption. Applications for district change of organization or reorganization shall be accompanied by a copy of agency's resolution supporting the proposal.

Standard No. 6 Effect on Natural Resources. This Standard requires that the applicant submit copies of the environmental documentation adopted or certified by the lead agency and copies of the resolution making the required environmental findings, adopting the Negative Declaration or Certifying the EIR, and making any Statement of Overriding Considerations.

Standard No. 7 Establishing Proposal Boundaries, Map and Geographic Description Requirements, Other Required Map Exhibits. LAFCO requires a sound boundary description that is acceptable to the Solano County Surveyor and the California State Board of Equalization. The map and geographic description of the proposal area shall meet the requirements set forth in Attachment A to Standard 7.

Standard No. 8 Likelihood of Significant Growth and Effect on Other Incorporated or Unincorporated Territory. This standard requires for any applications for a change of organization or reorganization which will convert open space lands to urban use, each application shall include the following documentation:

- For a change or organization or reorganization where less than 40 acres of commercial or industrial land use is proposed or where less than 100 acres of residential land use is proposed, the proponent shall provide an analysis of likelihood of significant growth based on available information in responding to this standard.
- An analysis of consistency of the proposed project with the city's Municipal Service Review.
- Documentation of the city's building permit activity over the past 10 years.
- A copy of the development agreement (if applicable).

Standard No. 9 Protection of Prime Agricultural Land. This Standard requires that any application for a change of organization or reorganization containing open-space lands to be converted to

an urban use shall provide the following documentation on its impact to prime agricultural land.

- Documentation as to whether the affected territory contains prime agricultural land as defined under Government Code Section 56064 and/or whether the affected territory is under an agricultural preserve contract.
- If the affected territory contains prime agricultural land, provide demonstrated compliance with evaluation criteria:
  - If an annexation includes prime agricultural land, the annexation is considered to promote the planned orderly and efficient development of an area if:
    - The proposed annexation meets the requirements of Standard No. 8; and
    - The proposed annexation either abuts a developed portion of the agency or abuts properties which already are committed to urban development by the extension of streets and other public facilities where service extensions were predicted on adjacent lands within the proposed annexation area being developed; and
    - It can be demonstrated that there are insufficient vacant non-prime lands within the Sphere of Influence planned for the same general purpose.
  - It is the responsibility of an agency to undertake substantial actions to facilitate and encourage the infill of land within a city's limit so to minimize the need for further annexation. Such actions include, but are not limited to: redevelopment plans and action programs, capital improvement programs, changes in land use policies and regulations, and housing programs.
  - Consistency with the city's Municipal Service Review and provisions for guiding future growth away from prime agricultural lands

Standard No. 10 Provision and Cost of Community Services. For proposals initiated by petition, this standard requires that an application of a change of organization or reorganization shall be accompanied by a "will serve" letter or a statement from the affected agency(ies).

Standard No. 11 The Effect of the Proposed Action on Adjacent Areas, Mutual Social and Economic Interests, and on Local Governmental Structure. This standard requires that an application for a change of organization or reorganization show the inter-relationship and effect of the proposed project on adjacent areas, both within and outside the boundaries of the affected agency, and to weigh the overall beneficial aspects of a proposal as compared to the potential negative impacts. The application shall provide a written response to this standard and all supporting documentation regarding mitigation.

Travis Air Force Base Airport Land Use Compatibility Plan

Travis Air Force Base is located in the City of Fairfield approximately 5.2 miles south of the proposed project site. The Travis Air Force Base ALUCP provides policies and guidance designed to ensure that future land uses surrounding the Air Force Base remain consistent and compatible with the airport facility safety and uses. The proposed project site falls within Land Use Compatibility Zone D in the ALUCP. Compatibility Zone D does not limit residential development or other uses but would require the Solano County ALUC and Federal Aviation Administration review of structures with a proposed height of over 200 feet (Solano County 2015).

City of Vacaville General Plan

The City's General Plan, adopted August 11, 2015, is designed as a long-range planning document for guiding future conservation, enhancement, and development in the City. Since certification of the 2018 EIR, the City also adopted a new Housing Element on June 27, 2023 (City of Vacaville 2023a) and concurrently adopted new community health policies (City of Vacaville 2023b). The following goals and policies from the City's General Plan Land Use Element, Conservation and Open Space Element, and Housing Element are applicable to the proposed project.

Goal LU-2. Carefully plan for new development in undeveloped portions of Vacaville.

Policy LU-P2.1. Require lands outside, but adjacent to, the current city limits to annex into the City of Vacaville as a prerequisite of development. Do not provide city utility services, water, and sanitary sewer to new development outside the City limit (with the exception of sanitary sewer for infill in the Elmira area) unless the City Council, with the approval of the Local Agency Formation Commission (LAFCO), approves exceptions in situations where the following three conditions are met:

- The area in question cannot annex into the City immediately, because it is not currently contiguous to the City limit.
- The property owner signs a recorded, irrevocable agreement to annex the property to the City when such annexation is requested by the City.
- The development is consistent with this General Plan and is found to meet all appropriate City development standards.

Policy LU-P2.2. Require that specific plans be prepared for new areas brought into the city for development. Such specific plans must provide a coordinated plan for land use, public facilities, and public services. Prohibit individual, piecemeal developments within these outlying areas.

Policy LU-P2.4. Require that development on any prime farmland, farmland of statewide importance, or unique farmland (as classified by the California Department of Conservation) purchase conservation easements to permanently protect agricultural land of equal or greater value at a ratio of 1 acre of conserved agricultural land per 1 acre of developed agricultural land.

Policy LU-P2.9. Prioritize new development on infill lots where feasible instead of being on greenfield, undeveloped land within the City Urban Growth Boundary.

Goal LU-3. Coordinate land development with the provision of services and infrastructure.

Policy LU-P3.4. Do not approve new development unless there is infrastructure in place or planned to support the growth.

Policy LU-P3.5. Encourage new development to consider transit, pedestrian, and bicycle circulation during the design phase.

Policy LU-P3.6. Require that new development or new Specific Plan areas be located immediately adjacent to existing development or infrastructure.

Goal LU-5. Maintain the City's Urban Growth Boundary.

Policy LU-P5.2. Lands East of Leisure Town Road: In conjunction with approval of any new urban development on lands shown as "Area B" on Figure LU-3, which consists of lands that are inside the Urban Growth Boundary but east of Leisure Town Road and between the Locke Paddon Community areas on the north and New Alamo Creek on the south, the City shall require such development to mitigate its impact on agricultural and open space lands by preserving, to the extent consistent with applicable law, for each acre of land developed, at least 1 acre of land outside the Urban Growth Boundary but within Pleasants Valley, Upper Lagoon Valley, or Vaca Valley, or any other location that is within 1 mile of the Urban Growth Boundary. Alternatively, to the extent consistent with applicable law, such development may pay an equivalent in-lieu fee as determined by the City in consultation with the Solano Land Trust. Lands acquired directly or with fees collected pursuant to this requirement shall first be offered to the Solano Land Trust. Any such fees transferred to the Solano Land Trust may only be used to acquire or protect lands outside of the Urban Growth Boundary but within 1 mile of the Urban Growth Boundary, or within Pleasants Valley, Upper Lagoon Valley, or Vaca Valley. Acquisitions pursuant to this requirement shall be coordinated with the Solano Land Trust.

If for any reason adequate land to meet the conservation goals described in the Vacaville General Plan, and in particular this section, cannot be identified or acquired, the City and the Solano Land Trust, or if the Solano Land Trust declines to participate, the City and another land conservation entity shall meet and confer to identify other areas where conservation acquisitions can occur at a reasonable cost and to satisfy the conservation goals described in this section.

Policy LU-P5.3. Coordination with Future Solano County LAFCO Open Space or Agricultural Land Mitigation Program: If the Solano County Local Agency Formation Commission (LAFCO) adopts an open space or agricultural land mitigation program applicable to the area defined in Policy LU-P5.2, lands defined therein shall be subject only to the requirements of the LAFCO mitigation program, provided that if the requirement described in Policy LU-P5.2 provides greater mitigation than the LAFCO requirement, the incremental difference between the two programs shall be imposed in addition to the LAFCO requirement to the maximum extent permitted by State law. To the extent the LAFCO requirement and this requirement overlap, development shall be subject to only the LAFCO requirement.

Goal LU-6. All development shall pay its own way and not result in a financial burden to existing development or services.

Policy LU-P6.1. Require that all development mitigate its own impacts on the existing community and pay its fair share of the cost of capital improvements needed to serve that development.

Policy LU-P6.2. Require that infrastructure and service improvements for future annexation or growth areas do not create an undue burden on existing City infrastructure and services.

Policy LU-P6.3. Ensure that future annexations are consistent with the overall goals and policies of the General Plan and do not adversely impact the City's fiscal viability, environmental resources, infrastructure and services, and quality of life.

Goal LU-11. Improve community health and reduce pollution exposure and health risks across the city and reducing asthma, especially land uses that generate air pollutants.

Policy LU-P11.1. Prohibit, or control land uses that pose potential health and environmental hazards to residents, especially land uses that generate air pollutants.

Policy LU-P11.2. Consider community health issues and impacts associated with land use decisions, especially where land use decisions would cause adverse health effects on residents.

Goal LU-13. Preserve and enhance the existing character and sense of place in residential neighborhoods.

Policy LU-P13.5. Prohibit residential neighborhood design that places access to single family lots on arterial streets.

Policy LU-P13.6. Design residential neighborhoods to avoid placing access to single family lots on collector streets, and limit the number of intersections along collector streets.

Goal LU-14. Provide high-quality housing in a range of residential densities and types.

Policy LU-P14.1. Encourage development that broadens the choice of type, size, and affordability of housing in Vacaville.

Policy LU-P14.2. Provide for transitions between higher-density and lower-density housing.

Goal LU-19. Provide for orderly, well-planned, and balanced growth in the East of Leisure Town Road Growth Area.

Policy LU-P19.1. Limit residential development within the East of Leisure Town Road Growth Area to 2,455 dwelling units with the following general assumptions:

- Brighton Landing Specific Plan Area: 780 dwelling units
- Roberts' Ranch Specific Plan Area (See Figure LU-2): 785 dwelling units
- The Farm at Alamo Creek Specific Plan Area (North of Elmira Road and South of the Hawkins Road prior to realignment, see Figure LU-2): 768 dwelling units (after realignment of Hawkins Road, approximately 20 dwelling units would be located north of Hawkins Road within the Farm at Alamo Creek Specific Plan Area)
- Properties north of Hawkins Road (prior to realignment): 122 dwelling units

Require a General Plan Amendment for residential development in excess of this amount.

Policy LU-P19.2. The East of Leisure Town Road Growth Area shall include a mixture of housing densities, and attached and detached housing types consistent with the adopted land use diagram.

Policy LU-P19.5. Require that specific plans be prepared for development in the East of Leisure Town Road Growth Area to ensure that coordinated plans for land uses, public facilities, and public services are created for such area, and require that these specific plans are consistent with the City's updated infrastructure master plans that account for development in the East of Leisure Town Growth Area.

Policy LU-P19.6. Require that specific plans for the East of Leisure Town Road Growth Area include a diagram showing the distribution of land uses and define permitted land uses, major public facilities (including schools, parks, roads, water, sewer, and drainage facilities), phasing, infrastructure financing mechanisms, interim fire protection measures, and any other elements that may be needed to ensure an orderly development process with minimal adverse impacts to the existing community. The specific plans shall be consistent with the City's master infrastructure plans prepared for the East of Leisure Town Road Growth Area.

Policy LU-P19.10. Require Specific Plans within the East of Leisure Town Growth Area to provide a wide variety of lot sizes and housing types. Lots located adjacent to the Agricultural Buffer, north of Elmira Road, shall be 10,000 square feet in size.

Policy LU-P19.11. Require specific plans within the East of Leisure Town Road Growth Area to incorporate detention basins, agricultural buffer areas, and public open spaces into the physical amenities designed into the neighborhood. These amenities could include trails, passive open spaces, recreational spaces, or other features designed to create innovative, attractive neighborhood design.

Policy LU-P19.12. Development projects within the East of Leisure Town Road Growth Area shall coordinate their respective roads, bike paths, landscape corridors, and design standards to create a unified sense of place and identity.

Goal LU-21. Comprehensively plan for future development in the East of Leisure Town Road and Northeast Growth Areas.

Policy LU-P21.1. Require a General Plan amendment to convert lands designated as Urban Reserve to other land use designations. Require all conversions to make the findings identified in an Urban Reserve Ordinance described in Action LU-A19.1, below.

Action LU-A21.1 Amend the Land Use and Development Code to establish an Urban Reserve ordinance. The ordinance shall include criteria necessary to support a General Plan amendment permitting the conversion of the land designated as Urban Reserve to another land use designation. The criteria shall allow consideration of amendments needed to retain a 20- year supply of developable land within the Urban Growth Boundary or to replenish the supply of developable land reduced since General Plan adoption. These findings shall support the General Plan Vision Statement

Policy LU-P21.5. Evaluate General Plan amendment requests to convert lands designated as Urban Reserve to other land use designations no more often than every 5 years. Applications to amend the General Plan to convert Urban Reserve lands must be consistent with the City's Municipal Service Review and Comprehensive Annexation Plan.

Policy LU-P21.6. Prior to the approval of any subdivision applications in the East of Leisure Town Road or Northeast Growth Area, the developers shall assure that all required domestic water supply and distribution systems, wastewater collection and treatment facilities, stormwater management facilities, and roadway segment and intersection improvements will be incorporated into the final project plans.

Goal COS-4. Minimize conflicts between agricultural and urban uses.

Policy COS-P4.1. Within the area east of Leisure Town Road, south of the Locke Paddon Community and north of the railroad tracks, as shown in Figure LU-6 in the Land Use Element, require new development to maintain a 300- to 500-foot wide agricultural buffer along the eastern boundary of all residential development and existing agricultural lands. Require that uses within the agricultural buffer be limited to passive open space uses that are not accessed by a large number of employees or the general public at one time. Permitted uses within the buffer shall be limited as described below:

- Any portion of the buffer located inside the Urban Growth Boundary, adjacent to the Pacific Gas & Electric Company easement, shall contain substantial landscaping to discourage unlawful access onto the agricultural lands, and to lessen the potential impacts of typical agricultural activities on residential uses. Passive recreational uses such as pedestrian and bicycle trails are permitted.
- Uses located outside of the Urban Growth Boundary, within the 385-foot wide Pacific Gas & Electric Company easement, shall be limited to public infrastructure improvements necessary or appropriate to serve or protect existing and new permitted uses within the Urban Growth Boundary, including but not limited to, alternative energy facilities, stormwater detention basins, water tanks (reservoirs), and sewer and water lines to accommodate buildout of the Vacaville General Plan.

Goal HE.1. New Construction

Policy HE.1-GP 1. Ensure a supply of housing of differing type, size, and affordability in order to meet Vacaville's housing needs for the current and future residents within the community.

Policy HE.1-GP 7. Establish development and construction standards that encourage energy conservation in residential areas.

Goal HE.4. Address Constraints

Policy HE.4-GP 3. Ensure that public services, particularly for wastewater treatment and water supply, are adequate to accommodate potential housing increases.

City of Vacaville Zoning Ordinance (Division 14.09)

Zoning regulations for the City are included in Division 14.09 of the City's Land Use and Development Code. The Zoning Ordinance contains zoning maps and regulates land use to protect and promote public health, safety, and general welfare of citizens. Regulations include, but are not limited to, development standards, general site use regulations, regulation for the placement of buildings and structures, regulations for the provision of site improvements such as landscaping and parking, and procedures for administration of the ordinance.

The proposed project site does not currently include City zoning because it is located outside of the city limits. The project applicant is requesting the site be pre-zoned RMD and Public Facilities (PF) with an Agricultural Buffer overlay zone over the PF zone. These zoning districts would be consistent with General Plan land use designations and planned uses for the proposed project site.

City of Vacaville Energy and Conservation Action Strategy

The ECAS is a strategic tool to implement the General Plan. It is a detailed, long-range strategy to reduce greenhouse gas (GHG) emissions and achieve greater conservation of resources with regards to transportation and land use, energy, water, solid waste, and open space. The ECAS was prepared for the City to be in compliance with state requirements that address the reduction of major sources of GHG emissions. It establishes a strategy that the City and community can implement to achieve the City's GHG emissions reduction target, as identified and required by state legislation. The following policy from the ECAS is relevant to the proposed project:

> Measure T/LU-7. Increase Land Use Diversification. Reducing car trips, by providing uses within safe walking and biking distance is an important reduction strategy and improves the quality of life for residents. This can be achieved by creating mixed neighborhoods where daily activities, such as parks, schools, and grocery stores are within a quarter mile of residences. Such land use strategies are often coupled with increasing density to maximize the number of people who have access to these uses. The City will explore increasing density and allowing for a diverse mix of uses and the resulting decrease in emissions will be documented on a project by project basis.

4.3.4 Impacts and Mitigation Measures

Methodology

Existing land uses in the vicinity of the proposed project site were identified based on Google Earth imagery. Planned land uses were identified based on the City's General Plan land use map and information provided by the City and the project applicant. The land use evaluation is based on a qualitative comparison of existing and proposed uses on the site and their compatibility with existing land uses and planned land uses, and policies that guide land use decisions, as defined in the City's General Plan, Solano County General Plan, Solano County LAFCO policies, the Farm at Alamo Creek Specific Plan and other applicable local planning documents.

Changes in population (and housing) in and of themselves are generally characterized as social and economic effects and are not considered physical effects on the environment. CEQA provides that economic or social effects are not considered significant effects on the environment unless the social and/or economic changes are connected to physical environmental effects. A social or economic change related to a physical change may be considered in determining whether the physical change is significant (CEQA Guidelines Section 15382). The guidance for assessing economic and social effects is set forth in Section 15131(a) of the CEQA Guidelines:

> Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on physical changes.

While an increase in population resulting from new development does not necessarily cause direct adverse physical environmental effects, indirect physical environmental effects such as increased vehicle trips and associated increases in air pollutant emissions and noise could occur. The information in this section is used as a basis for the analysis of project impacts in the technical sections contained in Chapter 4 of this Draft SEIR. The discussion differs from the impact discussions in that only general land use plan or policy consistency issues are discussed, as opposed to a discussion of the physical impacts on the environment that could occur with implementation of the proposed project, which are addressed in the 2018 EIR and in the other technical sections in Chapter 4 of this SEIR.

Consistency with Land Use Plans

CEQA Guidelines, Section 15125(d) (found in 14 CCR 15000 et seq.), states that an EIR must discuss "any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans." An inconsistency with a general plan or policy would not necessarily create an environmental impact. For example, certain general plan policies are intended to address housing availability, socioeconomics, or employment; impacts related to these topics are not considered impacts to the environment under CEQA (see above). Therefore, the significance determination for Impact 4.3-1 below is informed only by the proposed project's consistency with plans and policies adopted for the purpose of avoiding or mitigating an environmental effect pursuant to the Thresholds of Significance (plans and policies that address environmental effects, but that do not guide land use decisions, are discussed in the applicable technical sections in Chapter 4 of this SEIR). Therefore, in accordance with CEQA Guidelines Section 15125(d), a brief discussion of the project's overall consistency with land use plans and policies not adopted to avoid or mitigate environmental effects is included below.

Farm at Alamo Creek Specific Plan

The adopted Farm at Alamo Creek Specific Plan creates a framework for a new residential neighborhood that would provide diverse housing and passive recreation opportunities. The Specific Plan establishes several goals including those related to the provision of open space and the application of smart growth planning principles. The Specific Plan also provides residential design criteria, such as requiring all homes be designed with a pedestrian presence from the street with clear views to the front door and porches, and community design criteria, such as requiring all open space areas to incorporate wayfinding signage and water quality treatment features/swales. The project is proposing the Specific Plan be amended to include the project site and has been designed consistent with the adopted Specific Plan, and revisions to the Specific Plan proposed as part of this project do not change any of the Plan's goals or guidelines. Generally, the proposed Specific Plan amendment would add language to describe the proposed project and to clarify that the proposed project would be a part of the overall Specific Plan (constructed as Phase 6 after construction of Phases 1 through 5 of the Farm at Alamo Creek). The proposed project would connect to the Specific Plan's backbone infrastructure, which was sized to accommodate future expansion. As such, the proposed project would be consistent with the Specific Plan.

Solano County General Plan

General plans provide long-term goals, policies and standards for development, and all development proposals must be generally consistent with the overall land use guidance provided in a general plan. The Solano County General Plan guides land use planning in the unincorporated areas of the County, including areas outside the Vacaville City limits that are within the City's Urban Growth Boundary but have yet to be annexed. This includes the proposed project site. The County General Plan includes several policies that apply specifically to County lands slated for City annexation. For example, Policy LU.P-4 requires that "areas where future development is to be

provided with municipal or urban types through city annexation" be designated as municipal service areas. The proposed project is consistent with this policy and LAFCO will evaluate the ability of service providers to serve the project site as part of the annexation evaluation. Additionally, the proposed project would provide 241 new medium density residential units, which helps to satisfy Policy LU.P-13 requiring sufficient residential lands to be provided jointly with the cities to meet the County's project housing needs, and Policy LU.P-18 requiring a variety of housing types (the adopted Specific Plan proposes low-medium density [RLMD] and medium-high density [RMHD] land uses, but no RMD land uses). Overall, the proposed project is generally consistent with the County General Plan's guidance for land development while also satisfying the County's obligation to provide for sufficient and varied housing opportunities.

Solano County Local Agency Formation Commission

LAFCO has adopted standards for the evaluation of proposals for reorganization or change of organization within Solano County. In the consideration of proposals, LAFCO has to observe four basic statutory purposes: the discouragement of urban sprawl; the preservation of open space and prime agricultural land resources; the efficient provision of government services; and the encouragement of orderly growth boundaries based upon local conditions and circumstances (LAFCO 2019). Compliance with LAFCO standards requires the demonstration of consistency with the City's Municipal Service Review (MSR). The City last updated its MSR in 2017 and subsequently adopted its current Sphere of Influence (SOI). LAFCO requires the MSR and SOI to be reviewed and updated every five years. Therefore, the City must complete the comprehensive update to the MSR/SOI in order for the project site to be considered for annexation. It is anticipated that the City will submit the necessary documentation to demonstrate compliance with LAFCO standards. Ultimately, project compliance is dependent upon future submittals and the determination to approve annexation of the project site would be made by LAFCO. A discussion of consistency with LAFCO policies is included in Table 4.3-1, below.

City of Vacaville General Plan

The City's General Plan is the principal policy and planning document for guiding future development in the City. This includes lands within the Urban Growth Boundary that are intended to be annexed to the city in the future. The Urban Growth Boundary was adopted by the City Council in 2008 and was voted to be incorporated within the General Plan Land Use Element. The Urban Growth Boundary indicates the maximum allowable extent of urbanization through 2028; beyond this boundary, only agricultural or open space uses are typically permitted. Adoption of the Urban Growth Boundary created two new growth areas: the East of Leisure Town Road Growth Area, which the proposed project site is within, and the Northeast Growth Area. The General Plan established land use designations for new urban development within these two growth areas. The proposed project site was therefore broadly considered under the City's General Plan. The project site along with other areas within the East of Leisure Town Growth Area were designated Urban Reserve, rather than a specific residential land use designation (e.g., RMD). The Urban Reserve designation demonstrates the City's desire to eventually annex and develop these lands while also allowing for flexibility in planning future development. As a result, the General Plan did not include specific development assumptions for the site and the 241 units proposed under this project were not considered in the General Plan's quantitative growth assumptions. Therefore, the proposed project may be inconsistent with certain policies such as Policy LU-P19.1 which limits residential development in the East of Leisure Town Road Growth Area to 2,455 dwelling units (768 units from the approved Specific Plan and 1,687 units from other approved developments). The proposed project would provide for 241 units in excess of this amount and is requesting a General Plan amendment. However, the project is consistent with Policy LU-21.1 to convert lands designated as Urban Reserve to other land use designations. Ultimately, the determination of the project's consistency with the

City's General Plan would be made by the City Council. The information provided in this section is meant to inform that decision.

In addition, the Courts have recognized that, because general plans often contain numerous policies adopted to effect differing or competing legislative goals, a development project may be "consistent" with a general plan, taken as a whole, even though the project appears to be inconsistent or arguably inconsistent with some specific policies within a given general plan (*Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 719). Furthermore, courts strive to "reconcile" or "harmonize" seemingly disparate general plan policies to the extent reasonably possible (*No Oil*, *supra*, 196 Cal.App.3d at p. 244). The ultimate determination of General Plan consistency for a proposed project often turns on whether the project is consistent with policies that are fundamental, mandatory, and specific. (*Families Unafraid to Uphold Rural El Dorado County v. El Dorado County Bd. of Supervisors* (1998) 62 Cal.App.4th 1332, 1341-1342.)

CEQA Impact Analysis

As previously discussed, the significance determination for Impact 4.3-1 below is informed only by the proposed project's consistency with plans and policies related to land use that were adopted for the purpose of avoiding or mitigating an environmental effect. Land use planning decisions can result in physical environmental impacts; for example, by designating existing agricultural lands for future urban development resulting in the loss of agricultural resources, or by planning for urban development that would require new infrastructure, the construction of which could impact the environment. The consistency analysis under Impact 4.3-1 provides the reader with a general overview of whether the project is in harmony with the overall intent of relevant goals and policies adopted for the purpose of avoiding or mitigating an environmental effect.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the proposed project would do any of the following:

- physically divide an established community; or
- cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Threshold Criteria not Applicable to the Proposed Project

Impacts related to the division of an established community were determined to be less than significant in the 2018 EIR. No substantial changes in the project or the project circumstances have occurred since the certification of the 2018 EIR; therefore, the impact was adequately addressed in that document and is not further evaluated in this section.

Project Impacts

Impact 4.3-1. Implementation of the proposed project may conflict with a land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The 2018 EIR analyzed land use impacts associated with construction and operation of the Specific Plan which included development of 768 residential units, over 45 acres of parks, and 7.4 acres of neighborhood commercial.

Because the project is proposing to amend the Specific Plan to be included, it would be subject to the same development guidelines as the prior approved project. Therefore, this analysis only includes a detailed evaluation of land use considerations specific to the proposed project not included in the 2018 EIR.

As discussed in the 2018 EIR regarding the Specific Plan, the proposed project site is identified in the Travis Air Force Base ALUCP as within Compatibility Zone D, which triggers review of structures with a proposed height of over 200 feet. The proposed project would not include buildings that exceed 200 feet in height. Additionally, the project is located outside of the Bird Strike Hazard Zone and Outer Perimeter and therefore would have no conflict with the Travis ALUCP.

The proposed project would comply with the City's updated ECAS, which was approved in 2021 after certification of the 2018 EIR. The ECAS is a detailed, long-range strategy to reduce GHG emissions and achieve greater conservation of resources, including energy (City of Vacaville 2021). The project has incorporated required measures established by the ECAS (as mentioned in the various technical sections in Chapter 4 of this SEIR) and is an all-electric development designed to reduce the project's contribution to greenhouse gas emissions.

Table 4.3-1 below lists relevant land use policies from the County General Plan, City General Plan and Housing Element, and Solano County LAFCO adopted for the purpose of avoiding or mitigating an environmental effect and determines the proposed project's consistency with each policy. As shown in the table, the proposed project maintains a minimum 300-foot agricultural buffer as required by the City along the eastern boundary of the project site; however, the project would place other non-open space features within the buffer, such as roads and side yard landscaping. Additionally, the proposed project would result in the loss of prime agricultural land. Therefore, the project impact would be **potentially significant.**

Table 4.3-1. Land Use Policy Consistency

Policy Number	Policy	Consistency Determination
Solano County General Plan		
Policy LU.P-11	Within municipal service areas, work with cities to protect and maintain designated urban-agricultural buffers within city jurisdiction compatible with adjoining agricultural uses.	**Consistent.** The project would retain a 7.2-acre agricultural buffer/open space area along the eastern project boundary.
City of Vacaville General Plan		
Policy LU-P2.4	Require that development on any prime farmland, farmland of statewide importance, or unique farmland (as classified by the California Department of Conservation) purchase conservation easements to permanently protect agricultural land of equal or greater value at a ratio of 1 acre of conserved agricultural land per 1 acre of developed agricultural land.	**Consistent with Mitigation.** Mitigation measure AG-1 (see Executive Summary) is required in order to ensure that the project applicant purchases or provides conservation easements in compliance with Policy LU-P2.4.
Policy LU-P2.9	Prioritize new development on infill lots where feasible instead of being on greenfield, undeveloped land within the City Urban Growth Boundary.	**Consistent.** The City's General Plan identifies future development within the UGB and adopted the Farm at Alamo Creek Specific Plan in 2018. The project is proposing to amend the Specific Plan to include the 214-acre project site to provide additional housing in this area of the City.
Policy LU-P3.4	Do not approve new development unless there is infrastructure in place or planned to support the growth.	**Consistent.** The project would connect to the adjacent Specific Plan infrastructure. The increase in service demand, such as sewer conveyance and water demand, has been factored into the sizing of the Specific Plan's infrastructure.
Policy LU-P3.5	Encourage new development to consider transit, pedestrian, and bicycle circulation during the design phase.	**Consistent.** The project includes separated sidewalks throughout the project site and a pedestrian/maintenance path that would connect to the adjacent Specific Plan trail system. The project would also be served by a future bus stop proposed for the Specific Plan.
Policy LU-P5.2	Lands East of Leisure Town Road: In conjunction with approval of any new urban development on lands shown as "Area B" on Figure LU-3, which consists of lands that are inside the Urban Growth Boundary but east of Leisure Town Road and between the Locke Paddon Community areas on the north and New Alamo Creek on the south, the City shall require such development to mitigate its impact on agricultural and open space lands by preserving, to the extent consistent with applicable law, for each acre of land developed, at least 1 acre of land outside the Urban Growth Boundary but within Pleasants Valley, Upper Lagoon Valley, or Vaca	**Consistent with Mitigation.** Mitigation measure AG-1 (see Executive Summary) is required in order to ensure that the project applicant preserves agricultural lands in compliance with Policy LU-P5.2.

Table 4.3-1. Land Use Policy Consistency

Policy Number	Policy	Consistency Determination
	Valley, or any other location that is within 1 mile of the Urban Growth Boundary. Alternatively, to the extent consistent with applicable law, such development may pay an equivalent in-lieu fee as determined by the City in consultation with the Solano Land Trust. Lands acquired directly or with fees collected pursuant to this requirement shall first be offered to the Solano Land Trust. Any such fees transferred to the Solano Land Trust may only be used to acquire or protect lands outside of the Urban Growth Boundary but within 1 mile of the Urban Growth Boundary, or within Pleasants Valley, Upper Lagoon Valley, or Vaca Valley. Acquisitions pursuant to this requirement shall be coordinated with the Solano Land Trust. If for any reason adequate land to meet the conservation goals described in the Vacaville General Plan, and in particular this section, cannot be identified or acquired, the City and the Solano Land Trust, or if the Solano Land Trust declines to participate, the City and another land conservation entity shall meet and confer to identify other areas where conservation acquisitions can occur at a reasonable cost and to satisfy the conservation goals described in this section.	
Policy LU-P5.3	Coordination with Future Solano County LAFCO Open Space or Agricultural Land Mitigation Program: If the Solano County Local Agency Formation Commission (LAFCO) adopts an open space or agricultural land mitigation program applicable to the area defined in Policy LU-P5.2, lands defined therein shall be subject only to the requirements of the LAFCO mitigation program, provided that if the requirement described in Policy LU-P5.2 provides greater mitigation than the LAFCO requirement, the incremental difference between the two programs shall be imposed in addition to the LAFCO requirement to the maximum extent permitted by State law. To the extent the LAFCO requirement and this requirement overlap, development shall be subject to only the LAFCO requirement.	**Consistent with Mitigation**. See consistency determination for Policy LU-P5.2.
Policy LU-P6.1	Require that all development mitigate its own impacts on the existing community and pay its fair share of the cost of capital improvements needed to serve that development.	**Consistent.** The mitigation measures in this EIR would be implemented, and the project would pay its fair share of the cost of capital improvements.

Table 4.3-1. Land Use Policy Consistency

Policy Number	Policy	Consistency Determination
Policy LU-P6.2	Require that infrastructure and service improvements for future annexation or growth areas do not create an undue burden on existing City infrastructure and services.	**Consistent.** See the consistency determination for Policy LU-P3.4.
Policy LU-P6.3	Ensure that future annexations are consistent with the overall goals and policies of the General Plan and do not adversely impact the City's fiscal viability, environmental resources, infrastructure and services, and quality of life.	**Consistent.** The project site is within the City's Sphere of Influence and Urban Growth Boundary and is requesting to be annexed into the city. The project's consistency with applicable General Plan policies is addressed in this table and impacts to the provision of utilities and biological resources are addressed in the applicable sections of the 2018 EIR and this SEIR.
Policy LU-P11.1	Prohibit, or control land uses that pose potential health and environmental hazards to residents, especially land uses that generate air pollutants.	**Consistent.** The proposed project does not include the development of any land uses that would pose health or environmental hazards to residents, such as industrial uses.
Policy LU-P11.2	Consider community health issues and impacts associated with land use decisions, especially where land use decisions would cause adverse health effects on residents.	**Consistent.** The proposed project is not located near any land uses (such as industrial) that would result in adverse health effects on residents and would not develop such land uses.
Policy LU-P19.5	Require that specific plans be prepared for development in the East of Leisure Town Road Growth Area to ensure that coordinated plans for land uses, public facilities, and public services are created for such area, and require that these specific plans are consistent with the City's updated infrastructure master plans that account for development in the East of Leisure Town Growth Area.	**Consistent.** The Farm at Alamo Creek Specific Plan would be amended to include the proposed project and addresses this policy. The Specific Plan includes an infrastructure plan that has been designed to be consistent with the City's plans for infrastructure in the area East of Leisure Town Growth Area and the City's Municipal Services Review.
Policy LU-P19.6	Require that specific plans for the East of Leisure Town Road Growth Area include a diagram showing the distribution of land uses and define permitted land uses, major public facilities (including schools, parks, roads, water, sewer, and drainage facilities), phasing, infrastructure financing mechanisms, interim fire protection measures, and any other elements that may be needed to ensure an orderly development process with minimal adverse impacts to the existing community. The specific plans shall be consistent with the City's master infrastructure plans prepared for the East of Leisure Town Road Growth Area.	**Consistent.** The Farm at Alamo Creek Specific Plan would be amended to include diagrams showing the distribution of land uses for the proposed project. Additionally, the Specific Plan includes a diagram of the zoning on the proposed project site and lists the permitted and conditionally permitted land uses within each designation. Chapter 8 of the Specific Plan includes a discussion of the public facilities required for the project and guidelines to ensure that development meets City requirements for provision of these services and facilities. The project application also includes a proposed phasing plan indicating how all facilities and services would be provided during buildout of the project.
Policy LU-P19.10	Require Specific Plans within the East of Leisure Town Growth Area to provide a wide variety of lot sizes and housing types. Lots	**Consistent with Mitigation.** The proposed project includes residential lots that extend within the required 300-foot agricultural buffer. The intent of this policy is to ensure sufficient barrier between existing

Table 4.3-1. Land Use Policy Consistency

Policy Number	Policy	Consistency Determination
	located adjacent to the Agricultural Buffer, north of Elmira Road, shall be 10,000 square feet in size.	agricultural operations and future residential uses. In order for the project to maintain this barrier and prevent a potential conflict between agricultural activities and residential uses (such as from the drifting of pesticides and particulate matter), the project applicant must implement mitigation measure AG-2 (see Executive Summary).
Policy LU-P19.11	Require specific plans within the East of Leisure Town Road Growth Area to incorporate detention basins, agricultural buffer areas, and public open spaces into the physical amenities designed into the neighborhood. These amenities could include trails, passive open spaces, recreational spaces, or other features designed to create innovative, attractive neighborhood design.	**Consistent.** The proposed project would construct its own detention basin, would provide landscaping on the west side of the basin, and would integrate a pedestrian and maintenance road connecting to the rest of the trail system proposed under the Specific Plan.
Policy LU-P21.6	Prior to the approval of any subdivision applications in the East of Leisure Town Road or Northeast Growth Area, the developers shall assure that all required domestic water supply and distribution systems, wastewater collection and treatment facilities, stormwater management facilities, and roadway segment and intersection improvements will be incorporated into the final project plans.	**Consistent.** The project plans include connections to the Specific Plan's backbone water and wastewater systems and would construct its own detention basin for stormwater retention.
Policy COS-P4.1	Within the area east of Leisure Town Road, south of the Locke Paddon Community and north of the railroad tracks, as shown in Figure LU-6 in the Land Use Element, require new development to maintain a 300- to 500-foot-wide agricultural buffer along the eastern boundary of all residential development and existing agricultural lands. Require that uses within the agricultural buffer be limited to passive open space uses that are not accessed by a large number of employees or the general public at one time. Permitted uses within the buffer shall be limited as described below: ▪ Any portion of the buffer located inside the Urban Growth Boundary, adjacent to the Pacific Gas & Electric Company easement, shall contain substantial landscaping to discourage unlawful access onto the agricultural lands, and to lessen the potential impacts of typical agricultural activities on residential uses. Passive recreational uses such as pedestrian and bicycle trails are permitted.	**Consistent with Mitigation.** The project site is located within the City's Urban Growth Boundary. The project maintains a minimum 300-foot-wide agricultural buffer on the eastern boundary as required by the City; however, the project places some non-open space features within the buffer, such as roads and side yard landscaping. The intent of this policy is to ensure a sufficient barrier between existing agricultural operations and future residential uses. In order to minimize impacts between residential uses and existing agricultural uses, the project applicant must implement mitigation measure AG-2.

Table 4.3-1. Land Use Policy Consistency

Policy Number	Policy	Consistency Determination
	▪ Uses located outside of the Urban Growth Boundary, within the 385-foot wide Pacific Gas & Electric Company easement, shall be limited to public infrastructure improvements necessary or appropriate to serve or protect existing and new permitted uses within the Urban Growth Boundary, including but not limited to, alternative energy facilities, stormwater detention basins, water tanks (reservoirs), and sewer and water lines to accommodate buildout of the Vacaville General Plan.	
Housing Element		
Policy HE.1-GP 7	Establish development and construction standards that encourage energy conservation in residential areas.	**Consistent.** The project has been designed consistent with Title 24 and the California Building Code for Energy Efficiency, has incorporated required measures established by the City's Energy & Conservation Action Strategy, and is an all-electric development.
Policy HE.4-GP 3	Ensure that public services, particularly for wastewater treatment and water supply, are adequate to accommodate potential housing increases.	**Consistent.** See the consistency determination for Policy LU-P3.4.
Solano County LAFCO Standards		
Standard No. 6	This Standard requires that the applicant submit copies of the environmental documentation adopted or certified by the lead agency and copies of the resolution making the required environmental findings, adopting the Negative Declaration or Certifying the EIR, and making any Statement of Overriding Considerations.	**Consistent.** This SEIR has been prepared to evaluate the proposed project's effect on environmental resources and this document as well as subsequent findings will be submitted to LAFCO.
Standard No. 9	This Standard requires that any application for a change of organization or reorganization containing open-space lands to be converted to an urban use shall provide documentation demonstrating that the proposal promotes "planned, orderly, and efficient" development of an area.	**Consistent.** The proposed project abuts the Specific Plan project site which has already been approved for urban development. The proposed project would connect to the Specific Plan's planned infrastructure which was anticipated to accommodate future development of the proposed project site. The City intends to update its MSR/SOI and demonstrate that the proposed project will be consistent with this update.
Standard No. 10	This standard requires that an application of a change of organization or reorganization shall be accompanied by a "will serve" letter or a statement from the affected agency(ies).	**Consistent.** The proposed project will obtain verifications from affected agencies, demonstrating that a full range of services required to serve the affected territory can be provided.

Source: Solano County 2008; City of Vacaville 2015, 2023.

Mitigation Measures

Mitigation measure AG-1 is proposed which requires conservation of agricultural lands in compliance with City General Plan Policies LU-P2.4, LU-5.2, and Policy LU-5.3. Mitigation measure AG-2 is proposed which requires landscaping within the 300-foot-wide agricultural buffer on the eastern boundary of the project site to minimize impacts between residential uses and existing agricultural uses. Implementation of mitigation measures AG-1 and AG-2 would ensure that agricultural land in the County is protected, and an adequate barrier is provided between new development and existing agricultural lands, thereby reducing impacts to a **less-than-significant level**.

AG-1 Conservation of Agricultural Land

The project applicant shall purchase or provide lands with conservation easements to permanently protect agricultural land of equal or greater value at a ratio of 1 acre of conserved agricultural land per 1 acre of developed agricultural land, consistent with the City of Vacaville General Plan Policy LU-P2.4. The conserved agricultural land shall be outside the Urban Growth Boundary but within Pleasants Valley, Upper Lagoon Valley, or Vaca Valley, or any other location that is within 1 mile of the Urban Growth Boundary, consistent with Policy LU-P5.2. Alternatively, to the extent consistent with applicable law, such development may pay an equivalent in-lieu fee as determined by the City in consultation with the Solano Land Trust. Consistent with Policy LU-P5.3, if the Solano County Local Agency Formation Commission (LAFCO) adopts an open space or agricultural land mitigation program applicable to the project site, the project shall be subject only to the requirements of the LAFCO mitigation program unless the requirement described in Policy LU-P5.2 provides greater mitigation than the LAFCO requirement. If so, the incremental difference between the two programs shall be imposed in addition to the LAFCO requirement to the maximum extent permitted by State law.

AG-2 Agricultural Buffer

The project applicant shall revise the open space area (within the 300-foot-wide agricultural buffer) to provide landscaping within the agricultural buffer, in compliance with City of Vacaville General Plan Policy COS-P4.1. Uses within the open space area shall be limited to passive open space, such as pedestrian or bike trails, that are not accessed by a large number of people or the general public at one time. The project applicant must implement the changes to the landscape plans for the agricultural buffer area with the Final Landscape Plans prior to their approval.

Cumulative Impacts

As stated in the 2018 EIR, the land use analysis in an EIR does not typically include a discussion of cumulative impacts because the consistency analysis for applicable land use goals and policies and compatibility with existing adjacent uses is not an additive effect.

4.3.5 References

City of Vacaville. 2015. City of Vacaville General Plan. https://www.ci.vacaville.ca.us/government/community-development/advanced-planning/adopted-plans/general-plan/general-plan-documents

City of Vacaville. 2018. The Farm at Alamo Creek Specific Plan Environmental Impact Report (SCH No. 2017062068).

City of Vacaville. 2021. General Plan Transportation Element and Energy Conservation Action Strategy Update (SCH No. 2020090526). https://www.ci.vacaville.ca.us/government/community-development/advanced-planning/adopted-plans/general-plan/general-plan-and-ecas-eir-documents

City of Vacaville. 2023a. Vacaville General Plan Housing Element. https://www.cityofvacaville.gov/home/showpublisheddocument/22796/638371478093130000

City of Vacaville. 2023b. Resolution No. 2023-060. https://vacaville.granicus.com/MetaViewer.php?view_id=5&clip_id=1895&meta_id=106270

DOC (Department of Conservation). 2022. California Important Farmland Finder. https://maps.conservation.ca.gov/DLRP/CIFF/

Solano County. 2015. Travis Air Force Base Airport Land Use Compatibility Plan. https://www.solanocounty.com/civicax/filebank/blobdload.aspx?BlobID=34765

4.4 Utilities and Service Systems

4.4.1 Introduction

This section describes the existing utilities and service systems present within and around the Fields at Alamo Creek ("proposed project") site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. The Executive Summary of this Supplemental EIR (SEIR) provides a summary of environmental issues for which potential impacts of the proposed project are adequately addressed in the Farm at Alamo Creek Specific Plan ("Specific Plan") Environmental Impact Report (SCH No. 2017062068) that was certified in November 2018 ("2018 EIR") for which no further analysis is required. This SEIR analysis focuses on those impacts that are novel to the proposed project and are substantially different from those described in the 2018 EIR.

One comment letter was received from Earthjustice in response to the Notice of Preparation (NOP) issued on March 24, 2023, which included recommendations to replace the project's gas infrastructure with electrical infrastructure out of concern for air quality and greenhouse gas impacts. The project does not propose any natural gas infrastructure. Comments related to potential air quality impacts from proposed project elements are addressed in Section 4.1, Air Quality of this SEIR.

Information contained in this section is based on the 2018 EIR, City of Vacaville General Plan (City of Vacaville 2015) and City of Vacaville General Plan and Energy Conservation Action Strategy Environmental Impact Report (General Plan EIR) (City of Vacaville 2013a), the amended 2020 Urban Water Management Plan (2020 UWMP) (City of Vacaville 2023a), the City of Vacaville Energy and Conservation Action Strategy Update (City of Vacaville 2021b), the City of Vacaville Utilities Department (City of Vacaville 2023b), and individual service providers.

4.4.2 Environmental Setting

This section details the existing environmental setting for utilities and service systems and updates the information described in Section 4.6, Public Utilities, starting on page 4.6-1 of the 2018 EIR.

Water Supply

The City of Vacaville (City) has three primary water sources: the Solano Project, State Water Project (SWP) water and settlement water from the North Bay Aqueduct (NBA), and groundwater sources (City of Vacaville 2023a). From the Solano Project, the City is entitled to 5,750 acre-feet per year (AFY) of water. The North Bay Regional Water Treatment Plant (NBR Plant) provides a capacity of 13.3 million gallons per day (mgd) for the City and supplies water directly to the City's distribution system. In addition, the 1995 Master Water Agreement with the Solano Irrigation District (SID) provides the City with an increasing supply of water from SID through the year 2040 and a consistent supply thereafter until 2050. In 2023, the City will receive 5,025 AFY from SID, which increases to 10,050 AFY by 2040 (City of Vacaville 2023a, Table 6-2). From the SWP, the City receives an annual allocation of 8,978 AFY and 9,320 AFY of Settlement Water (available by the State Department of Water Resources) (City of Vacaville 2023a).

The City has 11 operating groundwater wells, most of which are located in the Elmira well field, and can provide approximately 7,000 AFY. In 2020, only 4,984 AF of groundwater was pumped for City use. The City recently amended its Urban Water Management Plan (UWMP) and adopted the amended plan in August 2023 ("2020

UWMP"). The plan states that if the City expands its well field and increases distance between operating well sites, up to 8,000 AFY of potable water could be sustained (City of Vacaville 2023a).

The City recently adopted the Recycled Water Master Plan Feasibility Study in April 2021, which outlines a proposed recycled water project that would provide approximately 2,830 AF of tertiary-treated recycled water from the Easterly Wastewater Treatment Plant (EWWTP). The recycled water will be used for agricultural irrigation, urban irrigation, and industrial reuse within the City's existing and projected service area. The year the recycled water system will go online in the City is tentative, however, the UWMP and Recycled Water Master Plan anticipate construction at the new storage tank and pump station at the EWWTP to begin in 2030 (City of Vacaville 2023a).

The City's total water supply available in 2020 from groundwater, surface water, and recycled water was approximately 35,173 AFY. Table 4.4-1, *Actual and Forecasted Available Water Supplies*, provides the actual water use for the calendar year 2020 and projected water supplies out to the year 2045. The actual amount of water supplied to the City in 2020 was 18,295 AFY.

Table 4.4-1. Actual and Forecasted Available Water Supplies

Source	Water Supplies (AFY)					
	2020[1]	2025	2030	2035	2040	2045
Groundwater	4,984	7,300	7,700	8,100	8,100	8,100
Solano Project	9,159	11,307	12,798	14,289	15,705	15,705
State Water Project	2,875	7,451	7,451	7,451	7,451	7,451
Settlement Water	1,277	1,454	1,454	1,454	1,454	1,454
Recycled Water	0	0	745	745	1,140	1,825
Total	**18,295**	**27,512**	**30,148**	**32,039**	**33,850**	**34,535**

Note: [1] Actual 2020 water supplies
Forecasted totals are based on reasonably available volume.
Source: City of Vacaville 2020 UWMP (City of Vacaville 2023a) Tables 6-10 and 6-11.

The City's 2020 UWMP determined that available groundwater and surface water supplies would meet or exceed projected water demands, even during extended drought conditions. Further, future water supply will be adequate to offset future water demands during a normal year, a single dry year, and a five-consecutive- year drought. The City's projected water use, presented in the 2020 UWMP, is based on estimated population growth and future development identified in the City's General Plan (City of Vacaville 2023a). The proposed project site is designated as Urban Reserve and Agricultural Buffer in the City's General Plan. Although the project site is located within the City's Urban Growth Boundary (UGB) and Sphere of Influence, no specific land uses (i.e., residential or commercial) were designated for the Urban Reserve area in the 2015 General Plan. As such, the proposed project site is not included in future growth assumptions and demand factors presented in the 2020 UWMP.

The City's total water supply available in 2020 from groundwater, surface water, and recycled water was approximately 35,173 AFY. The actual amount of water supplied to the city in 2020 was 18,295 AFY. The total water supply (allocation or safe yield) available to the city in 2045 will be approximately 45,028 (City of Vacaville 2023a).

Wastewater

Easterly Wastewater Treatment Plant

As detailed in the 2018 EIR, the City provides wastewater collection and treatment for most developed areas within the city limits. The City's sewer service includes operation and maintenance of gravity sewers, lift stations, force mains, and the EWWTP. If the proposed project is approved and the site is annexed, project-generated wastewater would be conveyed and treated at the EWWTP. The EWWP is located east of the city adjacent to the unincorporated Town of Elmira. Treated effluent from the EWWTP flows into Old Alamo Creek. The EWWTP treats an average of 7.5 million gallons per day (mgd) of wastewater and has a design capacity of 15 mgd average dry weather flows and a peak wet weather flow of 55 mgd (City of Vacaville 2023b; City of Vacaville 2021a).

The Specific Plan includes a sanitary sewer system adjacent to the proposed project site that stubs into the project site. The Specific Plan proposes a 36-inch sanitary sewer main along its eastern boundary (Basin Way) connecting to the southeastern boundary of the project site. Additionally, the Specific Plan would install a 12-inch sanitary sewer main along its eastern edge connecting to the proposed project up to Hawkins Road.

Stormwater

Drainage systems in the City consist of a network of storm drainpipes, creeks, and constructed channels that convey runoff from streets and adjacent land. The 2018 EIR provides details on the City's stormwater system starting on page 4.4-2.

Solid Waste

Recology Vacaville Solano (RVS) is under a franchise agreement which allows the exclusive right to provide residential, commercial, and industrial solid waste collection and hauling in the City. Recyclable material collected by RVS is transported to the Recology Vallejo facility located at 2021 Broadway Street in Vallejo. Solid waste or non-recyclable materials generated throughout the City and surrounding areas are sent to the Recology Hay Road Landfill located in unincorporated Solano County.

The Recology Hay Road Landfill (Solid Waste Facilities Permit 48-AA-0002) has a permitted daily capacity of 2,400 tons and receives 136,066 tons of solid waste per year (City of Vacaville 2013a). The total capacity of the landfill is 37 million cubic yards and as of 2010 had a remaining capacity of 30.4 million cubic yards. The landfill is expected to cease operations in 2077 (CalRecycle 2019a). In 2019, Vacaville's per capita disposal rate was 5.7 pounds per person per day (PPD), which was below the City's target disposal rate of 6.5 PPD and the statewide average of 6.7 PPD (CalRecycle 2019b).

Energy

The environmental setting for energy in the 2018 EIR is applicable to the proposed project. The project site does not contain any existing natural gas infrastructure. There is an existing PG&E easement east of the project site for 500 kilovolt (kV) and 230 kV overhead transmission lines that are part of the statewide electrical system.

4.4.3 Regulatory Setting

The regulatory setting for the proposed project site is generally as described in the 2018 EIR. However, some regulations or implementing rules have changed since the preparation of that document. These changes are described below.

Federal

The Federal regulatory setting is the same as described in the 2018 EIR.

State

General Waste Discharge Requirements for Sanitary Sewer Systems

The General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems were revised and adopted by the State Water Resources Control Board (SWRCB) in December 2022. The WDR Order WQ 2022-0103-DWQ became effective in June 2023. These WDRs require local jurisdictions to develop a sewer system management plan (SSMP) that addresses the necessary operation and emergency response plans to reduce sanitary sewer overflows. The WDRs require that the local jurisdiction approve the SSMP; the Vacaville City Council approved and recertified the most current version of the City's SSMP on July 23, 2019. Approval and certification of the SSMP complying with the revised WDR Order WQ 2022-0103-DWQ by City Council is due in 2025. All provisions of the most current WDRs are in effect and enforceable by the City and state.

Local

Water Supply and Distribution Systems

2020 Urban Water Management Plan

The City's 2020 UWMP provides information on past, present, and future water sources and demands, and acts as a guide for the City of Vacaville to plan for adequate water supply in the future. The UWMP provides a comparison of available water supplies to projected water demands through 2045, and addresses conservation measures the City has implemented to ensure a safe and reliable water supply. The plan is intended to provide a basis for determining that sufficient water supply is available for future proposed development. The most recent UWMP was amended in 2023 and adopted by City Council on August 22, 2023.

City of Vacaville General Plan

The following goals and policies from the City of Vacaville General Plan Conservation and Open Space Element (COS) are applicable to the proposed project.

Goal COS-13 Promote water conservation as an important part of a long-term and sustainable water supply.

Policy COS-P13.3 Prohibit development that would adversely affect the City's well field.

Policy COS-P13.4 Require new development to incorporate Best Management Practices (BMPs) for water use and efficiency and demonstrate specific water conservation measures.

Wastewater

City of Vacaville General Plan

The following goals and policies from the City of Vacaville General Plan Public Facilities and Services (PUB) Element, and Land Use (LU) Element are applicable to the proposed project.

Goal PUB-13 Collect, transmit, treat, and dispose of wastewater in ways that are safe, sanitary, and environmentally acceptable.

Policy PUB-P13.3 Require that new habitable structures located within the city limits connect to the public wastewater collection system.

Goal PUB-14 Coordinate wastewater conveyance, treatment, and disposal with land use planning.

Policy PUB-P14.3 Ensure that new development provides adequate funding for all wastewater infrastructure and facilities.

Policy PUB-P14.4 Prohibit any development that will not maintain adequate standards for wastewater service. All wastewater service standards shall be met prior to project occupancy.

Policy PUB-P14.5 Require that new development designate sewer easements or routes when tentative maps or specific plans are approved.

Goal LU-3 Coordinate land development with the provision of services and infrastructure.

Policy LU-P3.2 Manage growth so that the quantity and quality of public services and utilities provided to existing businesses and residents will not drop below the required levels of service because of new development, except when required findings related to levels of service are made. While existing development bears some responsibility to fund improvements that will resolve such deficits, ensure that new development also funds its fair share of the costs of maintenance and depreciation of facilities.

Policy LU-P3.4 Do not approve new development unless there is infrastructure in place or planned to support growth.

Policy LU-P3.6 Require that new development or Specific Plan areas be located immediately adjacent to existing development or infrastructure.

Goal LU-6 All development shall pay its own way and not result in a financial burden to existing development or services.

Policy LU-P6.2 Require that infrastructure and service improvements for future annexations or growth areas do not create an undue burden on existing City infrastructure and services.

Stormwater

Vacaville Municipal Code

Section 11.01.020 of the Vacaville Municipal Code presents development impact fees in which the City imposes upon, or agrees to collect from, new development. Included in these fees is the Drainage and Stormwater Detention Facilities Impact Fee. The purpose of the fee is to finance the cost of drainage and stormwater detention projects including mains, tributary systems, creek improvements and detention basins. New development increases the amount of impervious surfaces due to more roof area, paved streets, driveways and parking lots. Flooding potential is thereby increased particularly during periods of high intensity and/or sustained rainfall creating an unacceptable hazard to citizen welfare and safety.

City of Vacaville General Plan

The following goals and policies from the City of Vacaville General Plan Safety Element (SAF) are applicable to the proposed project.

Goal SAF-2 Collect, convey, store, and dispose of stormwater in ways that provide an appropriate level of protection against flooding, account for existing and future development, and address applicable environmental concerns.

Policy SAF-P2.1 Continue to develop a comprehensive system of drainage improvements to minimize flood hazards, and maintain storm drainage infrastructure in good condition.

Policy SAF-P2.2 Assess the adequacy of storm drainage utilities in existing developed areas, and program any needed improvements in coordination with new infrastructure that will serve developing areas.

Policy SAF-P2.4 Design storm drainage infrastructure to serve dual purposes to the extent possible. This includes the following:

- Drainage facilities integrated into recreation corridors with bike paths, sidewalks, and landscaping.
- Drainage channels integrated with transportation and environmental corridors.
- Active and passive recreation areas incorporated into detention basins where feasible.

Policy SAF-P2.5 Maintain open areas needed to retain stormwater and prevent flooding of urban or agricultural land.

Policy SAF-P2.6 Require new development adjacent to creeks to dedicate the area within 40 feet of the stable top of bank to the City and be designed to allow access to, and visibility of, creek areas for maintenance and public safety purposes.

Goal SAF-3 Provide effective storm drainage facilities for development projects.

Policy SAF-P3.1 Evaluate the storm drainage needs for each project; this evaluation should account for projected runoff volumes and flow rates once the drainage area is fully developed. In the

Alamo Creek watershed upstream of Peabody Road (including Alamo, Laguna, and Encinosa creeks), require post-development 10-year and 100-year peak flows to be reduced to 90 percent of predevelopment levels. In the remainder of Vacaville, for development involving new connections to creeks, peak flows shall not exceed predevelopment levels for 10- and 100-year storm events.

Policy SAF-P3.2 Continue to require development impact fees to fund necessary storm drainage improvements, including drainage detention basin.

Policy SAF-P3.3 Require a storm drainage site-specific plan or storm drainage technical memorandum and calculations to be prepared for new development projects to ensure new development adequately provides for on-site drainage facilities necessary to protect the new development from potential flood hazards and ensure that potential off-site impacts are fully mitigated.

Policy SAF-P3.4 Require that new development designate storm drainage easements or routes when tentative maps or specific plans are approved.

Goal SAF-4 Protect people and property from flood risk.

Policy SAF-P4.4 Require that new development mitigate its additional runoff and mitigate removal of any floodplain areas.

Solid Waste

Vacaville Municipal Code

Section 8.08 of the Vacaville Municipal Code, Solid Waste, Yard Waste, and Household Hazardous Waste, regulates the collection and disposal of solid waste, yard waste, and household hazardous materials. This section also implements the provisions of the Source Reduction and Recycling Element required by AB 939 and the SB 1016 update. The City's diversion rate target is 6.5 PPD and the City's actual 2019 diversion rate was 4.9 PPD (CalRecycle 2019b). The City currently has several programs in place to facilitate recycling, facility recovery, public education, transformation, and source reduction (Vacaville Recycling 2019). In addition, residential, commercial, business, industrial and public districts are all required to provide areas for the collection of recyclable materials and solid waste per Section 14.09 of the City's Land Use and Development Code.

City of Vacaville General Plan

The following goals and policies from the City of Vacaville General Plan Public Facilities and Services (PUB) Element are applicable to the proposed project.

Goal PUB-9 Reduce the volume of solid waste generated in Vacaville through recycling and resource conservation.

Policy PUB-P9.3 Maintain and expand the citywide curb recycling program.

Policy PUB-P9.4 Maintain and expand the citywide household hazardous waste collection program.

Policy PUB-P9.5 Maintain and expand the citywide separate yard waste collection and composting program.

Policy PUB-P9.9 Require that construction sites provide for the salvage, reuse, or recycling of construction and demolition materials and debris.

Energy Conservation and Action Strategy

The following measure from the ECAS is applicable to the proposed project (City of Vacaville 2021b).

Measure S-1 Implement Organic Waste Reduction Requirements. The City has already begun to implement this measure, which includes the implementation of organic waste reduction requirements. Compliance areas in which the city is required to develop and manage include organics collection programs, contamination monitoring, education and outreach, enforcement and penalties, edible food recovery programs, organics self-haul programs, ordinances and policy changes, procurement of recovered organic materials and more.

Energy

City of Vacaville General Plan

The following goals and policies from the City of Vacaville General Plan Conservation and Open Space (COS) Element are applicable to the proposed project.

Goal COS-11 Conserve energy and fuel resources by increasing energy efficiency.

Policy COS-P11.1 Require that new development incorporate energy-efficient design features for HVAC, lighting systems, and insulation that exceed Title 24.

Policy COS-P11.2 Require that site and structure designs for new development promote energy efficiency.

Energy Conservation and Action Strategy

The following measure from the ECAS is applicable to the proposed project (City of Vacaville 2021b).

Measure E-3 Adopt an All-Electric New Construction Preferred Ordinance. The City will implement this an all-electric ordinance and enforcing it through building inspections. Special exception will be made for industrial, hospital, and similar uses that demonstrate there is no viable electrification option for important equipment due to technological constraints.

4.4.4 Impacts and Mitigation Measures

Methodology

Water Supply

The analysis of impacts to water supply is based on projected water demands for the City and future development in five-year increments through the year 2045. The 2020 baseline City water demand is estimated using the 164 gallons per capita per day (gpcd) target for Year 2020 and the 2023 adjusted population of 100,806 for a total

demand of 18,607 ac-ft/yr or 16.6 million gallons per day (mgd). Water demands for the Year 2020 through 2045 were based on the demand projections presented in the recently amended 2020 UWMP and demand factors from the 2018 Water Master Plan (City of Vacaville 2018). These projections take into consideration the Year 2020 target per capita per day usage and applying that to the future population projections used in the City's 2020 UWMP.

Table 4.4-2. Land Use and Water Demand Summary at Year 2035

Land Use	Designation	Quantity (du)	Quantity (ac)	Demand Factors		Estimated Water Demand	
				Potable gpd/du	Potable gpd	Total gpd	Annual ac-ft/yr
Residential Medium Density*	RMD	241	27	265	63,865	63,865	71.5
Agricultural Buffer	BUFF	0	7.2	0	0	0	0
Total	-	**241**	**34.2**	-	-	**63,865**	**71.5**

Source: Compiled by Dudek in 2023. Demand factors sourced from the City of Vacaville 2018 Water Master Plan (City of Vacaville 2018).
Notes: Domestic irrigation demand (for residential land uses) will be met with potable water, and therefore is included in potable demand factor.
*The proposed 0.6-acre park is included in total acreage designated as Residential Medium Density.
du-= dwelling unit; ac = acres

Table 4.4-3. City Summary of Normal Year Annual Water Demand (ac-ft/yr) in Five Year Increments

Demand	2020	2025	2030	2035	2040	2045
City Base Year (2020) (a)	18,295	18,295	18,295	18,295	18,295	18,295
Future Growth Water Demands in City (b)	0	325	1,424	2,591	3,830	5,144
Proposed Project (c)	0	0	71.5	71.5	71.5	71.5
Total Demand	**18,295**	**18,620**	**19,790.5**	**20,957.5**	**22,196.5**	**23,510.5**

Source: Data Compiled by Dudek in 2023. Demand and growth totals are sourced from the City of Vacaville 2018 Master Water Plan (City of Vacaville 2018) and the City of Vacaville 2020 UWMP (City of Vacaville 2023a).
(a) Based on the City's gross water use and service area population of 100,731. In 2021, per-capita water use was 162 gpcd, lower than the 2020 target of 164 gpcd.
(b) Based on the difference between City's projected total water use (Table 4-5 of the City of Vacaville 2020 UWMP) and City's gross water use in 2020 (18,295).
(c) The proposed project assumed complete development by year 2035.
Note: Recycled water anticipated to go online in 2035 is included in the projected total water use, used to calculate future growth demands in the City.

As summarized in Table 4.4-3, the total average annual demand for the existing city, proposed growth, and the proposed project combined would reach 23,510.5 ac-ft/yr by 2045. This value is compared to available water supply in the subsequent impact analyses. The proposed project's potable water demands are expected to cover demands for irrigation water as well.

The City's existing (2016) and City buildout water demands were estimated and included in the 2018 Water Master Plan. Existing demand was estimated to be 16,390 ac-ft/yr (or 14.62 mgd) and Buildout water demand was estimated to be 28,350 ac-ft/yr (or 25.29 mgd). These water demand estimates are based on existing and projected

land use quantities and demand factors. At this time, the City does not have projections of land use quantities for intermittent years to compare the future demands based on the Year 2020 target (164 gpcd) and the land use quantities and demand factors. For purposes of this analysis, the demand projections and assumptions relied on in the 2020 UWMP and 2018 Water Master Plan are adequate.

Wastewater

The analysis of impacts to wastewater treatment services is based on wastewater treatment demand generated by the proposed project compared to the thresholds of significance listed below. Wastewater demand for the proposed project was quantified based on the planned land uses and wastewater flow generation rates specified in the City's *Sanitary Sewer System Design Standards* (City of Vacaville 2013b). The project's total wastewater generation is calculated in Table 4.4-4, below.

Table 4.4-4. Proposed Project Wastewater Generation

Proposed Development	Parcel Acres	Land Use		Flow Factor		Average Dry Weather Flows (gpd)[2]
		Quantity	Units	Value	Units	
Residential Medium Density	26.4	241	du	240	gpd/du	57,840
Public Facilities with Agricultural Buffer Overlay	7.2	7.2	Acres	0	gpd/acre	0
					Total	57,840 gpd

Source: Data compiled by Dudek in 2023. Flow factors from the Sanitary Sewer System Design Factors (City of Vacaville 2013b).
Notes:
1 du = dwelling Unit
2 gpd = gallons per day

As shown in Table 4.4-4, the project's average dry weather flow (ADWF) would be 57,840 gpd or approximately 0.06 million gallons per day (mgd). Using a peaking factor of 2.5, the project's peak dry weather flow would be approximately 0.14 mgd.

Solid Waste

The analysis of impacts to landfill capacity is based on the amount of solid waste that would be generated by the proposed project compared to the thresholds of significance listed below. Solid waste generation was calculated for the project site based on the City's per capita disposal rate for solid waste of 5.7 pounds per resident per day (CalRecycle 2019a). The project's total solid waste generation is calculated in Table 4.4-4 below.

Table 4.4-5. Proposed Project Solid Waste Generation

Proposed Use	Demand Factor (lbs/person/day)	Residents[1]	Solid Waste Generation (lbs/day)	Solid Waste Generation (tons/year)
Residential Medium Density	5.7	658	3,750.6	684.5
		Total	3,750.6 lbs/day	684.5 tons/year

Source: Data Compiled by Dudek in 2023.
Notes: 1 Based on the City's average person per household of 2.73 (Census Bureau 2020) and a total of 241 units.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the proposed project would do any of the following:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
- result in a determination by the wastewater treatment provider, which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Threshold Criteria not Applicable to the Proposed Project

The 2018 EIR did not address utilities and service system impacts of the proposed project. As such, all of the above threshold criteria are applicable and an analysis of water infrastructure and supply, wastewater and storm drain infrastructure and capacity, solid waste, and dry utilities (electric power, and telecommunications) as well as the associated project demands on the ability of these utilities to serve the project is discussed below.

Project Impacts

Impact 4.4-1. The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Water Facilities

The 2018 EIR concluded that the expansion or construction of new water infrastructure was adequately addressed in the General Plan EIR for the Specific Plan project. As such, potential impacts associated with the relocation or construction of new or expanded water facilities was determined to be less than significant.

The proposed project, if annexed into the city, would connect to the city's water systems infrastructure. More specifically, the project would tie into infrastructure included as part of the Specific Plan. There is no existing water infrastructure located on the project site. The Specific Plan is expected to install 12-inch water mains along the west and south boundaries of the proposed project site, and would also install 12-inch water mains along the east boundary and north boundary within Hawkins Road. All other on-site water conveyance would include the installation of 8-inch water mains and services for the residential lots within the road/driveway rights-of-way within the project site. The increase in water demand by the proposed project has been factored into the sizing of the Specific Plan's infrastructure and Phillippi Engineering has determined that there is sufficient capacity and conveyance to accommodate the project. Therefore, impacts from the project would be **less than significant.**

Wastewater

Wastewater analysis presented in the 2018 EIR found that there is sufficient capacity at the EWWTP, and future sewer line trunk improvements would address new growth in the eastern portion of the city, including the Specific Plan project site. The 2018 EIR concluded that the increase in would not exceed the EWWTP's capacity resulting in the need to expand the existing plant. Therefore, impacts were determined to be less than significant.

The project site does not contain any existing wastewater infrastructure; however, the proposed project would connect to the City's planned sewer infrastructure installed as part of the Specific Plan. The Specific Plan is planned to construct a sanitary sewer system adjacent to the proposed project site. Infrastructure would include a 36-inch sanitary sewer main along the eastern boundary to the southern boundary of the Specific Plan. Additionally, the planned Specific Plan infrastructure includes the installation of a 12-inch sanitary sewer along the eastern edge of the easternmost road to the southern boundary of the project site, which is to be extended to Hawkins Road by the proposed project. All project sewer infrastructure would be located within the road or driveway rights-of way within the project site and would be designed in accordance with the City's standards. As proposed, it has been determined that there is sufficient capacity and conveyance to accommodate the proposed project. The City's Infrastructure Master Plan and Development Fee Program also requires development projects to pay a Sewer Impact Fee to fund expansion of wastewater collection and treatment facilities. With consideration of the above factors, the proposed project would result in a **less-than-significant impact** regarding wastewater facilities.

Stormwater Drainage Facilities

The 2018 EIR concluded that compliance with the City's requirements and the preparation of a Storm Drain Master Plan demonstrated that runoff from the project site would be sufficiently supported by the Specific Plan's proposed drainage facilities. As such, the potential impacts to the relocation or construction of new stormwater drainage facilities would be less than significant.

The proposed project would develop approximately 26 acres of the project site for residential development, which would increase impervious surfaces and generate additional runoff. Similar to the Specific Plan, the proposed project would construct a detention basin to convey the increased runoff from the project. The basin would be designed to function as a water quality feature to meet water quality standards pursuant to the City's standards and the City's MS4 permit. All drainage on-site would be conveyed to the basin, which would have an appropriately sized outfall structure and connect downstream to the storm drain system within the Specific Plan. Conveyance of drainage to the basin would be facilitated via an underground pipe network constructed in accordance with the City's Standard Specifications and Drawings. The pipes would be sized to convey peak flows from a 10-year storm in accordance with City standards. Construction of the detention basin would be consistent with the City's General Plan policy SAF-P2.5, which encourages the maintenance of open areas needed to retain stormwater and prevent flooding of urban or agricultural land. Likewise, in accordance with General Plan Policy SAF-P3.2, the proposed project would be required to pay development impact fees that fund necessary storm drainage improvements. As such, project design and compliance with all applicable City standards and regulations would ensure that impacts associated with stormwater drainage facilities are reduced to a **less-than-significant level.**

Electric Power and Telecommunications.

The 2018 EIR concluded that integration of energy conservation measures in addition to compliance with General Plan and ECAS policies would ensure that the Specific Plan had a less-than-significant impact on energy demand.

Therefore, potential impacts related to the construction of new energy production and/or transmission infrastructure were found to be less than significant.

The project is proposing to either create or enter into an existing Lighting and Landscaping Maintenance District to maintain the project's lights provided along roadways and in other public spaces as well as landscaping along the trail, medians, and parkway strips. The project's Homeowners Association (HOA) would maintain the private mini-park. Consistent with the Specific Plan, lighting would be designed to minimize light levels for any given application and to direct the lighting onto the high use areas or objects to be lit. Lighting would be designed to provide continuity along street corridors and promote the safety of residents and users. Ornamental, pedestrian scale pole lights no taller than 20-feet are proposed for local street lighting, with optics and shields that direct the light towards the ground.

Electricity services in the project area are provided by PG&E. The project does not propose any natural gas infrastructure. Policies contained in the General Plan are aimed to reduce energy consumption by preventing energy waste and encouraging renewable energy generation. Policy COS-P11.1 requires new commercial and residential buildings to exceed the Title 24 standards for HVAC, lighting, and insulation. Additional measures are provided in the ECAS in the Transportation and Land Use, Energy, and Off-Road Equipment sectors to promote energy conservation and the development of renewable energy sources in the City. The ECAS is intended to reduce overall energy usage throughout the City and is addressing this by reducing demand, thereby reducing the need to require new energy-related infrastructure. The proposed project includes a number of sustainability measures (outlined in Chapter 2, Section 2.5) consistent with General Plan Policies COS-P11.1 and COS-P11.2, including walking paths throughout the community to provide walkability of the project site, trails for biking, street orientation to allow for rooftop solar panel installation opportunities, and trees on all streets to provide shade for streets and sidewalks. In addition, new development would be required to comply with the version of the California Building Code for Energy Efficiency, which includes the Title 24 requirements, in effect at the time final maps are approved.

Integration of energy conservation measures in addition to compliance with General Plan and ECAS policies would ensure that the proposed project, in addition to the Specific Plan, has a **less-than-significant impact** on energy demand and would not require the need for PG&E to construct new infrastructure or expand existing infrastructure to accommodate the project.

Impact 4.4-2. The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

A water supply assessment (WSA) was prepared for the Specific Plan as part of the 2018 EIR. The 2018 EIR determined that there are sufficient water supplies available to serve the Specific Plan and impacts related to sufficient water supply were found to be less than significant.

However, as the proposed project site was not included in the Specific Plan that was analyzed in the 2018 EIR, it did not include the proposed project's projected water demands in its analysis. The City's amended 2020 UWMP concluded that the City has sufficient water to meet its customers' needs through 2040, including the Specific Plan. This is based on continued application of the water conservation ordinance and on-going conjunctive use of water supply sources. It was also concluded that increased water demand associated with buildout of the City, which included the Specific Plan site, was adequately addressed in the City's General Plan EIR.

Since the proposed project was not included in the estimates provided in the Specific Plan's WSA and the City's UWMP has since been updated, projections for water demand by the proposed project have been calculated (See Table 4.4-2 and Table 4.4-3). The average water demand for the proposed project at buildout (2035) was calculated as 71.5 AFY. This would represent a 23% increase in water demand relative to the previously approved Specific Plan (310.3 AFY). This calculation is conservative as the water demand factors used are from 2018, which do not consider recent updates to the California Green Building Standards, also known as Cal Green (2022), and other adopted conservation policies. CalGreen Standards include regulations for water efficiency and conservation that are continually updated and adapted on a 3-year cycle based on new legislation and changing conditions. The project would be constructed in compliance with the version of the standards in effect at the time final maps are approved.

According to the City's 2020 UWMP, the supply reliability and drought risk assessments considered the water supply available for a single-year and five-year consecutive drought period for both the near-term and long-term buildout of the 2035 General Plan. The supply availability was compared to the total water use to determine if a deficit is projected under any of the conditions. The supply and drought risk assessment determined that the City's water supplies would be sufficient to meet or exceed customer demands during a normal year, single dry year, and a five-consecutive-year drought. In the event of a water shortage, the City also has the ability to put measures in place to reduce demand, if necessary. Therefore, considering that the proposed project would only result in an increase of 71.5 AFY of water greater than what was assumed in the 2018 EIR and the City's 2020 UWMP demonstrates an ability to meet projected growth for normal years, single dry years, and a five-consecutive-year drought with no water shortages, the potential impact related to water supply would be considered **less than significant**.

Mitigation Measures

No mitigation measures are required.

Impact 4.4-3. The project would not result in a determination by the wastewater treatment provider, which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

The 2018 EIR concluded that there was sufficient capacity at the EWWTP to serve the Specific Plan; therefore, potential impacts related to wastewater treatment capacity were found to be less than significant.

The EWWTP treats an average of 7.5 mgd of wastewater and has a design capacity of 15 mgd (City of Vacaville 2023b). The proposed project's wastewater demand, as calculated in Table 4.4-4 would be approximately 0.06 mgd. Flows from the project site would equal approximately 0.8% of the wastewater currently being treated by the EWWTP (2018 EIR). Anticipated flows from the Specific Plan were projected to be approximately 2.6% of the wastewater currently being treated by the EWWTP. Combined, flows from the Specific Plan and the proposed project would equal 3.4% of the wastewater currently being treated at EWWTP. Given the remaining capacity of the EWWTP, there is sufficient capacity to adequately accommodate the proposed project's contribution of wastewater in addition to contributions estimated from the Specific Plan and all other existing commitments. The increase in wastewater from the project site would represent an incremental increase in the amount of wastewater currently treated at the plant and would not exceed EWWTP's capacity resulting in the need to expand the existing plant. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Impact 4.4-4. The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Solid waste associated with buildout of the Specific Plan analyzed in the 2018 EIR estimated solid waste production was approximately 1,879.8 tons per year, or 5.15 tons per day, which represented approximately a 2.3% increase in amount of tonnage received at the Hay Road Landfill from the City. The 2018 EIR concluded the Hay Road Landfill would have sufficient capacity to accommodate solid waste generated by the Specific Plan and the impact would be less than significant. The proposed project is smaller in size and would generate approximately 685 tons of solid waste per year at buildout (see Table 4.4-5).

The proposed project would generate solid waste associated with construction activities as well as from project operation. Solid waste generated by project construction and operation would be transferred to the Hay Road Landfill in Vacaville. The Hay Road Landfill is permitted to accept up to 2,400 tons of refuse per day and currently receives approximately 136,066 tons per year of solid waste (CalRecycle 2019a). Of the 136,066 tons of solid waste received per year at the landfill, approximately 81,268 (59.7%) is from the City of Vacaville (City of Vacaville 2013a).

The proposed project's estimated solid waste generation would be less than one percent of the permitted daily capacity and would be approximately .005% of the yearly tonnage received at the Hay Road Landfill. Additionally, the total capacity of the landfill is 37 million cubic yards; as of 2010 the landfill had a remaining capacity of 30.4 million cubic yards and is projected to remain open until 2077 (CalRecycle 2019a). Therefore, the Hay Road Landfill would have sufficient capacity to accommodate the proposed project and this impact would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Impact 4.4-5. The project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

The General Plan EIR concluded that all new development within the City must comply with General Plan policies as well as federal, state, and other local statues related to solid waste. Because future development of the Specific Plan project site was assumed in the General Plan EIR, the 2018 EIR concluded that impacts were adequately addressed in the General Plan EIR found to be less than significant.

The City is meeting the state-mandated diversion goal with an actual per capita disposal rate of 5.7 PPD (CalRecycle 2019b). It is expected that recycling options would continue and potentially increase, which would hold steady or potentially decrease the per capita solid waste disposal rate (City of Vacaville 2013a). Operation of the proposed project would be required to adhere to City Municipal Code, Section 8.08 (Solid Waste, Yard Waste, and Household Hazardous Waste) which regulates the collection and disposal of solid waste, yard waste, and household hazardous materials. Division 8.08 also implements the approved Source Reduction and Recycling Element required by AB 939 (See Subsection 4.4.3). Similarly, compliance with General Plan goals and policies, such as Goal PUB-9 would help reduce per capita solid waste disposal and increase recycling and resource conservation in the City. As the project would fully comply with all regulations, there would be **no impact.**

Mitigation Measures

No mitigation measures are required.

Cumulative Impacts

The scope of the cumulative impact analysis includes projected buildout under the City's General Plan and the 2020 UWMP. In addition to buildout of the 2035 General Plan, the cumulative context for wastewater treatment, solid waste, and energy includes buildout of the specific service area for each utility provided including recently approved and reasonably foreseeable development within the boundaries of the City's service area for wastewater, the Hay Road service area for solid waste, and the PG&E service area for electricity.

Impact 4.4-6 The proposed project, when combined with current and reasonably foreseeable future projects, would not result in cumulatively considerable impacts related to utilities and service systems.

Water Supply

Development of the proposed project combined with buildout under the 2035 General Plan, including other cumulative projects located within the City's water service area, would increase water supply demands in the city. The City's 2020 UWMP provides current and projected water demands for the city through 2045 based on the buildout of the General Plan. The 2020 UWMP also includes a supply and drought risk assessment to evaluate projected growth with available water supplies through normal and 5-year drought periods. The assessments demonstrate that the City does not expect any water supply shortages in future years, even in a drought and a five consecutive dry year period (City of Vacaville 2023a). Additionally, the City continues to promote water conservation measures and reduce water losses to optimize use of the City's water supplies. If necessary, the City could implement measures to reduce demand in response to water shortages. Such measures are included in the City's Water Shortage Contingency Plan (Chapter 8 of the 2020 UWMP), which describes water shortage response actions such as restrictions on outdoor irrigation, development, and landscaping. Additionally, the City is in the process of implementing a recycled water project that is anticipated to produce approximately 1,825 AF of recycled water that would be used within the City's existing and projected service area. The City's UWMP states that once active, recycled water is projected to be fully reliable in addition to the City's various water sources that have also been analyzed to be reliable and provide sufficient resources. The combination of water sources available to the City allows for the management of water supply based on each source's availability in any given year and ensures reliability.

The water supply reliability analysis for multiple dry year scenarios indicates sufficient water supply. Additionally, if necessary, enactment of the Water Shortage Contingency Plan would result in meeting the projected water demands without a deficit (City of Vacaville 2023a). The City's General Plan EIR states that with continual monitoring of groundwater levels by public agencies, storage as part of the groundwater management plans, and implementation of requirements set for by SB 610 Water Supply Assessment Reports, development under the City's General plan would result in a less-than-significant cumulative impact to water supply. Therefore, there is no existing significant cumulative impact related to water supply. The proposed project would have a less-than-significant project-level impact and would not result in a considerable contribution to an existing cumulative impact.

Wastewater Conveyance

Development of the proposed project combined with buildout of the city would increase wastewater flows to the City's sewer system. The wastewater collection and treatment facilities within the City's service area are maintained and operated by the City. Projects are evaluated individually by the City during environmental review to determine adequate capacity for each project. As cumulative increases in wastewater conveyance are found to require upgrades, the City would require that capital improvements are completed to sufficiently accommodate increased wastewater inflows to existing sewer lines. The City's General Plan EIR did not identify a significant cumulative impact on wastewater conveyance. As such, the proposed project would not contribute to an existing significant cumulative impact.

Wastewater Treatment Facilities

Buildout of the General Plan in addition to other cumulative projects within the wastewater operations service area would increase demands on the EWWTP and wastewater collection infrastructure such that there would be a significant cumulative impact in the absence of system upgrades.

The General Plan EIR noted that the EWWTP is considered to have sufficient capacity to serve anticipated growth in the City for 16 years without the need for further expansion, which includes the proposed project. The City is required to plan, construct, and maintain wastewater treatment facilities to meet State discharge requirements and to plan for expanding wastewater treatment capacity consistent with anticipated needs under General Plan policy PUB-P13.4. Additionally, under the NPDES permit, the City is required to annually estimate when flows are expected to reach the plant's 15 mgd capacity. When projections indicate that capacity would be reached within four years, the City is required to complete a plan to address the capacity limitations and send the plan for approval to the CVRWQCB within 120 days. The General Plan EIR concluded that with compliance with the NPDES permit requirements and implementation of General Plan policies, future development within the City (including the project site) would have a less than significant impact on the demand for wastewater treatment and meeting wastewater treatment requirements (City of Vacaville 2013a). Therefore, the proposed project would not contribute to any existing significant cumulative impact.

Solid Waste

According to the 2035 General Plan EIR, buildout of the General Plan which includes the project site would result in approximately 26,500 new residents that would generate an additional 26,698 tons of solid waste per year (City of Vacaville 2013a). The City's ECAS includes measures to reduce solid waste and increase recycling, which would reduce the actual amount of solid waste sent to the landfill. Cumulative development under the City's General Plan and within the County of Solano was determined to not result in the need to expand existing landfills or construct a new landfill creating a significant cumulative impact. Therefore, the proposed project would not contribute to an existing cumulative impact.

Stormwater

Development of the proposed project combined with cumulative projects could increase stormwater flows to the City's existing stormwater drainage system for all projects that increase impervious surfaces. However, not all projects involve increases to impervious surfaces, and new developments that replace impervious surfaces are required to include drainage control measures such that peak storm flows are equal to or less than existing conditions. Projects are evaluated individually by the City during environmental review to determine adequate capacity for each project and adherence to drainage control requirements. The City's General Plan EIR determined

that cumulative development would result in less than significant cumulative impact to storm drainage facilities. As such, due to the analysis of proposed project specific demands, current drainage control requirements and the City's long-term planning efforts, the City's system would have adequate capacity to serve the project and cumulative projects with respect to stormwater infrastructure, and the proposed project would not contribute to an existing cumulative impact.

Electricity

Future development under the City's General Plan would increase the demand for electricity in the City and within the PG&E service boundary. Policies from the General Plan and the ECAS include measures to prevent the wasteful use of energy as well as meet the State's energy efficiency standards. The General Plan EIR concluded that implementation of General Plan policies would ensure that future development within the City would not result in significant impacts associated with the cumulative increase in demand for energy resulting in the need for construction or expansion of facilities (City of Vacaville 2013a). Therefore, the proposed project would not contribute to an existing significant cumulative impact.

Mitigation Measures

No mitigation measures are required.

4.4.5 References

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4.5 Transportation

4.5.1 Introduction

This section analyzes the potential impacts of the Fields at Alamo Creek ("proposed project") on transportation, including mitigation, if any, that may be needed to reduce impacts to less than significant. The Executive Summary of this Supplemental Environmental Impact Report (SEIR) provides a summary of environmental issues for which potential impacts of the proposed project are adequately addressed in the Farm at Alamo Creek Specific Plan ("Specific Plan") Environmental Impact Report (SCH No. 2017062068) that was certified in November 2018 ("2018 EIR") for which no further analysis is required. Under Senate Bill (SB) 743, level of service (LOS) or vehicle delay is no longer considered an environmental impact under the California Environmental Quality Act (CEQA), and the new CEQA Guidelines Section 15064.3 identifies vehicle miles traveled (VMT) as the appropriate measure of transportation impacts under CEQA. Therefore, an analysis of the project's VMT has been included in this SEIR.

No comment letters related to transportation were received in response to the Notice of Preparation (NOP) issued on March 24, 2023, or in response to the revised NOP issued on July 23, 2023. The NOPs and comments received are provided in Appendix A.

Information contained in this section is based on the Project Access Evaluation for the Fields at Alamo Creek Project Final Technical Memorandum prepared by Fehr and Peers (February 20, 2023). For the report, refer to Appendix D. Additional sources reviewed to prepare this section include a review of Google Earth imagery and a review of transportation relevant plans and policies.

4.5.2 Environmental Setting

This section details the existing environmental setting for transportation and updates the information provided in the 2018 EIR included in Section 4.7, Transportation starting on page 4.7-1.

Road System

Regional and local access to the site would generally be the same as previously described in the 2018 EIR. Regional access would be provided from Interstate 80 (I-80) via Leisure Town Road and its interchange with I-80, from Ulatis Drive to the Allison Drive interchange, from Elmira Road to its interchange, and via Alamo Drive to its interchange.

The project's roadway network would tie into the adjacent Farm at Alamo Creek Specific Plan roadway network to the west and south and would also provide access to Hawkins Road to the north. Therefore, local access would be the same and would be provided from Elmira Road, Leisure Town Road, Ulatis Drive, Hawkins Road, Elmira Road, Marshall Road, Nut Tree Road, Allison Drive, Peabody Road, Byrnes Road, Vanden Road, and Cliffside Drive.

In addition, the following vehicular connections are proposed directly onto Hawkins Road connecting to the Specific Plan:

- **Hawkins Road/Aledo Way**: This intersection would be situated in the easterly part of the project site approximately 330 feet east of Katleba Lane.
- **Westerly Connections to the Farm at Alamo Creek Specific Plan**: Bothell Way and Harrow Way would be public street connections between the project and the adjacent Specific Plan. Harrow Way would connect

directly to Carroll Way, which is a planned two-lane, median-divided arterial street within the Farm at Alamo Creek Specific Plan that would extend between Elmira Road and Hawkins Road.

- Southerly Connection to the Farm at Alamo Creek Specific Plan: Aledo Way would extend to the project's southern limits and connect to Camino Beltran, which is an east-west street that would extend to Carroll Way and Leisure Town Road.

The project's proposed street connectivity would allow project trips to use various streets within the Specific Plan if desiring to travel to/from the south on Leisure Town Road and Elmira Road. Usage of these streets would be more likely to occur by residents of the southern part of the project due to added travel time/distance required to access Hawkins Road.

Transit

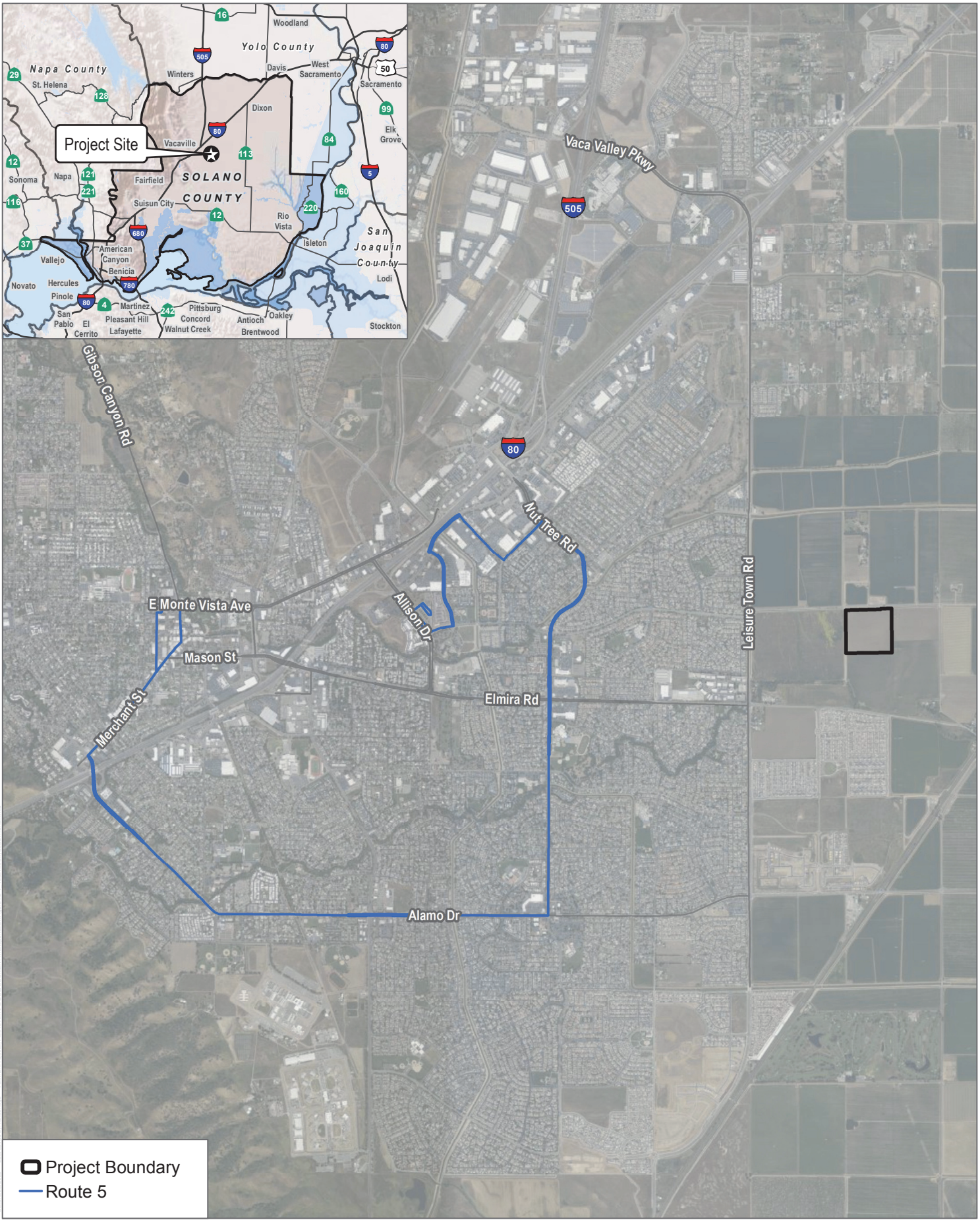
Existing transit service in the study area has changed from what was described in the 2018 EIR. Transit services are provided by Vacaville City Coach (including on-demand microtransit service) and Soltrans. Since certification of the 2018 EIR, Fairfield and Suisun Transit (FAST) and YOLOBUS no longer provide transit services in the City. The project site is not currently directly served by any fixed-route public transit service (does not exist on Leisure Town Road south of Sequoia Drive). The nearest fixed-route bus stop for City Coach's Route 5 is located on Nut Tree Road near Ulatis Drive, which is over 1.5 miles away from the corner of Leisure Town at Hawkins or at Elmira Road. Figure 4.5-1, Vacaville City Coach Transit, presents a map of Route 5 in the study area.

Existing Bicycle Facilities

The existing bicycle facilities are the same as described in the 2018 EIR (see 2018 EIR, Figure 4.7-5). In the project vicinity, Alamo Creek Bikeway is a multi-use path along Alamo Creek between Marshall Road and Leisure Town Road. Bike lanes are marked exclusively for bike travel on roadways. Bike lanes are provided between Leisure Town Road and just east of Nut Tree Road in the vicinity of the project. On-street bike routes, which must be signed or marked, bicycle riders must share the roadway with vehicles. There are no existing on-street bike routes in the project vicinity. However, several facilities are planned in the study area, including the Elmira Road Bike Path, Ulatis Creek Bike Path, and Jepson Parkway Bike Path.

Existing Pedestrian Facilities

The existing pedestrian facilities are the same as described in the 2018 EIR. Existing pedestrian facilities in the project vicinity are limited because this area is currently at the urban fringe. In the project site vicinity, sidewalks are provided only on the west side of Leisure Town Road from Elmira Road to Hawkins Road. There are no sidewalks or paved shoulders installed on Elmira Road east of Leisure Town Road, or on Hawkins Road, east of Leisure Town Road.



SOURCE: Bing Maps 2022, Open Street Map 2019

DUDEK

0 1,750 3,500 Feet

FIGURE 4.5-1

Vacaville City Coach Transit

Fields at Alamo Creek

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4.5.3 Regulatory Setting

This section updates the regulatory setting that has changed since the 2018 EIR.

Federal

The Federal regulatory setting is the same as described in the 2018 EIR (see Section 4.7.3)

State

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which created a process to change the way transportation impacts are analyzed under the California Environmental Quality Act (CEQA). SB 743 required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service (LOS) as the metric for evaluating transportation/traffic impacts. Since preparation of the 2018 EIR, the CEQA Guidelines have been updated and as of July 2020 require a project's VMT be evaluated in lieu of LOS. Under the new transportation guidelines, LOS or vehicle delay, is no longer considered an environmental impact under CEQA. Amendments to the CEQA Guidelines required under SB 743 were approved on December 28, 2018, and the new section 15064.3 identifies VMT as the most appropriate measure of transportation impacts under CEQA and is currently being implemented as of July 1, 2020. Related legislation, SB 32 (2016) requires California to reduce greenhouse gas emissions 40% below 1990 levels by 2030. The California Air Resources Board has determined that it is not possible to achieve this goal without reducing VMT and specifically California needs to reduce per capita VMT across all economic sectors. SB 743 is primarily focused on passenger-cars and the reduction in per capita VMT as it relates to individual trips.

The OPR Technical Advisory (OPR 2018) provides guidance and tools to properly carry out the principles within SB 743 and how to evaluate transportation impacts in CEQA. The VMT analysis for the project is based on the *City of Vacaville General Plan Transportation Element and Energy Conservation Action Strategy Update Draft Supplemental EIR* (SCH # 2020090526 – "2021 Supplemental EIR"), which was certified by the City Council in September 2021.

Local

City of Vacaville General Plan

The City of Vacaville's General Plan (City of Vacaville 2017) contains guiding and implementing policies that are relevant to transportation and circulation in the study area. These guiding and implementing policies from the Transportation Element and the updated Conservation and Open Space Element (City of Vacaville 2023) are listed below.

Goal COS-12 Maintain and Improve Air Quality.

Policy COS-P12.3 Encourage project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that reduce vehicle trips and promote energy efficiency.

Goal TR-3 Take proactive steps to reduce Greenhouse Gas Emissions caused by Vehicle Miles Travelled in Vacaville.

Policy TR-P3.2 Pursue an overall land use / transportation relationship that becomes more efficient over time, as measured by improved VMT efficiency (i.e., VMT per dwelling unit or per thousand square feet of floor space).

Policy TR-P3.3 Evaluate development proposals using VMT measurement techniques and significance thresholds from the *Senate Bill (SB) 743 Implementation Guidelines for the City of Vacaville*.

Policy TR-P3.5 A proposed residential development project exceeding a level of 15 percent below existing citywide VMT per capita may indicate a significant transportation impact.

Policy TR-P3.8 Consider the potential effect on VMT when evaluating proposed transportation improvements.

Policy TR-P3.9 Require feasible mitigation measures to reduce potentially significant VMT impacts and monitor whether those measures are achieving the intended outcomes.

Goal TR-5 Provide roadway capacity on Vacaville city streets for typical weekday peak hour (7:00 to 9:00 AM and 4:00 to 6:00 PM) traffic volumes without significant delay.

Policy TR-P5.1 Endeavor to maintain LOS C as the LOS goal at all intersections to facilitate the safe and efficient movement of people, goods, and services. Strive to design improvements to provide a LOS goal of C, based on the City's most recent 20+ year traffic forecast including signalized and unsignalized intersections.

Policy TR-P5.2 At signalized and all-way stop control intersections, endeavor to maintain LOS mid-D. At two-way stop control intersections, attempt to maintain LOS D.

Policy TR-P5.3 To allow for infill development and higher density development at transit centers, endeavor to maintain LOS D at signalized and all-way stop control intersections in the Downtown Urban High Density Residential Overlay District or other Priority Development Areas (PDA) designated by the City. At two-way stop controlled intersections in these areas, endeavor to maintain an overall LOS mid-E.

Policy TR-P5.4 The City may allow LOS that is worse than the established LOS operating goal for a particular location as an interim level of service where improvements are programmed by the City that will improve the service to the desired level.

Policy TR-P5.5 The City may allow LOS that is worse than the established LOS policy goals for a particular location on the basis of specific findings described in adopted City policies or standards.

Policy TR-P5.7 Roadway improvements implemented by the City using the Development Impact Fee Program or other funding sources shall be designed based on the level of service operating goals prescribed in Policies TR-P4.1, TR-P432 and TR-P4.3.

Policy TR-P5.8 Require roadway improvements implemented by development projects to be designed based on the level of service operating goals prescribed in Policies TR-P4.2 and TR-P4.3.

Goal TR-6 Require necessary traffic improvements from new development.

Policy TR-P6.1 As part of development approvals, require (through conditions of approvals) that necessary traffic improvements be constructed in time to accommodate trips generated by the project.

Policy TR-P6.2 In order to ensure that adequate roadway capacity is provided for the buildout of the General Plan and that new development does not preclude the construction of adequate circulation facilities, require all new development to provide right-of-way dedications consistent with this Transportation Element (Figure TR-6).

Policy TR-P6.3 When reviewing development proposals, consider Year 2035 projections for fair share contributions to transportation improvements (as shown in Figure TR-5) and full buildout projections (beyond Year2035) for dedication of right of way for future road improvements (as shown in Figure TR-6).

Goal TR-8 Protect residential neighborhoods from through-traffic.

Policy TR-P8.3 Consider traffic calming measures consistent with the City's traffic calming policies and approved by the City as part of development proposals in an effort to lower vehicle speeds and enhance mobility for bicyclists and pedestrians.

Goal TR-9 Provide a balanced, multimodal transportation network that meets the needs of all users, including pedestrians, bicyclists, and motorists of all ages and abilities.

Policy TR-P9.3 Require that new development applications include transit amenities, such as bus stops, bus bays, transit shelters, benches, and on-site drop-off locations, as appropriate, or explain why these features are infeasible or unnecessary.

Policy TR-P9.4 Require that new development applications design roadway networks to accommodate transit vehicles and facilitate efficient transit routes.

Policy TR-P9.6 Require that new development applications design roadway networks to accommodate on-street bicycle lanes, and only allow bicycle routes with sharrows when on-street bicycle lanes are impractical or infeasible.

Policy TR-P9.7 Require that new roadway networks be designed as a grid or interconnected pattern to reduce circuitous travel patterns, decrease VMT, and improve access and circulation for all modes.

Policy TR-P9.8 Prioritize transportation improvements that support and enhance travel by transit, bicycle, and pedestrian modes to and from designated Priority Development Areas (PDA).

Goal TR-10 Increase bicycling by improving the network of bikeway and support facilities.

Policy TR-P10.4 Require that new development applications include bike paths or bike lanes, when appropriate.

Policy TR-P10.5 Enhance, complete, and improve bicycle connections between neighborhoods and between neighborhoods and significant destinations, such as parks, schools, transit stops and transit centers, shopping centers, and employment centers.

Policy TR-P10.9 Require that new multi-family and non-residential developments provide adequate public and private bicycle parking and storage facilities.

Goal TR-14 Reduce congestion and driving through transportation systems management (TSM) and transportation demand management (TDM).

Policy TR-P14.1 Cooperate with public agencies and other entities to promote local and regional public transit serving Vacaville.

Goal TR-15 Support a comprehensive, convenient, and efficient transit system.

Policy TR-P15.7 Require specific plans in new growth areas to include planning for future public transit service to these areas by considering the addition of future transit stops and route connections as part of the public transportation system.

City of Vacaville Energy and Conservation Action Strategy Update

The City of Vacaville Energy and Conservation Action Strategy (ECAS) Update includes the following measures pertaining to transportation listed below (City of Vacaville 2021):

Measure T/LU-3 Implement Transportation Demand Management for New Development. New projects that are subject to CEQA review will be required to develop and implement transportation demand management programs. Transportation demand management programs are used widely throughout California to reduce the number of trips taken by single occupancy vehicles. New residential, office, retail, and industrial developments will be held to similar standards. Residential developments will separate parking from leases and charge for off-street parking.

City of Vacaville Municipal Code

The City's Municipal Code includes regulations that govern the transportation system. The Land Use and Development Code and the Traffic Impact Mitigation Ordinance are of particular relevance to the project. The Land Use and Development Code identifies off-street parking requirements for each type of land use and provides development standards for emergency vehicle and fire apparatus access to residential projects. The Traffic Impact Mitigation Ordinance establishes a procedure to assess and mitigate the potential impacts of proposed development projects on the transportation system.

4.5.4 Impacts and Mitigation Measures

Methodology

Transportation information and data for this analysis was primarily obtained from the Project Access Evaluation for the Fields at Alamo Creek Project Final Technical Memorandum prepared by Fehr and Peers (Appendix D). In addition, the programs, plans, ordinances, and policies listed in Section 4.5.3, were analyzed for their applicability to the proposed project.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the proposed project would do any of the following:

- conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b);
- substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- result in inadequate emergency access.

Threshold Criteria not Applicable to the Proposed Project

Impacts related to roadway and intersection LOS were determined to be less than significant, with mitigation, in the 2018 EIR. Since July 2020, LOS is no longer the metric used to evaluate transportation impacts. No substantial changes in the project circumstances have occurred since the certification of the 2018 EIR; therefore, impacts were adequately addressed in that document and are not further evaluated in this section.

Project Impacts

Impact 4.5-1. The project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

The proposed project would be constructed as Phase 6 of the Specific Plan, which would take 12 months for site preparation, grading and trenching for utilities and construction of roads, followed by residential construction which would be built consistent with market demand. Because the project would be constructed over a period of time, interim development may potentially conflict with adopted plans, policies and programs related to public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities during the initial phases of implementation prior to full buildout of the project. For instance, pedestrian and bicycle facilities and connections to Hawkins Road might not be adequate during the initial phases. Therefore, the project would have potentially significant interim or short-term impacts related to multi-modal facilities. However, upon completion, the project would be consistent with the adopted transportation-related plans, ordinance, programs, or policies described in the Regulatory Setting section above, including General Plan goals and policies establishing a balanced multimodal system. The project's proposed sidewalks and multi-use pathways would provide safe and convenient pedestrian travel throughout the project site and the larger Specific Plan. Pedestrian and bicycle pathways would be provided to connect selected cul-de-sacs, including providing access through sound walls along certain streets,

thus providing safe and convenient access and connectivity for pedestrians and bicyclists to collector roads and key local roads. Class II bike lanes would be provided along designated streets, increasing connectivity for bicyclists and would also serve as an additional buffer for pedestrians.

Therefore, the project would not conflict with adopted plans, policies, and programs related to multi-modal facilities and would not decrease the performance and safety of such facilities. However, the project would have **potentially significant** interim or short-term impacts related to multi-modal facilities during buildout of the project when residents living within the project may not have access to bicycle and pedestrian facilities.

Mitigation Measures

Compliance with the following mitigation measure, identified as TRAFF-4 in the 2018 EIR, as modified (shown in underline and strikethrough) would be required to ensure that multimodal accessibility is provided during all phases of project development; therefore, reducing the project impact to less than significant.

TRAFF-4 The project ~~level site plan~~ improvement plans shall be submitted for each phase of the project development for review and approval by the City to ensure safe and direct facilities for pedestrians, bicyclists, and transit riders are provided and the design does not conflict with adopted plans, policies, and programs related to such facilities.

Impact 4.5-2. The project could be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

This section presents the VMT evaluation conducted for the proposed project, referencing the City of Vacaville General Plan Transportation Element and Energy Conservation Action Strategy Update Draft 2021 Supplemental EIR. Impact TRA-1 in the 2021 Supplemental EIR stated that implementation of the City's General Plan would generate average VMT per dwelling unit and per thousand square feet of non-residential space that exceeds the applicable significance thresholds, thereby causing a significant impact. The City selected a VMT threshold that is 15 percent below the City-wide average VMT per dwelling unit.

CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning) specifies that projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. In 2021, the City prepared the General Plan Transportation Element and Energy Conservation Action Strategy Update Supplemental EIR (SCH No. 2020090526 – 2021 Supplemental EIR) that analyzed the impacts of all land use projects contemplated in the City's General Plan to determine their effect on VMT, which is the metric used to analyze transportation impacts, per CEQA Guidelines Section 15064.3. Page 3.21-1 of the 2021 Supplemental EIR states the following:

> "Future projects consistent with the General Plan will not require further VMT analysis pursuant to CEQA. However, those projects would be subject to Mitigation Measure TRA-1 unless it can be demonstrated that the project's specific land use type and location is in a "VMT efficient" location."

The project site is located within Traffic Analysis Zone (TAZ) 126 of the City's travel demand model. This TAZ extends southerly beyond the project limits, covering parts of The Farm at Alamo Creek Specific Plan. The 2050 version of the model contains 450 single-family units in this TAZ.

According to the Specific Plan, a total of 768 dwelling units are planned. The project is proposing to amend the Specific Plan to add 241 units resulting in a total of 1,009 units. The seven TAZs (bounded by Hawkins Road, Leisure Town, Elmira Road, and Open Space to the east) that represent the Specific Plan and the project site consist of 1,201 units. Thus, it is concluded that the project was considered in the VMT analysis contained in the General Plan as that analysis was based on the City's travel demand model. According to the 2021 Supplemental EIR, projects consistent with the General Plan will not require further VMT analysis pursuant to CEQA. However, those projects would be subject to Mitigation Measure TRA-1 (in Section 3.1-6) unless it can be demonstrated that a project's specific land use type and location is in a "VMT efficient" location.

Table 3.1-9 of the 2021 Supplemental EIR indicates that single-family has a citywide average of 76.5 VMT per unit under General Plan Buildout Minus Northeast Growth Area (2050) conditions. Figure 4.5-2 presents the VMT screening map showing the relative VMT efficiency of all TAZs within the City, which have at least 10 single-family units in them under cumulative conditions. As shown, the project's TAZ (represented by the fourth rectangle east of Leisure Town Road and south of Hawkins Road) is shown as yellow, which indicates a VMT per unit that is 0% to 5% above the citywide average. Thus, the project is not situated in a VMT efficient location, and the impact is considered **significant**. Accordingly, the project is subject to the applicable strategies in Mitigation Measure TRA-1 identified in the 2021 Supplemental EIR to reduce project generated VMT.

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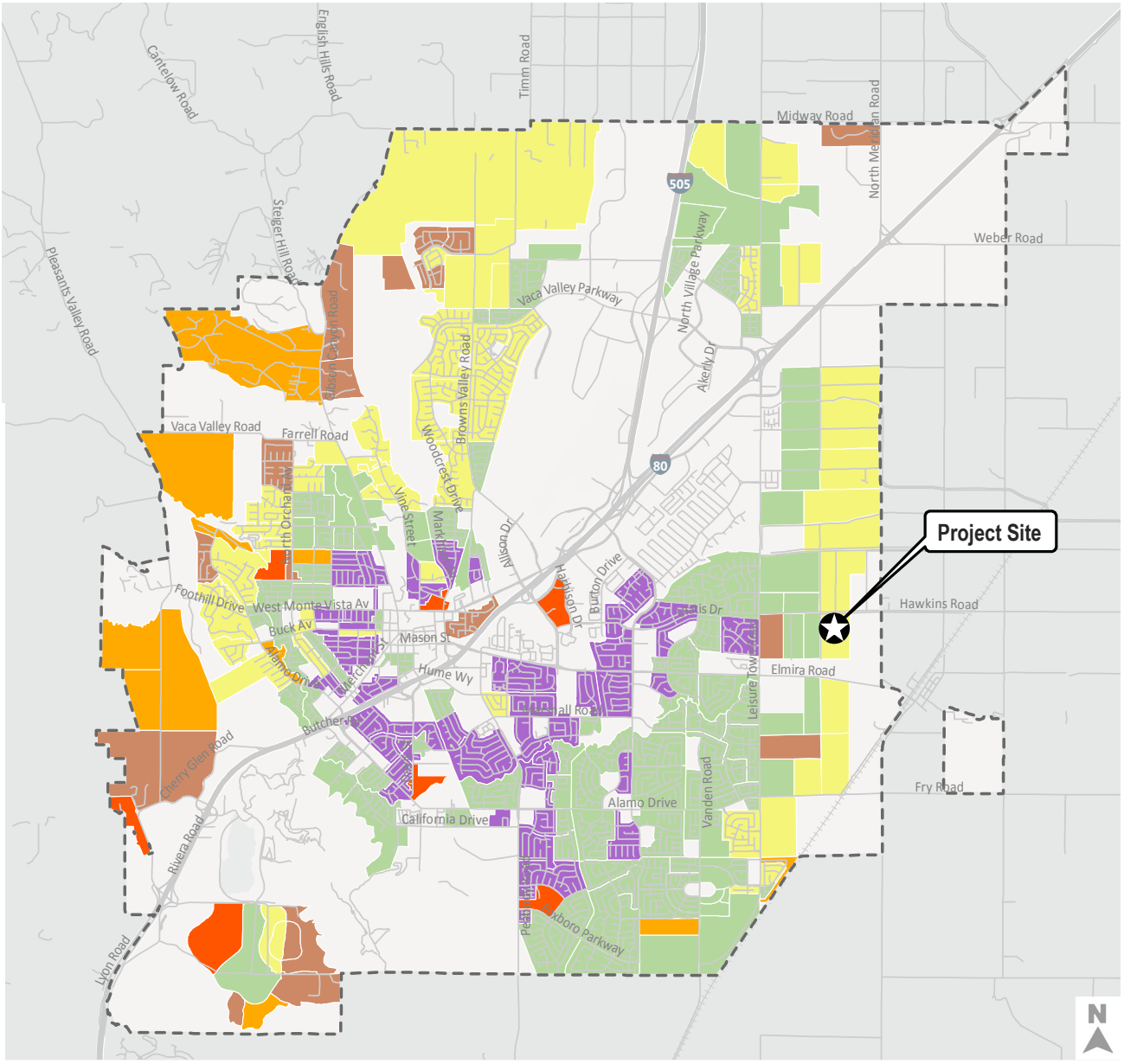

% Difference from Citywide Average Home-based VMT per DU (76.54)

- ≤ -15%
- -10% to -14.9%
- -5% to -9.9%
- 0% to -4.9%
- +5% to +0.1%
- +10% to +5.1%
- +20% to +10.1%
- > +20%

Urban Growth/Model Boundary

TAZs with <10 Single Family DU

All Traffic Analysis Zones (TAZs) with at least 10 dwelling units are allocated a color according to its relative VMT efficiency to the left. In many instances, a single TAZ may include multiple land uses, which means they show VMT efficiency on multiple figures. All VMT estimates are derived from the City of Vacaville travel demand model. VMT includes all home-based weekday daily travel (with trip lengths not truncated at political boundaries).

SOURCE: Fehr and Peers

FIGURE 4.5-2

City of Vacaville VMT Screening Map

Fields at Alamo Creek

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Mitigation Measures

Mitigation measure TRA-1 from the 2021 Supplemental EIR is required to reduce VMT effects in a manner consistent with state guidance on decreasing VMT. The proposed project would be required to prepare a Transportation Demand Management (TDM) plan incorporating relevant strategies from mitigation measure TRA-1. The TDM plan would be subject to approval by the City. Implementation of a TDM plan including various design features would achieve reductions in VMT generated by the project; however, the proposed project would still be located in a VMT inefficient area which is considered a significant impact. The project's VMT would be reduced by implementing strategies that reduce the number of automobile trips generated by the project, including shifting more trips from automobile to non-automobile modes, and/or reducing the distances that people drive. The project includes on-site traffic calming elements and is also providing a connection to a major multi-use trail. The project would also be part of the adopted Specific Plan which is proposing neighborhood commercial land uses. This would add local-serving retail opportunities for the project, thereby improving retail destination proximity, shortening retail destination trips and reducing VMT. However, because the impact is only partially mitigated and would not be reduced to less than significant, the impact would be significant and unavoidable.

TRA-1 Proposed development projects that could have a potentially significant VMT impact shall consider reasonable and feasible project modifications and other measures during the project design and environmental review stage of project development that would reduce VMT effects in a manner consistent with state guidance on VMT decrease. The below list of potential measures is not intended to be exhaustive, and not all measures may be feasible, reasonable, or applicable to all projects. The purpose of this list is to identify options for future development proposals, not to constrain projects to this list, or to require that a project examine or include all measures from this list. Potential measures include:

- improving access to transit
- increasing access to common goods and services, such as groceries, schools, and daycare
- incorporating affordable housing, including low-income housing, into residential and mixed-use development
- orienting the project toward transit, bicycle and pedestrian facilities
- improving pedestrian or bicycle networks, or transit service
- implementing traffic calming
- providing bicycle parking
- unbundling parking costs
- providing car-sharing, bike sharing, and ride-sharing programs
- providing transit subsidies or passes
- providing incentives or subsidies that increase the use of modes other than single-occupant vehicle
- increasing project density
- increasing the mix of uses within the project or within the project's surroundings
- increasing connectivity and/or intersection density on the project site

Impact 4.5-3. 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).

The proposed project would not increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). The project's roadway network would tie into the adjacent Specific Plan roadway network to the west and south and would also provide access to Hawkins Road to the north. The project would be subject to the City's standard design guidelines to regulate the design of the project through the General Plan and Zoning Ordinance to ensure compatible use. Additionally, there would be no changes to the off-site circulation on other City roads. The developer would be responsible for on-site circulation improvements (driveways and internal drive aisles) and frontage improvements (landscape areas, etc.) along Hawkins Road and Aledo Way. These on-site and adjacent improvements would be designed in accordance with all applicable design standards set forth by the City, which were established to ensure safe and efficient vehicular circulation. As such, no sharp curves, dangerous intersections, or incompatible uses would be introduced by the project. Therefore, impacts associated with hazardous design features or incompatible land uses would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Impact 4.5-4. The project would not result in inadequate emergency access.

The analysis of emergency access considers both the adequacy of emergency access to and from the project site at buildout, and the adequacy of emergency access during construction, while some project components are already occupied but before all project roadways have been constructed. Emergency secondary access would be available in all phases of project development to address the requirements of the City's fire department.

As described above, all roadway, intersection, and project access improvements would be overseen by the City and their qualified traffic engineers. This approach would ensure compliance with all applicable roadway design requirements. All street improvements would be designed with adequate width, turning radius, and grade to facilitate access by the City's firefighting apparatus, and to provide alternative emergency ingress and egress. The site plan would be subject to plan review by the City's Fire Department to ensure proper access for fire and emergency response is provided and required fire suppression features are included. Therefore, the project's impact due to inadequate emergency access would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

Cumulative Impacts

The cumulative context for determining cumulative VMT impacts consists of future development under the City's General Plan.

Impacts related to conflicts with transit, bicycle or pedestrian transportation, hazards, and inadequate emergency access are site-specific and would be identical to the impacts described in the project impacts section above; therefore, they are not addressed in the cumulative impacts evaluation.

Impact 4.5-5. The project would result in a cumulatively considerable impact related to VMT.

The 2021 Supplemental EIR determined that development under the General Plan would not meet the selected threshold of 15% below the City-wide average baseline VMT per dwelling unit and per thousand square feet of non-residential floor space. Therefore, there is an existing significant cumulative impact. As previously noted, the 2021 Supplemental EIR indicates that future projects consistent with the development density established in the General Plan will not require further VMT analysis pursuant to CEQA. The seven TAZs (bounded by Hawkins Road, Leisure Town, Elmira Road, and Open Space to the east) that represent the Specific Plan and the proposed project site consist of 1,201 units, which is more than the total units proposed (241 units from the proposed project in addition to the 768 units from the Specific Plan, for a total of 1,009 units). Thus, it is concluded that the project was considered in the VMT analysis contained in the General Plan as that analysis was based on the City's travel demand model. Therefore, a project-specific cumulative analysis is not required. However, because the project is not located within a VMT efficient location and implementation of mitigation measure TRA-1 would only partially mitigate the project's VMT impact, the project would result in a **significant and unavoidable** contribution to the existing cumulative impact.

Mitigation Measures

No additional feasible mitigation measures are available to reduce the impact to less than significant.

4.5.5 References

City of Vacaville. 2017. 2035 General Plan Update. Proposed Amendments to the Transportation Element. September 19.

City of Vacaville. 2021. City of Vacaville General Plan Transportation Element and Energy Conservation Action Strategy Update Draft Supplemental EIR. March.

Fehr and Peers. 2023. Project Access Evaluation for the Fields at Alamo Creek Project Final Technical Memorandum. February 20.

OPR (California Governor's Office of Planning and Research). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. Accessed February 2022. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

5 Alternatives

5.1 Introduction

The following discussion is intended to inform the public and decision makers of feasible alternatives to the Fields at Alamo Creek project ("proposed project") that would avoid or substantially lessen any significant effects from the project. Section 15126.6(a) of the California Environmental Quality Act (CEQA) Guidelines states that:

> An EIR shall describe a range of reasonable alternatives to the project, or the location of the project, which 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, and evaluate the comparative merits of the alternative. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.

As described in the *Farm at Alamo Creek Specific Plan Environmental Impact Report* (SCH No. 2017062068) ("2018 EIR"), the alternatives to the Specific Plan included a No Project/No Development Alternative, a No Project/Existing General Plan Land Use Alternative, and a Reduced Intensity Alternative. The alternatives analyzed in the 2018 EIR did not include detailed development assumptions for this proposed project. The alternatives analysis in this Supplemental EIR (SEIR) is based on the alternatives included in the 2018 EIR but includes new assumptions for development of the proposed project. The Specific Plan was adopted on June 30, 2018, and there are no proposed updates that would affect the prior approved project. Therefore, development of the adjacent proposed project site is assumed to occur as described in the Specific Plan.

This chapter identifies the proposed project objectives, describes the project alternatives, and evaluates the comparative effects of the alternatives relative to the proposed project. As required under Section 15126.6(e)(2) of the CEQA Guidelines, the environmentally superior alternative is identified and included at the end of this chapter.

Alternatives to the proposed project are:

- **No Project/No Development Alternative:** This alternative assumes the proposed project site would remain in its current undeveloped condition.
- **Reduced Intensity Alternative:** This alternative assumes a reduction of 23 residential units in order to retain open space land at the northern project boundary adjacent to the Solano Irrigation District (SID) canal, primarily to address the proposed project's potentially significant impacts to foraging value for special-status bird species.
- **Affordable Housing Alternative:** This alternative is intended to reduce the significant and unavoidable vehicle miles traveled (VMT) impact from the proposed project by only developing affordable residential housing units. According to the Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA,* an 100% affordable residential development can be assumed to have a less-than-significant impact on VMT (OPR 2018). To develop housing affordable to low-income households, it is presumed that residential density would be increased. Increased residential density would also allow for the 300-foot buffer at the eastern boundary of the project site to only include open space uses, which would enhance the barrier between existing agricultural operations and future residential uses (General Plan Policy COS-P4.1).

Although the 2018 EIR included a No Project/General Plan Land Use Alternative (assuming development would occur consistent with the current General Plan land use designations), this alternative has not been carried forward for this proposed project. This is because the General Plan designates most of the proposed project site for Urban Reserve, which specifically applies to lands intended for annexation and development in the future. A detailed discussion of alternatives considered but dismissed from further consideration is included below in Section 5.4.

5.2 Significant and Unavoidable Impacts

As discussed in Section 4.5, Transportation, the project is not situated in a VMT-efficient location and therefore the impact is considered significant. The project is required to comply with the mitigation measure from the City's General Plan Transportation Element and Energy Conservation Action Strategy Update 2021 Supplemental EIR, which includes transportation demand management strategies for residential uses. Although implementation of these design features would achieve reductions in VMT generated by the project, the project is still situated in a VMT-inefficient area and there are no means to accurately quantify VMT reductions that could result from implementation of the measure. Therefore, the VMT impact would remain significant and unavoidable.

5.3 Project Objectives

Specific project objectives are:

- Complete the planning for the geographical area designated by the General Plan for future growth which coincides with the city's designated urban growth boundary.
- Complete the land planning for the area initiated with the Farm at Alamo Creek.
- Develop an economically feasible community that can be reasonably served by existing and proposed public infrastructure in a manner that would foster orderly urban development, discourage leapfrog or piecemeal development.
- Develop a project that will provide needed housing. Provide multiple types of single-family housing to support the City's workforce. Accommodate projected regional growth in proximity to existing and planned infrastructure, urban services, transportation corridors, and major employment centers.
- Create a community that has a positive overall economic impact on the City and achieves a positive fiscal impact on the City's finances.
- Develop a project that will promote efforts to reduce greenhouse gas emissions by implementing green building practices and providing all electric homes that will promote the change from fossil fuels to carbon free alternatives for a more sustainable neighborhood.
- Develop a project that provides a turnkey private park to be maintained by the homeowners association.
- Develop pedestrian and bicycle friendly neighborhoods with open space trails and traffic calming features.
- Provide for the extension of utilities and services including an easement for the construction and maintenance of the 36" sewer line to be located within the agricultural buffer area. The sewer line extension is planned for the agricultural buffer area of the Fields and will ultimately extend north to serve the City's Northeast Growth Area.

5.4 Alternatives Considered but Dismissed from Further Consideration

Section 15126.6(c) of the CEQA Guidelines requires EIRs to identify any alternatives that were considered by the lead agency but were rejected as infeasible for detailed study, and briefly explain the reasons underlying the lead agency's determination. Furthermore, Section 15126(f)(1) states that "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire or control or otherwise have access to the alternative site. No one of these factors established a fixed limit on the scope of reasonable alternatives."

No Project/Existing General Plan Land Use Alternative

Under the No Project/Existing General Plan Land Use Alternative, the 26.5 acres currently designated as Urban Reserve in the eastern portion of the site would not be developed with 241 medium density residential units and a 0.6-acre park, as proposed under the project. Consistent with the General Plan, this portion of the site would remain designated as Urban Reserve, which is a designation for areas outside of the City that may be annexed and developed in the future. Essentially, this portion of the project would remain in its current condition as an undeveloped area to be annexed and developed at a later time. The only portion of the project that could be developed under this alternative would be the detention basin and trail within the agricultural buffer/open space area, but this would serve little purpose because these components are intended to serve the residential component of the project. In essence, the No Project/Existing General Plan Land Use Alternative is not sufficiently distinguishable from the No Project/No Development Alternative (Alternative 1).

Off-Site Alternative

An Off-Site Alternative was dismissed because as discussed in *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553 (*Goleta II*), where a project is consistent with an approved general plan, no off-site alternative need be analyzed in the EIR. In this case, the project site is consistent with the City's General Plan and development of the Urban Reserve portion of the site was considered in the General Plan EIR. In approving a general plan, the local agency has already identified and analyzed suitable alternative sites for particular types of development and has selected a feasible land use plan. Therefore, this SEIR does not need to analyze an off-site alternative.

5.5 Alternatives to the Proposed Project Considered in this Supplemental EIR

This section provides a description of the alternatives to the proposed project analyzed in this Draft SEIR and evaluates how specific impacts differ in severity from those associated with the proposed project. For purposes of this analysis, the potentially significant impacts identified under the alternatives analysis are assumed to be fully mitigated through compliance with mitigation measures identified in Sections 4.1 through 4.5 included in Chapter 4, which contains the environmental analysis of the proposed project.

The project alternatives identified herein address the significant impacts (before mitigation) identified for the proposed project including biological resources, land use, and transportation, and to a lesser extent, those impacts that are less than significant and not requiring mitigation.

This Draft EIR has incorporated a reasonable range of project alternatives that, collectively, attain a majority of the project objectives in a reasonable manner while reducing the severity of the significant impacts (before mitigation) identified under the proposed project.

The alternatives to the proposed project analyzed in this Draft SEIR are:

- **Alternative 1:** No Project/No Development
- **Alternative 2:** Reduced Intensity
- **Alternative 3:** Affordable Housing

Alternative 1: No Project/No Development Alternative

Description

The No Project/No Development Alternative considers the effects of forgoing the proposed project entirely, and leaving the project site in its current, undeveloped condition. Under the No Project/No Development Alternative, the proposed project would not be developed, and the Specific Plan would not be amended to include the proposed project site. In addition to not providing up to 241 residential units, a small 0.6-acre park, a new detention basin, and improvements to the pedestrian and transportation network, the project site would not be zoned and developed in a manner consistent with the existing General Plan land use designation of Urban Reserve on 26.5 acres of the site. This alternative would also not meet the City's policies, General Plan or project objectives, or State policies of promoting the development of new housing. For policy reasons, and because the No Project/No Development Alternative would fail to meet any of the basic objectives of the project or of the City's General Plan, this alternative could be rejected in favor of the proposed project. The No Project/No Development Alternative thus allows decision-makers to compare the impacts of the proposed project to retaining the existing condition of the site. The No Project/No Development Alternative describes the environmental conditions that exist at the time that the environmental analysis commenced (CEQA Guidelines, Section 15126.6 (e)(2)).

Comparative Analysis of Environmental Effects

The No Project/No Development Alternative would produce no changes on the project site because the site would remain in its current condition, effectively eliminating those project impacts discussed in this Draft SEIR. There would be no air emissions associated with project construction and operation that could contribute to a potential violation of applicable air quality standards or to nonattainment conditions. There would be no land disturbance and therefore no impacts to biological resources. There would be no increase in the number of vehicles accessing the site and on area roadways and intersections, or increase in demand for public utilities. Additionally, the impacts and mitigation measures identified in the 2018 EIR would no longer be applicable for this project site.

Relationship to the Project Objectives

The No Project/No Development Alternative would not achieve any of the project objectives.

Alternative 2: Reduced Intensity Alternative

Description

This alternative assumes a reduction in the proposed number of residential units in order to retain open space land at the northern project boundary adjacent to the SID canal, primarily to address the proposed project's potentially

significant impacts to foraging value for nesting birds and special-status bird species. This would be a reduction of 23 units for a new total of 218 units. The adjacency of the canal to the proposed project site was considered in the biological resource assessment (BRA), specifically in aiding the determination of the potential for special-status species to occur within the project site (see Appendix C).

Comparative Analysis of Environmental Effects

As previously discussed, the 2018 EIR adequately evaluated impacts associated with the proposed project in the following issue areas: Aesthetics; Agriculture and Forestry Resources; Cultural and Tribal Cultural Resources; Geology, Soils, Seismicity; Mineral Resources; Hazards and Hazardous Materials; Greenhouse Gas Emissions; Hydrology and Water Quality; Noise; Population and Housing; and Wildfire. The Reduced Intensity Alternative would not be sufficiently different from the proposed project such that it would result in new significant impacts or more severe environmental impacts than what was stated in the 2018 EIR. Therefore, these issue areas are not further discussed in detail (see the Executive Summary for more detail on what was analyzed in the 2018 EIR). This comparative analysis instead focuses on the issue areas that were either not previously evaluated in the 2018 EIR or would be more severe than previously stated.

Air Quality. As discussed in Section 4.1, the proposed project (including both construction and operation) would not conflict with the applicable air quality plan, result in any cumulatively considerable net increases of criteria pollutants in the project region, or expose sensitive receptors to substantial pollutant concentrations. The Reduced Intensity Alternative would result in fewer construction and operation emissions than the proposed project because it would construct 23 fewer housing units, leaving the area adjacent to the SID canal (north of proposed Bothell Way) as undeveloped land. Therefore, impacts would remain less than significant (but less severe than those of the proposed project).

Biological Resources. As discussed in Section 4.2, the proposed project could potentially cause a substantial adverse effect on special-status wildlife species and potentially conflict with the Draft Solano Habitat Conservation Plan (HCP). Mitigation measures BIO-1c (burrowing owl avoidance), BIO-1d (burrowing owl habitat mitigation), BIO-1f (Swainson's hawk foraging habitat mitigation), and BIO-1g (special-status bird avoidance and foraging habitat mitigation) from the 2018 EIR would apply to the proposed project and would reduce these impacts to less-than-significant levels. Under the Reduced Intensity Alternative, the 23 units proposed along the northern project boundary would not be built, leaving approximately 2.4 acres of open space land adjacent to the SID canal. While the canal was not considered to be a significant contributor to suitable habitat for special-status wildlife species (there was little to no aquatic vegetation in the canal and evident human disturbance), retaining open space near the canal may provide some value for wildlife species that nest or forage near freshwater. Nonetheless, the alternative would still result in the conversion of 23.4 acres of agricultural land to support new residential units, as well as construction for new landscaping, utilities connections, and infrastructure to support the project. The loss of foraging value and disturbance from construction activities would result in potentially significant impacts. This alternative would result in less severe impacts than the proposed project, but would still be required to implement mitigation measures BIO-1c, BIO-1d, BIO-1f, and BIO-1g from the 2018 EIR in order to reduce impacts to less-than-significant levels.

Land Use. As discussed in Section 4.3, Land Use, the proposed project would be required to implement mitigation measure AG-1 (which restates the requirements of General Plan Policies LU-P2.4, LU-P5.2, and LU-P5.3) and AG-2 (which requires landscaping within the 300-foot-wide agricultural buffer to ensure a sufficient barrier between existing agricultural operations and future residential uses, in compliance with General Plan Policy COS-P4.1). Similarly, the Reduced Intensity Alternative would be required to ensure compliance with the General Plan via

mitigation measures AG-1 and AG-2. There would be no inconsistencies with other plans such as the County's General Plan or the Travis Air Force Base Airport Land Use Compatibility Plan. This alternative would still require annexation review by the Solano Local Agency Formation Commission (LAFCO), a General Plan amendment to allow for new residential development in the East of Leisure Town Road Growth Area, and other relevant approvals, the same as the proposed project.

Utilities and Service Systems. As discussed in Section 4.4, the proposed project would be adequately served by existing and planned water infrastructure and supply, wastewater and storm drain infrastructure and capacity, solid waste services, and dry utilities (electric power and telecommunications). Because the Reduced Intensity Alternative would result in 23 fewer units (and accordingly, fewer new residents), there would be less demand on utilities and service systems. Using the demand factors in Section 4.4, this alternative would result in a reduction of approximately 6,095 gallons per day (gpd) of water demand, 5,520 gpd of wastewater demand, and 385 pounds per day of solid waste generation compared to the proposed project. Therefore, impacts would remain less than significant (but less severe than the proposed project).

Transportation. As discussed in Section 4.5, the proposed project may result in significant interim or short-term impacts related to multi-modal facilities during construction, and would result in a significant VMT impact due to the project's location in an area where VMT per unit is 0-5% above the citywide average. The impact to multi-modal facilities would be reduced with implementation of mitigation measure TRAFF-4 from the 2018 EIR, which requires a site plan to be submitted for each phase of a project to ensure safe and direct facilities for pedestrians, bicyclists, and transit riders. This mitigation measure would also apply to the Reduced Intensity Alternative. For the significant VMT impact, the project would be required to prepare a Transportation Demand Management (TDM) plan consistent with mitigation measure TRA-1 from the City's *General Plan Transportation Element and Energy Conservation Action Strategy Update Supplemental EIR* (City of Vacaville 2021). Nonetheless, because the project is not situated in a "VMT efficient" location and there are no means to accurately quantify VMT reductions that could result from implementation of the TDM measures, the impact would be significant and unavoidable. The Reduced Intensity Alternative would construct 23 fewer units than the proposed project which would result in less VMT. However, the project site would still be located in an area that does not meet the City's selected threshold of 15% below the citywide average baseline VMT per dwelling unit. Therefore, even with implementation of mitigation measure TRA-1, the VMT impact under the Reduced Intensity Alternative would remain significant and unavoidable, the same as the proposed project.

Relationship to the Project Objectives

The Reduced Intensity Alternative would fully meet the project objectives of completing planning for the area designated by the General Plan for future growth and initiated by the Specific Plan, developing a community reasonably served by existing and proposed infrastructure, implementing green building practices and providing all-electric homes, developing a private park, providing open space trails and traffic calming features, and providing for the extension of utilities and services. This alternative would also meet the project objectives of providing housing to accommodate regional growth and to achieve a positive fiscal impact, albeit to a lesser extent compared to the proposed project. This is because the Reduced Intensity Alternative would provide 23 fewer residential units (a 9.5% reduction), which lowers residential density and weakens the ability of the project to accommodate projected regional growth. While this alternative would satisfy all project objectives, it would not do so at the same extent as the proposed project.

Alternative 3: Affordable Housing Alternative

Description

The OPR Technical Advisory suggests screening thresholds to quickly identify when a project should be expected to cause a less-than-significant VMT impact without conducting a detailed study (OPR 2018). One of these screening thresholds is the presumption of a less-than-significant impact for an 100% affordable residential development (or the residential component of a mixed-use development) in infill locations. This is because adding affordable housing generally improves a job-housing match, which accordingly shortens commutes and reduces VMT. Lead agencies also may develop their own presumption of less-than-significant impacts for residential projects containing a particular amount of affordable housing, based on local circumstances and evidence. The City's VMT thresholds (evaluated in the *General Plan Transportation Element and Energy Conservation Action Strategy Update Supplemental EIR* [SCH No. 2020090526]) follow the recommendations of the OPR Technical Advisory and do not establish a different presumption for affordable housing projects (City of Vacaville 2021). Therefore, this Affordable Housing Alternative is proposed to address the significant and unavoidable VMT impact from the proposed project.

To feasibly provide units affordable to low-income residents, it is expected that residential density would need to be increased compared to the proposed project. The City has expressed a need for "missing middle" housing types not commonly found in the city, which include duplexes, fourplexes, and courtyard homes. Therefore, it is assumed that this alternative would still request the Residential Medium Density (RMD) zoning but would provide the maximum density allowed under this zoning (14 dwelling units per developable residential acre [du/acre]), compared to the proposed project which has an average density of 9.3 du/acre. This would increase the number of units from 241 to 344, an increase of 103 units. It is assumed these would be some type of attached duplexes to meet the increased density.

As discussed in Section 4.3, Land Use, the proposed project includes a minimum 300-foot-wide agricultural buffer along the eastern boundary of the site as required by General Plan Policy COS-P4.1; however, the project design includes non-open space uses such as roadways and side yard landscape setbacks within the buffer. Mitigation measure AG-2 is proposed which requires the project applicant to revise the open space area (within the 300-foot-wide agricultural buffer) to provide landscaping in order to provide a sufficient buffer between agricultural activities that can affect sensitive land uses. For this Affordable Housing Alternative, it is presumed that the increase in residential density would allow a project design that would only include open space uses within the 300-foot-wide agricultural buffer, which would further improve the interaction between agricultural activities that could affect residential uses, such as pesticide and particulate matter drifting across land uses. With only open space uses proposed within the 300-foot-wide buffer, the open space area would be 8.4 acres and the residential area (including the private park) would be 25.2 acres. It is assumed that the private park would remain 0.6 acres, therefore the developable residential acreage would be 24.6 acres. At the maximum density of 14 du/acre, there would be 344 units on 24.6 acres. Figure 5-1 provides a conceptual illustration of the land use allocation under this Affordable Housing Alternative.

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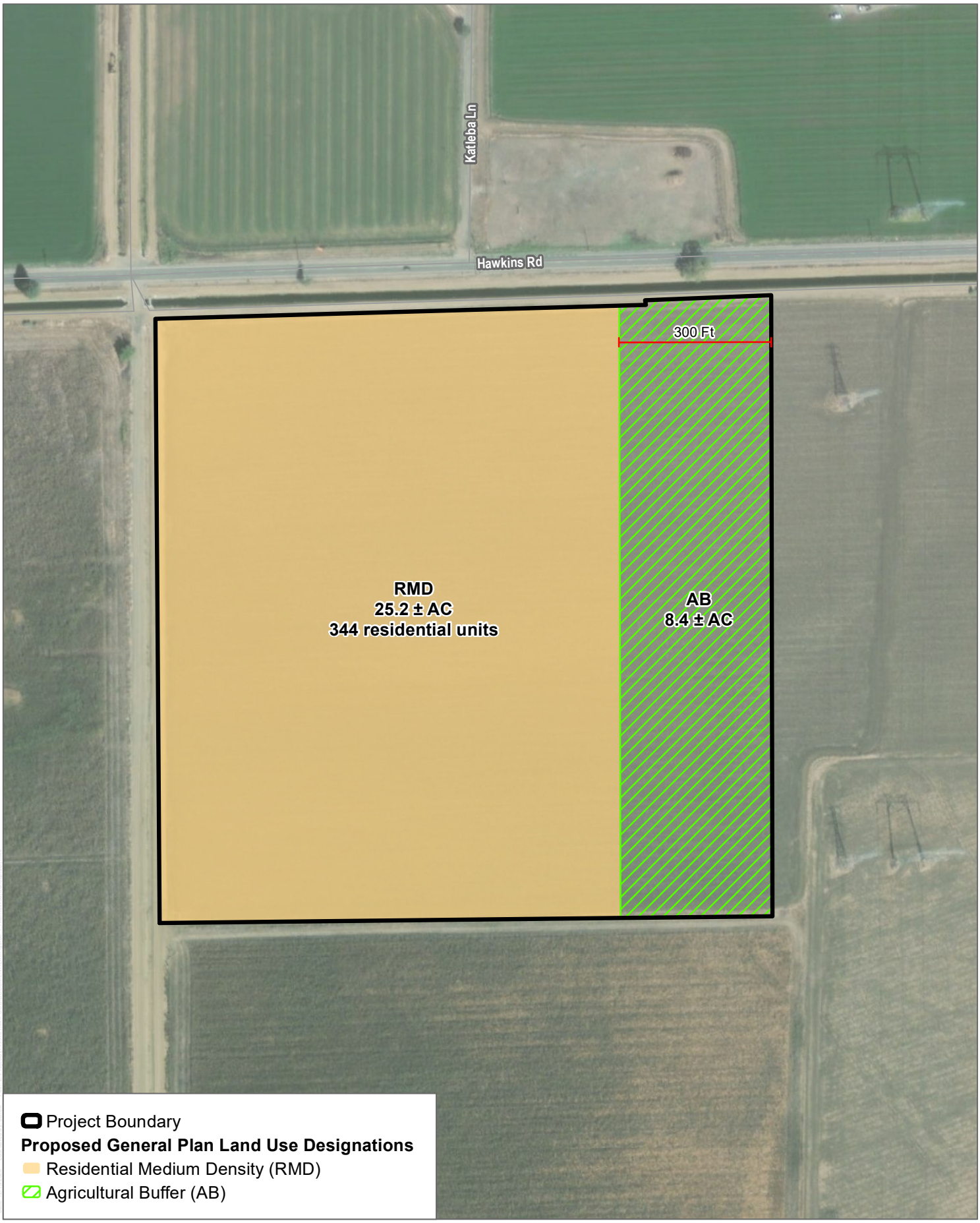

SOURCE: DigitalGlobe 2017, Open Street Map 2019, FRAP 2015

DUDEK

0 125 250 Feet

FIGURE 5-1

Alternative 3 (Conceptual)

Fields at Alamo Creek

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Comparative Analysis of Environmental Effects

As previously discussed, the 2018 EIR adequately evaluated impacts associated with the proposed project in the following issue areas: Aesthetics; Agriculture and Forestry Resources; Cultural and Tribal Cultural Resources; Geology, Soils, Seismicity; Mineral Resources; Hazards and Hazardous Materials; Greenhouse Gas Emissions; Hydrology and Water Quality; Noise; Population and Housing; and Wildfire. The Affordable Housing Alternative would not be sufficiently different from the proposed project such that it would not result in new significant impacts or more severe environmental impacts than what was stated in the 2018 EIR. For example, although the Affordable Housing Alternative would provide 103 more units than the proposed project, this alternative would still be designed as an all-electric development consistent with the adopted Energy and Conservation Action Strategy (ECAS). This alternative would also request a General Plan Amendment to allow for residential development in excess of the amount specified in Policy LU-P19.1, the same as the proposed project. There would be no additional significant impacts beyond what was identified in the General Plan EIR or 2018 EIR, given that the alternative would comply with state and local laws and regulations (including compliance with General Plan policies). Therefore, these issue areas are not further discussed in detail (see the Executive Summary for more detail on what was analyzed in the 2018 EIR). This comparative analysis instead focuses on the issue areas that were either not previously evaluated in the 2018 EIR or would be more severe than previously stated.

Air Quality. As discussed in Section 4.1, Air Quality, the proposed project (including both construction and operation) would not conflict with the applicable air quality plan, result in any cumulatively considerable net increases of criteria pollutants in the project region, or expose sensitive receptors to substantial pollutant concentrations. The Affordable Housing Alternative may result in greater construction and operation emissions than the proposed project because it would construct 103 more housing units. However, these housing units would be smaller, and construction would occur within a slightly reduced footprint (24.6 acres of developable residential land compared to 25.8 acres under the proposed project). Therefore, although the unit count would differ, the intensity of project construction would be similar to the proposed project. Operational impacts may be greater due to increased energy use from the 103 additional units, such as from space heating or stoves. However, as shown in Section 4.1, Table 4.1-5 on page 4.1-15, operational criteria air pollutant emissions from the proposed project would be well below the Yolo Solano Air Quality Management District (YSAQMD) thresholds, such that even a doubling of emissions (which would be more than from this alternative) would not exceed the thresholds. Therefore, impacts would remain less than significant (but slightly more severe than those of the proposed project).

Biological Resources. As discussed in Section 4.2, Biological Resources, the proposed project could potentially cause a substantial adverse effect on special-status wildlife species and potentially conflict with the Draft Solano HCP. Under the Affordable Housing Alternative, the open space/agricultural buffer area at the eastern project boundary would be 8.4 acres, compared to the 7.2 acres under the proposed project (although this would increase from compliance with mitigation measure AG-2). Overall, this alternative would result in similar impacts to biological resources since the loss of foraging value and disturbance from construction activities would primarily be attributed to the residential component of the project. This alternative would still be required to implement mitigation measures BIO-1c, BIO-1d, BIO-1f, and BIO-1g from the 2018 EIR in order to reduce impacts to less-than-significant levels.

Land Use. As discussed in Section 4.3, Land Use, the proposed project includes a 300-foot-wide agricultural buffer as required by General Plan Policy COS-P4.1 but would require landscaping under mitigation measure AG-2 to ensure a sufficient barrier between existing agricultural operations and future residential uses. This alternative is designed to incorporate only open space uses within the 300-foot-wide agricultural buffer, and therefore would not require mitigation measure AG-2 to ensure the impact is less than significant. This alternative would still require

compliance with mitigation measure AG-1 to ensure conservation of agricultural lands, the same as the proposed project. Therefore, impacts would remain less-than-significant with mitigation (but slightly less severe than the proposed project).

Utilities and Service Systems. As discussed in Section 4.4, Utilities and Service Systems, the proposed project would be adequately served by existing and planned water infrastructure and supply, wastewater and storm drain infrastructure and capacity, solid waste services, and dry utilities (electric power and telecommunications). The Affordable Housing Alternative would result in 103 more units than the proposed project (and accordingly, more new residents), therefore increasing demand on utilities and service systems. Using the demand factors in Section 4.4, this alternative would result in an increase of approximately 27,295 gallons per day (gpd) of water demand, 24,720 gpd of wastewater demand, and 1,726 pounds per day of solid waste generation compared to the proposed project.

According to the City's 2020 Urban Water Management Plan (UWMP), available water supplies would meet or exceed projected water demands from buildout of the General Plan, even during extended drought conditions. Although this alternative would result in more water demand than previously considered, the ability to support the City in extended drought years combined with future water initiatives (for example, the City's proposed recycled water project) demonstrates that there would likely be adequate water supply to accommodate this alternative. Likewise, it is anticipated that wastewater demand from this alternative could be accommodated by existing facilities. The Easterly Wastewater Treatment Plant treats an average of 7.5 million gallons per day (mgd) of wastewater and has a design capacity of 15 mgd. Given the remaining capacity of the EWWTP, there is sufficient capacity to accommodate the 24,720 gpd (or 0.02 mgd) additional wastewater demand from this alternative. Impacts to water supply and wastewater capacity would remain less than significant (although more severe than the proposed project).

Although there is existing water supply and wastewater treatment capacity, it is possible that this alternative would require water and/or wastewater conveyance systems larger than what was anticipated under the Specific Plan. This would need to be confirmed by an engineer and/or the City's Department of Public Works. Therefore, impacts regarding water and wastewater conveyance under the Affordable Housing Alternative could be potentially significant.

The Affordable Housing Alternative would develop 24.6 acres of the project site for residential development, slightly less than the 25.8 acres under the proposed project, but the increase in density could result in a greater proportion of impervious surfaces causing stormwater runoff. However, this alternative would construct a detention basin sized to accommodate anticipated runoff, similar to the proposed project. The applicant would also be required to pay development impact fees that fund necessary storm drainage improvements in accordance with General Plan Policy SAF-P3.2. Therefore, stormwater infrastructure impacts would be less than significant, similar to the proposed project.

This alternative would result in more solid waste generation than the proposed project, but it is anticipated that existing infrastructure would be able to accommodate the increase. As discussed in Section 4.4, the Hay Road Landfill is permitted to accept up to 2,400 tons of refuse per day and currently receives approximately 136,066 tons per year (an average of about 373 tons per day). The landfill also has a remaining capacity of 30.4 million cubic yards as of 2010. Therefore, impacts to solid waste capacity would remain less than significant (although more severe than the proposed project). The Affordable Housing Alternative would also comply with all applicable federal, state, and local solid waste regulations, the same as the proposed project.

Transportation. As discussed in Section 4.5, Transportation, the proposed project may result in significant interim or short-term impacts related to multi-modal facilities during construction. The impact to multi-modal facilities would be reduced with implementation of mitigation measure TRAFF-4 from the 2018 EIR, which requires a site plan to be submitted for each phase of the project to ensure safe and direct facilities for pedestrians, bicyclists, and transit riders. This mitigation measure would also apply to the Affordable Housing Alternative.

As previously discussed, the City's VMT thresholds follow the OPR Technical Advisory which allows presumption of a less-than-significant impact for an 100% affordable residential development. The Affordable Housing Alternative would therefore be considered to have a less-than-significant VMT impact and would not be required to prepare a TDM plan under mitigation measure TRA-1.

Relationship to the Project Objectives

The Affordable Housing Alternative would fully meet the project objectives of completing planning for the area designated by the General Plan for future growth that was initiated by the Specific Plan, implementing green building practices and providing all-electric homes, developing a private park, providing open space trails and traffic calming features, and providing for the extension of utilities and services. This alternative would also meet the project objectives of providing housing to accommodate regional growth and to achieve a positive fiscal impact to a greater extent as compared to the proposed project. This is because the Affordable Housing Alternative would provide 103 additional residential units (an approximately 43% increase), which increases residential density and allows the project to accommodate more regional growth. However, because this alternative may require greater water and/or wastewater conveyance than currently planned under the Specific Plan, it cannot be considered to satisfy the project objective of developing a community that can be reasonably served by existing and proposed infrastructure.

5.6 Environmentally Superior Alternative

CEQA Guidelines require that an EIR identify the environmental superior alternative (Section 15126.6 (e)(2)). If the environmentally superior alternative is the "No Project" Alternative, the EIR must identify an environmentally superior alternative from among the other alternatives. As shown in Table 5-1, the No Project/No Development Project is the environmentally superior alternative.

Section 15126.6(a) of the CEQA Guidelines states that alternatives should be designed to avoid or substantially lessen any of the *significant* effects of the project. Because the VMT impact was significant and unavoidable under the proposed project, a reduction in VMT impact is weighted more heavily than changes to other impacts when determining the environmentally superior alternative.

After the No Project/No Development Project Alternative, the next most environmentally superior alternative is Alternative 3, the Affordable Housing Alternative, which would avoid the significant and unavoidable VMT impact and would not require mitigation measure AG-2 to ensure a sufficient barrier between existing agricultural operations and future residential development. However, this Alternative would increase the severity of other impacts relative to the proposed project (but would not change significance determinations with the exception of Impact 4.4-1 related to water and wastewater conveyance, which would be potentially significant). Accordingly, this alternative would not achieve the project objective of developing a community that can be reasonably served by existing and proposed infrastructure. However, other project objectives would be fully achieved, including the objective of providing housing to accommodate regional growth, which would be achieved to a greater extent compared to the proposed project.

Table 5-1. Comparison of Impacts of Project Alternatives

Threshold Question	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Intensity	Alternative 3: Affordable Housing
4.1 Air Quality				
4.1-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	LTS	NI▼	LTS▼	LTS▲
4.1-2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	LTS	NI▼	LTS▼	LTS▲
4.1-3: Would the project expose sensitive receptors to substantial pollutant concentrations?	LTS	NI▼	LTS▼	LTS▲
4.2 Biological Resources				
4.2-1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	LTS with MM BIO-1c, -1d, -1f, -1g	NI▼	LTS with MM BIO-1c, -1d, -1f, -1g▼	LTS with MM BIO-1c, -1d, -1f, -1g(–)
4.2-2: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	LTS with MM BIO-1d, -1f	NI▼	LTS with MM BIO-1d, -1f▼	LTS with MM BIO-1d, -1f(–)
4.3 Land Use and Planning				
4.3-1: Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	LTS with MM AG-1, AG-2	NI▼	LTS with MM AG-1, AG-2(–)	LTS with MM AG-1▼
4.4 Utilities and Service Systems				
4.4-1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	LTS	NI▼	LTS▼	PS▲
4.4-2: Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future	LTS	NI▼	LTS▼	LTS▲

Threshold Question	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: Reduced Intensity	Alternative 3: Affordable Housing
development during normal, dry and multiple dry years?				
4.4-3: Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	LTS	NI▼	LTS▼	LTS▲
4.4-4: Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	LTS	NI▼	LTS▼	LTS▲
4.4-5: Would the project fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	NI	NI(–)	NI(–)	NI(–)
4.5 Transportation				
4.5-1: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	LTS with MM TRAFF-4	NI▼	LTS with MM TRAFF-4(–)	LTS with MM TRAFF-4(–)
4.5-2: Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	SU with MM TRA-1	NI▼	SU with MM TRA-1(–)	LTS▼
4.5-3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	LTS	NI▼	LTS(–)	LTS(–)
4.5-4: Would the project result in inadequate emergency access?	LTS	NI▼	LTS(–)	LTS(–)

Notes:
▲ Alternative is likely to result in greater impacts to issue when compared to proposed project.
(–) Alternative is likely to result in similar impacts to issue when compared to proposed project.
▼ Alternative is likely to result in reduced impacts to issue when compared to proposed project.
NI = No impact
LTS = Less-than-significant impact
PS = Potentially significant impact
SU = Significant and unavoidable impact
MM = Mitigation Measure

5.7 References

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6 Other CEQA Considerations

6.1 Introduction

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, this Supplemental Environmental Impact Report (SEIR) must also identify (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, (4) growth-inducing impacts of the proposed project, and (5) alternatives to the proposed project (evaluated in Chapter 5, Alternatives).

6.2 Significant Environmental Effects

The Executive Summary and Sections 4.1 through 4.5 of this SEIR provide a comprehensive identification of the proposed project's significant environmental effects, including the level of significance both before and after mitigation.

6.3 Significant and Unavoidable Environmental Impacts

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the proposed project on various aspects of the environment are discussed in detail in the technical sections contained in Chapter 4, Environmental Analysis, of this SEIR. There is one significant Transportation impact that cannot be mitigated to a less-than-significant level, so it remains significant and unavoidable. In addition, the project would contribute to the significant and unavoidable impacts identified in the General Plan EIR, as described in the Executive Summary. The remainder of the proposed project impacts can be mitigated to a less-than-significant level through the adoption of recommended mitigation measures.

6.4 Significant Irreversible Environmental Impacts

Section 15126.2 (c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental change that would be caused by the proposed project. Generally, a project would result in significant irreversible changes if:

- The primary and secondary impacts would generally commit future generations to similar uses (such as highway improvement that provides access to a previously inaccessible area);
- The project would involve a large commitment of nonrenewable resources (CEQA Guidelines Section 15126.2(c));
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Implementation of the proposed project would result in the long-term commitment of resources of the project site to urban land use. The development of the proposed project would likely result in or contribute to the following irreversible environmental changes:

- Conversion of undeveloped land, currently used for agriculture. Approximately 33.6 acres of undeveloped land would be converted to urban uses, thus precluding other alternate land uses in the future.
- Irreversible consumption of energy and natural resources associated with the future use of the site.

Development of the proposed project would result in the commitment of the project site to urban development, thereby precluding other uses for the lifespan of the project. Restoration of the site to pre-developed conditions would not be feasible, given the degree of disturbance, the urbanization of the area, and the level of capital investment.

Resources that would be permanently and continually consumed by project implementation include water, electricity, and fossil fuels. Wood products, asphalt, and concrete would be used in construction along with gas and diesel fuel. With respect to operational activities, compliance with all applicable state and local building codes, as well as mitigation measures, planning policies, and standard conservation features, would ensure that resources are conserved to the maximum extent possible. The proposed project would incorporate a number of sustainable practices that reduce the consumption of energy. Nonetheless, construction activities related to the proposed project would result in irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels, natural gas, and gasoline and diesel for automobiles and construction equipment.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by environmental accidents associated with the project. While the proposed project would result in the use, transport, storage, and disposal of minor amounts of hazardous materials during project construction and operation, as described in the Modified Initial Study (see Appendix B to the 2018 EIR), all such activities would comply with applicable local, state and federal laws related to the use, storage and transport of hazardous materials, which significantly reduces the likelihood and severity of accidents that could result in irreversible environmental damage. The proposed project itself does not include any uniquely hazardous uses that would require any special handling or storage. Further, the proposed project does not contain any industrial uses that would use or store acutely hazardous materials.

Implementation of the proposed project would result in the long-term commitment of resources to urban development. The most notable significant irreversible impacts would include the use of non-renewable and/or slowly renewable natural and energy resources, such as lumber and other forest products and water resources during construction activities. Operations associated with future uses would also consume electricity. These irreversible impacts, which are unavoidable consequences of urban growth, are described in detail in the appropriate sections of this EIR and the 2018 EIR.

6.5 Growth-Inducing Impacts

As required by Section 15126.2(d) of the CEQA Guidelines, an EIR must discuss ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, the EIR must discuss the characteristics of the project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, the stimulation of economic activity within the region, or the establishment of policies or other precedents that directly or indirectly

encourage additional growth. Under CEQA, this growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth would be considered a significant impact if it can be demonstrated that the potential growth, directly or indirectly, significantly affects the environment.

In general, a project could foster spatial, economic, or population growth in a geographic area if the project removes an impediment to growth (e.g., the establishment of an essential public service, the provision of new access to an area, or a change in zoning or General Plan amendment approval), or economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion). These circumstances are further described below.

- **Elimination of Obstacles to Growth:** This refers to the extent to which a proposed project removes infrastructure limitations or provides infrastructure capacity, or removes regulatory constraints that could result in growth unforeseen at the time of project approval.
- **Economic Effects:** This refers to the extent to which a proposed project could cause increased activity in the local or regional economy. Economic effects can include such effects as the "multiplier effect." A "multiplier" is an economic term used to describe interrelationships among various sectors of the economy. The multiplier effect provides a quantitative description of the direct employment effect of a project, as well as indirect and induced employment growth. The multiplier effect acknowledges that the on-site employment and population growth of each project is not the complete picture of growth caused by the project.

Elimination of Obstacles to Growth

The elimination of either physical or regulatory obstacles to growth is considered a growth-inducing effect, though not necessarily a significant one. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines into areas that are not currently provided with these services would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

Removal of Infrastructure Limitations or Provision of Capacity

The elimination of physical obstacles to growth is considered a growth-inducing effect, though not necessarily a significant one. The physical constraints to growth in the vicinity of the proposed project site include The Farm at Alamo Creek Specific Plan ("Specific Plan") to the west, the approved Brighton Landing Specific Plan project in the City of Vacaville (City) to the south, and the approved Roberts' Ranch Specific Plan also to the south.

The proposed project would connect to the planned Specific Plan infrastructure which was sized to serve future development at the proposed project site in the event the City received an application to develop and annex the site. The proposed project site is located in the City's planned Sphere of Influence (SOI) and is proposed for annexation. Undeveloped land in the County is located to the north and east of the proposed project site, which could feasibly be developed in the future. Land to the north of the proposed project site is included within the City's Urban Growth Boundary (UGB), Urban Services Boundary, and SOI, but does not include lands to the east. Lands to the east are within the County and according to the County's General Plan, these lands are designated for agricultural uses. The County does not have any infrastructure in this area to support development and at this time no development is proposed. The proposed project would not eliminate any constraints that are currently obstacles

to growth in this portion of the City, with the exception of extending utility infrastructure to serve the proposed project site.

As discussed in the General Plan EIR on pages 6-1 through 6-3, the General Plan includes specific policies that limit that growth to within the city limits and UGB. For example, policies under Goal LU-5 set forth the parameters of the UGB. The General Plan land use map provides a mixture of housing, shopping, public, and employment opportunities so that as the number of residents increase, they do not pressure adjacent communities to provide new commercial and employment opportunities. The General Plan commits to only allowing development where infrastructure is in place or is planned. In addition, the proposed General Plan discourages piecemeal development. Policy LU-P2.2 requires that specific plans be prepared for new areas brought into the city for development, and that they provide a coordinated plan for land use, public facilities, and public services. This policy also prohibits individual, piecemeal developments within these outlying areas. As a result, the General Plan EIR concluded the proposed General Plan policies would result in a less-than-significant indirect growth inducing impact. The proposed project is located within the UGB and would connect to the planned Specific Plan infrastructure, which was sized to accommodate future development at the proposed project site. The Specific Plan (and proposed amendments to the Specific Plan under this project) represent a coordinated vision for land use, public facilities, and public services to serve future residents from the proposed project, consistent with the above General Plan policies. The General Plan designates the site Urban Reserve anticipating future development; therefore, because the proposed project site was already assumed in the General Plan and would be considered planned development that would not result in an indirect growth-inducing impact.

Economic Effects

The proposed project would affect the local economy by the construction of new residences that would encourage people to live in Vacaville and would help encourage people to stay in the City to take advantage of proximity to local shops, restaurants, and other amenities in nearby downtown Vacaville.

Additional local employment can be generated through the multiplier effect, as discussed previously in this chapter. The multiplier effect tends to be greater in regions with larger, diverse economies due to a decrease in the requirement to import goods and services from outside the region. Two different types of additional employment are tracked through the multiplier effect. Indirect employment includes those additional jobs that are generated through the expenditure patterns of direct employment associated with the project. Indirect jobs tend to be in relatively close proximity to the places of employment and residence.

The multiplier effect also calculates induced employment. Induced employment follows the economic effect beyond the expenditures of the residents within the project area to include jobs created by the stream of goods and services necessary to support residences within the proposed project. When a manufacturer buys or sells products, the employment associated with those inputs or outputs are considered induced employment. For example, when an employee of the project goes out to lunch, the person who serves the employee lunch holds a job that is indirectly related to the proposed project. When the server then goes out and spends money in the economy, the jobs generated by this third-tier effect are considered induced employment.

The multiplier effect also considers the secondary effect of employee expenditures. Thus, it includes the economic effect of the dollars spent by those employees and residents who support the employees of the proposed project.

Increased future employment generated by employee spending ultimately results in physical development of space to accommodate those employees. It is the characteristics of this physical space and its specific location that will

determine the type and magnitude of environmental impacts of this additional economic activity. Although the economic effect can be predicted, the actual environmental implications of this type of economic growth are too speculative to predict or evaluate, since they can be spread throughout the City, Solano County, and beyond.

Impacts of Induced Growth

The growth induced directly and indirectly by the proposed project could contribute to environmental impacts in the City and the County as well as the greater regional area. Any such environmental effects, however, are too diffuse and speculative to predict or describe with any particularity.

Indirect and induced population growth in the City would further contribute to the loss of open space because it would encourage the conversion of undeveloped land to urban uses for additional housing and infrastructure. However, it is assumed this new growth would occur within areas of the City designated and zoned for development or planned for potential future urban development. Again, however, the particular open space that might get converted cannot be predicted with any certainty, all such conversions to urban land use would occur within areas planned for growth in the City's General Plan. Development of the property to the north of the project site would require a general plan amendment, compliance with the Urban Reserve Ordinance and would require environmental review under CEQA prior to approval.

In summary, although the proposed project can be said to induce growth, the consequences of such growth-inducement are too speculative to meaningfully predict and, furthermore, due to existing General Plan policies, would not result in a significant growth inducing impact. Growth-inducing effects are therefore considered less than significant.

6.6 Energy Usage

Measures intended to reduce unnecessary or inefficient use of resources or energy consumption are incorporated into the City's adopted Energy & Conservation Action Strategy (ECAS). Implementation of the proposed project, which is consistent with the General Plan and ECAS, would result in the commitment of limited, renewable resources such as lumber and water. In addition, development allowed by the General Plan would irretrievably commit nonrenewable resources for the construction and maintenance of buildings, infrastructure, and roadways. These non-renewable resources include mined materials such as sand, gravel, steel, copper, and other metals. The City recognized that buildout of the General Plan also represents a long-term commitment to the consumption of fossil fuels, natural gas, diesel and gasoline. Increased energy demands would be used for construction, lighting, heating, and cooling of residences, and transportation of people within, to, and from the proposed project site. General Plan Goals COS-10 and COS-11 and their associated policies and actions promote energy conservation, which would minimize or incrementally reduce the consumption of these resources. In addition, the ECAS includes measures to promote energy conservation and the development of renewable energy in Vacaville. In particular, Measure E-3 describes the implementation of an all-electric ordinance. The proposed project is an all-electric development that incorporates features designed to implement these measures and would not result in effects not addressed in the 2018 EIR.

6.7 Cumulative Impacts

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the proposed project. This assessment involves examining project-related effects on the environment in the context of

similar effects that have been caused by past or existing projects, and the anticipated effects of future projects. As indicated in the CEQA Guidelines, the discussion of cumulative impacts need not provide the same level of detail as project-related impacts. The discussion should be guided by "standards of practicality and reasonableness" (CEQA Guidelines Section 15130(b)). Although project-related impacts can be individually minor, the cumulative effects of these impacts, in combination with the impacts of other projects, could be significant under CEQA and must be addressed (14 CCR Section 15130(a)). Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable probable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself).

Cumulative Context

To ensure an adequate discussion of cumulative impacts is included in an EIR, CEQA allows the lead agency to use either a list of past, present, and probable future projects (including those projects outside of the control of the lead agency), or projections included in an adopted local, regional, or statewide plan like a general plan (CEQA Guidelines, Section 15130(b)(1)). The general cumulative impact context for evaluating cumulative impacts for the majority of the technical issue areas evaluated in Chapter 4 of this SEIR considers development projections identified in the City's General Plan or evaluates the potential loss of resources on a much broader, regional scale. The cumulative impact analyses in this SEIR thus do not rely on any list of specific pending, reasonably foreseeable development proposals in the general vicinity of the proposed project.

It is important to note that the basis of the cumulative analysis varies by technical area. For example, traffic-related air emissions and noise analyses assume development that is planned and/or anticipated in the City, as well as the surrounding unincorporated area, because each contributes to traffic on local and regional roadways that is quantifiable. Operational air quality impacts are evaluated against conditions in the City and surrounding areas within the air basin. The technical sections in Chapter 4 evaluate the proposed project's cumulative impacts at the end of the impacts analysis. The cumulative analysis in each of the technical sections evaluates the proposed project's contribution to the cumulative scenario. A description of the cumulative context for each issue area evaluated is included in the cumulative impacts at the end of each technical section of Chapter 4.

7 List of Preparers

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