

SECTION 4: CUMULATIVE EFFECTS

4.1 - Introduction

California Environmental Quality Act (CEQA) Guidelines Section 15130 requires the consideration of cumulative impacts within an EIR when a project’s incremental effects are cumulatively considerable. Cumulatively considerable means that “. . . the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” In identifying projects that may contribute to cumulative impacts, the CEQA Guidelines allow the use of a list of past, present, and reasonably anticipated future projects, producing related or cumulative impacts, including those which are outside of the control of the lead agency.

In accordance with CEQA Guidelines Section 15130(b), “. . . the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, the discussion need not provide as great [a level of] detail as is provided for the effects attributable to the project alone.” The discussion should be guided by standards of practicality and reasonableness, and it should focus on the cumulative impact to which the identified other projects contribute rather than on the attributes of other projects that do not contribute to the cumulative impact.

The Project’s cumulative impacts were considered in conjunction with other proposed and approved projects, as well as other probable future projects, in the Project vicinity. Table 4-1 provides a list of the other projects considered in the cumulative analysis. These projects were collected from surrounding jurisdictions’ planning department websites, including those located relatively close to the Project Site.

Table 4-1: Cumulative Projects

Jurisdiction	Project	Characteristics	Location	Status
Contra Costa County	Creekside Memorial Park Cemetery	Administrative offices/chapel building, indoor mausoleum; four outdoor mausoleums, storage building and corporation yard; one-acre site set aside for a possible future fire station, and several forms of landscaping	58.7 acres of 221.6-acre site at 7000 Camino Tassajara	Pending
	Alamo Creek Residential Development	Approximately 250 of 1,193 residences remain to be constructed	South of Camino Tassajara and west of Southern Site	Approved
Town of Danville	Podva Property Residential Development	20 single-family residences on 10 acres and 99 acres of permanent open space	End of Midland Way, Danville	Approved; under construction
	Danville Hotel	37,500 square feet of new residential, retail and restaurant space including 16 residential units	411 Hartz Avenue, Danville	Approved; under construction

Table 4-1 (cont.): Cumulative Projects

Jurisdiction	Project	Characteristics	Location	Status
Town of Danville (cont.)	Magee Ranch	70 single-family residences, 287 acres of open space	Southeast of Diablo Road and Green Valley/McCauley Road	Approved; unbuilt
	Tyler Court	Six single family residences on 2.48 acres	853 Diablo Road	Complete
	Weber Property	22 single family residences on 15 acres	Weber Lane	Complete
City of San Ramon	Walgreens	14,400-square-foot pharmacy	11440 Windermere Parkway	Pending
City of Dublin	The Groves	930 residential units	Dublin Boulevard/Keegan Street	Approved; under construction
	The Terraces	626 dwelling units	Dublin Boulevard/Keegan Street	Approved; under construction
	East County Hall of Justice	196,213 square feet courthouse	Hacienda Drive/Gleason Drive	Approved; under construction
	Grafton Plaza Mixed Use	235 dwelling units; 496,000 square feet mixed uses	Dublin Boulevard/Grafton Drive	Approved; unbuilt
	Grafton Station Phase III	133,446 square feet commercial	Dublin Boulevard/Tassajara Road	Approved; unbuilt
	Kaiser Dublin Medical Center	1.2 million square feet of medical campus and commercial uses on 58.7 acres.	Dublin Boulevard/Lockhart Street	Pending
Source: Town of Danville, City of San Ramon, City of Dublin				

4.2 - Cumulative Impact Analysis

The cumulative impact analysis below is guided by the requirements of CEQA Guidelines Section 15130. Key principles established by this section include:

- A cumulative impact only occurs from impacts caused by the proposed Project and other projects. An EIR should not discuss impacts that do not result from the proposed Project.
- When the combined cumulative impact from the increment associated with the proposed Project and other projects is not significant, an EIR need only briefly explain why the impact is not significant; detailed explanation is not required.

- An EIR may determine that a project's contribution to a cumulative effect impact would be rendered less than cumulatively considerable if a project is required to implement or fund its fair share of mitigation intended to alleviate the cumulative impact.

The cumulative impact analysis that follows relies on these principles as the basis for determining the significance of the Project's cumulative contribution to various impacts.

4.2.1 - Aesthetics, Light, and Glare

The geographic scope of the cumulative aesthetics, light, and glare analysis is the area surrounding the Project Site. This is the area within view of the Project, and, therefore, the area most likely to experience changes in visual character or experience light and glare impacts.

The Project's urban development would be limited to the southwest corner of the Northern Site adjacent to existing urban development in an area of relatively minimal topographical relief, avoiding adjacent hilltops to the north. As a result of its location, the Project would not significantly impact views of scenic ridgelines or views seen from scenic ridgelines. The residential development would include Craftsman, Spanish, European Cottage, and Traditional architectural styles in a mixture of one- and two-story buildings with incorporated landscaping similar to surrounding urban development. The Project would result in a different visual character in the Residential Development Area of the Northern Site; however, it would not be considered substantially degraded because (as explained more fully in Section 3.1, Aesthetics) the residential uses would be consistent with the aesthetic of the existing residential and urban character of the areas to the west, southwest, and south. Furthermore, the vast majority of the Project Site would be permanently protected and preserved for park, recreational, open space, scenic, grazing, wetlands, and habitat mitigation purposes, which would help ensure the continued protection of these lands as aesthetic resources.

The Project would include sources of lighting on the Northern Site including street lights, exterior and interior residential lighting, and vehicular headlights. Sources of glare would include reflective building materials, primarily limited to windows, and potentially rooftop solar panels installed by future residents. Residential lighting and glare would be consistent with that of adjoining residential areas. In accordance with Ordinance Code 76-4.612, all on-site lighting fixtures would be installed, controlled, or directed so that light would not spill onto adjoining properties, produce glare, or be blinding to pedestrians or vehicular traffic.

Projects listed in Table 4-1 are not generally within view of the Project, and, therefore, the Project's impacts as these relate to aesthetic resources would not combine with other relevant cumulative projects. Furthermore, other projects that involve the installation of new exterior lighting fixtures or glare would be required to implement similar measures to prevent light spillage. Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to aesthetics, light, and glare.

4.2.2 - Agricultural Resources

The geographic scope of the cumulative agricultural resources analysis is the County of Contra Costa. According to the Contra Costa County General Plan, the dominant trend in agricultural acreage that

is due to the increase in urbanization has decreased since the 1940s, thereby resulting in an existing cumulatively significant impact related to loss of farmland.

The Project Site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance under FMMP or Prime Farmland under LAFCO law. The Project Site is zoned Exclusive Agriculture (A-80) by the Contra Costa County Ordinance Code and would be rezoned to a P-1 zone that would allow existing agricultural operations to continue on all portions of the Project Site outside of the Residential Development Area. As evaluated more fully in Section 3.2 (Agricultural Resources), the Project could result in the conversion of lands from Farmland of Local Importance to non-agricultural uses such as parking, recreation, open space, scenic, wetland preservation and creation, and habitat mitigation; however, this is not considered a significant impact under CEQA. Furthermore, because the vast majority of the Project Site would be permanently preserved for open space, agricultural (i.e., grazing), park, recreational and other non-urban uses, this helps to ensure that the Project would not trigger the conversion of other agricultural lands to non-urban uses, and the Project's contribution to the existing cumulatively significant impact related to loss of farmland would not be cumulatively considerable. Other projects in Table 4-1 may result in the conversion of agricultural lands and would be expected to mitigate for such impacts accordingly.

4.2.3 - Air Quality/Greenhouse Gas Emissions

The geographic scope of the cumulative air quality and greenhouse gas emissions analysis is the San Francisco Bay Area Air Basin, which covers all or portions of the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano. Air quality is impacted by topography, dominant air flows, atmospheric inversions, location, and season; therefore, using the Air Basin represents the area most likely to be impacted by air emissions. As discussed more fully in Section 3.3 (Air Quality/Greenhouse Gas), air quality impacts are inherently cumulative in nature.

The Project would not achieve the per capita annual GHG emissions threshold of 4.6 MTCO₂e/SP/yr established by BAAQMD even after the application of all feasible mitigation measures. This represents an inconsistency with the GHG Reduction Goal of BAAQMD's Clean Air Plan, which is addressed below. In all other respects, the Project was found to be consistent with the Bay Area Air Quality Management District's (BAAQMD's) Clean Air Plan with the incorporation of mitigation.

The Project would result in new air emissions related to construction fugitive dust that could contribute to the violation of BAAQMD air quality standard violations. Mitigation is proposed, requiring the implementation of fugitive dust reduction measures during construction. Other projects listed on Table 4-1 would also have the potential to emit construction fugitive dust and would similarly be required to implement applicable mitigation. However, because the Project would mitigate its fugitive dust emissions to a less than significant level, it would not make a cumulatively considerable contribution to any related cumulatively significant impact.

All of the projects listed in Table 4-1 would result in new air emissions, during construction or operations (or both). The Project would emit construction criteria pollutant emissions at levels that would exceed the BAAQMD thresholds. Mitigation is proposed requiring off-road diesel-powered construction equipment with greater than 50 horsepower to meet EPA Tier 4 off-road emission standards. Implementation of this mitigation would reduce construction criteria pollutant emissions

to below BAAQMD thresholds. Other projects that exceed BAAQMD thresholds would also be required to mitigate their impacts. Because the Project would mitigate its construction criteria pollutant emissions to a less than significant level, it would not contribute to related cumulatively significant impacts.

The Project may have the potential to expose sensitive receptors to construction-generated diesel particulate matter. Mitigation is proposed requiring off-road diesel-powered construction equipment with greater than 50 horsepower to meet EPA Tier 4 off-road emission standards, thereby reducing diesel generated particulate matter. Other projects listed on Table 4-1 would also have the potential to expose sensitive receptors to pollutants, and would similarly be required to implement applicable mitigation. Impacts to sensitive receptors tend to be localized, and would likely not combine with the emissions of projects listed in Table 4-1 to create cumulatively significant impacts to any sensitive receptor, due to their distance from the Project site. Furthermore, because the Project would mitigate its diesel particulate matter emissions to a less than significant level, it would not make a cumulatively considerable contribution to any related cumulatively significant impact.

As discussed more fully in Section 3.3 (Air Quality/Greenhouse Gas), greenhouse gas emissions-related impacts are inherently cumulative in nature. The Project would emit new greenhouse gas emissions. Other projects listed in Table 4-1 would also emit new greenhouse gas emissions. The Project's construction and operational greenhouse gas emissions would exceed the BAAQMD's annual MTCO₂e threshold. Mitigation is proposed requiring the implementation of greenhouse gas emission reduction measures; however, there is uncertainty regarding whether emissions would be reduced to below BAAQMD thresholds, and, therefore, potential impacts remain significant and unavoidable. Other projects would also be required to demonstrate whether they exceed greenhouse gas thresholds and, if need be, mitigate their impacts to the extent feasible. However, because it cannot be demonstrated that the Project could reduce greenhouse gas emissions to below BAAQMD thresholds, it would have a cumulatively significant impact associated with greenhouse gas emissions.

All other Project-related air quality and greenhouse gas impacts were found to be less than significant and did not require mitigation (e.g., objectionable odors and greenhouse gas reduction plan consistency). Other projects that result in similar impacts would be required to mitigate for their impacts. Because the Project would not result in significant impacts to objectionable odors and greenhouse gas reduction plan consistency, it would not have a cumulatively significant impact with respect to these impact areas.

4.2.4 - Biological Resources

The geographic scope of the cumulative biological resources analysis is the Project vicinity. The Project Site is located in an area characterized by both urban and rural development and infrastructure. Adjacent urban habitats tend to be characterized as highly disturbed, thereby localizing impacts. Adjacent rural habitats are somewhat disturbed by rural residential and agricultural uses but still have the potential to provide habitat continuity. Recent development patterns and growth in the area that are due to the loss of potential habitat for rare species have resulted in an existing cumulatively significant impact to biological resources.

As evaluated more fully in Section 3.4 (Biological Resources), the Project has the potential to have significant impacts on the following special-status plant and wildlife species: Congdon's tarplant, San Joaquin spearscale, California tiger salamander, California red-legged frog, San Joaquin kit fox, burrowing owl, American badger, Alameda whipsnake, western pond turtle, nesting raptors, nesting birds and common birds, Yuma myotis, pallid bat, greater western mastiff bat, western red bat, and Townsend's big eared bat. Mitigation Measures BIO-1a through BIO-1k are proposed, requiring appropriate surveys, avoidance, and, if needed, implementation of relocation measures. The required mitigation would reduce the Project's contribution to any significant cumulative impact on special-status wildlife species to less than cumulatively considerable. Some of the other projects listed in Table 4-1 are located on sites with similar biological attributes and, therefore, would be required to mitigate for impacts on special-status plant and wildlife species in a manner similar to the Project.

The Project would result in impacts to waters of the United States/State. Mitigation Measure BIO-3 is proposed, requiring the applicant to obtain appropriate permits, and compensate for loss of waters of the United States/State through re-creation or payment of mitigation credits. Other projects listed in Table 4-1 may be located on sites with waters of the United States/State and, therefore, would be required to mitigation for impacts in a manner similar to the Project. As such, the Project, in conjunction with other projects, would not have a cumulatively significant impact on waters of the United States/State.

The Project would require the removal of 19 protected trees. Mitigation Measure BIO-5 would require implementation of the County's tree ordinance and protection of preserved trees. Other projects listed in Table 4-1 may require the removal of trees, but would be required to implement the applicable jurisdiction's regulations regarding tree removal. As such, the Project, in conjunction with other projects, would not have a cumulatively significant impact related to consistency with the County's tree ordinance.

All other Project-related biological resource impacts were found to be less than significant and did not require mitigation (e.g., riparian habitat, wildlife corridors and nursery sites, and conservation plans). Other projects that result in such impacts would be required to mitigate for their impacts. Because the Project would not result in significant impacts to riparian habitat, wildlife corridors, nursery sites, or conservation plans, it would not have a related cumulatively significant impact.

Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to biological resources.

4.2.5 - Cultural Resources

The geographic scope of the cumulative cultural resources analysis is the Project vicinity. Cultural resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the Project Site itself, the area near the Project Site would be the area most affected by project activities (generally within a 500-foot radius).

Although there is the possibility that previously undiscovered resources could be encountered by earthwork activities on the Project Site, the implementation of standard construction mitigation measures would ensure that undiscovered cultural resources are not adversely affected by Project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources in the Project vicinity. Standard construction monitoring and, if necessary, avoidance or recovery procedures would be required for any project with the potential to adversely affect cultural resources. Other projects would be required to implement similar construction mitigation.

Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to cultural resources.

4.2.6 - Geology, Soils, and Seismicity

The geographic scope of the cumulative geology, soils, and seismicity analysis is the Project vicinity. Adverse effects associated with geologic, soil, and seismic hazards tend to be localized, and the area near the Project Site would be the area most affected by Project activities (generally within a 0.25-mile radius).

The Project would have the potential to be exposed to liquefaction and landslide if on-site soils are not properly remediated. Mitigation Measure GEO-1 requires the Project applicant to prepare a design-level geotechnical investigation and implement compliance with the latest adopted edition of the California Building Standards Code's geologic, soils, and seismic requirements. Other projects listed in Table 4-1 may be exposed to similar seismic hazards and, therefore, would be expected to implement similar mitigation measures. As such, the Project, in conjunction with other projects, would not have a cumulatively significant impact associated with seismic hazards.

Regarding soil erosion, development activities could lead to increased erosion rates on site soils, which could cause unstable ground surfaces and increased sedimentation in nearby streams and drainage channels. Implementation of the Project's National Pollutant Discharge Elimination System permit, Storm Water Pollution Prevention Plan, and best management practices, as well as the design-level geotechnical investigation required under MM GEO-1 would ensure that earthwork activities do not result in substantial erosion off-site. Other projects in the vicinity would be similarly required to implement design-level geotechnical studies and permitting. As such, the Project, in conjunction with other projects, would not have a cumulatively significant impact associated with soil erosion.

The Project Site is identified as containing past landslides. Detailed information on the location, extent, and depth of any required landslide remediation would be provided on the Project's corrective grading plans when final grading plans are available for review. Implementation of Mitigation Measure GEO-1 would ensure that such recommendations are implemented and reduce potential impacts from landslides. Other projects listed in Table 4-1 may be similarly exposed to potential landslide areas and would be expected to implement similar mitigation measures. As such, the Project, in conjunction with other projects, would not have a cumulatively significant impact associated with landslides.

Finally, the Project Site contains native soils that have moderate to high plasticity, and moderate to critically high expansion potential. Mitigation Measure GEO-1 requires the Project applicant to prepare a design-level geotechnical investigation and implement compliance with the latest adopted edition of the California Building Standards Code's geologic, soils, and seismic requirements. Some or all of the other projects listed in Table 4-1 would be exposed to expansive soil hazards and, therefore, would be expected to implement similar mitigation measures. As such, the Project, in conjunction with other projects, would not have a cumulatively significant impact associated with expansive soils.

Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to geology, soils, and seismicity.

4.2.7 - Hazards and Hazardous Materials

The geographic scope of the cumulative hazards and hazardous materials analysis is the Project vicinity. Adverse effects of hazards and hazardous materials tend to be localized; therefore, the area near the Project Site would be most affected by Project activities.

The Project Site contains structures that have the potential to contain hazardous buildings materials such as asbestos-containing materials and lead-based paint. Mitigation Measure HAZ-1 would require testing and appropriate removal of such substances if the structures are to be demolished. Other projects in Table 4-1 may also require demolition of buildings containing hazardous materials and would be expected to implement similar mitigation. As such, the Project, in conjunction with other projects, would not have a cumulatively significant impact associated with hazardous building materials.

All other Project-related hazards and hazardous material impacts were found to be less than significant and did not require mitigation (e.g., risk of upset, hazards in proximity to schools, hazardous materials site listing, and wildland fires). Other projects that result in such impacts would be required to mitigate for their impacts. Because the Project would not result in significant impacts related to risk of upset, hazards in proximity to schools, hazardous materials site listing, and wildland fires, it would not have a related cumulatively significant impact.

Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to hazards and hazardous materials.

4.2.8 - Hydrology and Water Quality

The geographic scope of the cumulative hydrology and water quality analysis is the Project vicinity, generally areas within 0.5 mile of the Project Site. Hydrologic and water quality impacts tend to be localized; therefore, the area near the Project Site would be most affected by Project activities.

The Project would involve short-term construction and long-term operational activities that would have the potential to degrade water quality in downstream water bodies. Mitigation Measure HYD-1 is proposed and would require implementation of various construction and operational water quality control measures that would prevent the release of pollutants into downstream waterways. The required mitigation would reduce the Project's contribution to any significant cumulative water

quality impact to less than cumulatively considerable. Other projects that propose new development would be required to implement similar mitigation measures in accordance with adopted regulations. The combined implementation of construction and operational water quality measures among the various development projects listed in Table 4-1 would be expected to reduce any related cumulative impacts.

All other Project-related hydrology impacts were found to be less than significant and did not require mitigation (e.g., groundwater, drainage, and flood hazards). Other projects that result in related impacts would be required to mitigate for their impacts. Because all other project-related hydrology impacts are less than significant, the Project would not have a cumulatively considerable contribution to any significant cumulative impact.

Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to hydrology and water quality.

4.2.9 - Land Use

The geographic scope of the cumulative land use analysis is the Project vicinity within the County of Contra Costa. Land use decisions are made at the County level; therefore, Contra Costa County is an appropriate geographic scope.

Development projects in Contra Costa County would be required to demonstrate consistency with all applicable Contra Costa County General Plan and Ordinance Code requirements. This would ensure that these projects comply with applicable planning regulations. Those projects listed in Table 4-1 that have been previously approved have been deemed consistent with all applicable General Plan (as amended) and Ordinance Code requirements. (Projects located outside the Contra Costa County, or within incorporated cities or towns within Contra Costa County would have been deemed consistent with the applicable General Plan and Ordinance Code requirements of that jurisdiction.) For pending projects, the lead agency would be required to issue findings demonstrating consistency with the applicable General Plan and Ordinance Code requirements if they are ultimately approved.

With the proposed General Plan amendment and rezoning, the Project would be consistent with the Contra Costa County General Plan and Ordinance Code. Changing the ULL by 30 acres to include the Residential Development Area to the Urban Limit Line would require approval pursuant to Ordinance Code Chapter 82-1 (65135 Land Preservation Plan). In addition, the Project would be required to be consistent with applicable LAFCO policies regarding annexation into the Central Contra Costa Sanitary District and East Bay Municipal Utility District (EBMUD). Finally, the Project would be required to be consistent with EBMUD policies regarding annexation should EBMUD's Board of Supervisors choose to annex the Residential Development Area to provide water to the Project Site.

Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to land use.

4.2.10 - Noise

The geographic scope of the cumulative noise analysis is the Project vicinity, including surrounding sensitive receptors. Noise impacts tend to be localized; therefore, the area near the Project Site (approximately 0.25 mile) would be the area most affected by Project activities.

The Project's construction noise levels may cause a temporary substantial increase in noise levels at nearby receptors. Mitigation Measure NOI-1 is proposed that would require implementation of construction noise attenuation measures to reduce noise levels. Other projects listed in Table 4-1 that would expose nearby sensitive receptors to excessive construction noise would be required to implement similar mitigation. Nonetheless, because construction noise is a localized phenomenon, the properties of noise are not additive, and because construction activity noise may not overlap temporally due to distance, the Project would not contribute to a cumulatively significant construction noise impacts.

Residences proposed within 216 feet of the centerline of Camino Tassajara may be exposed to interior noise levels in excess of acceptable standards (45 dBA L_{dn}) when windows or doors are open. Mitigation Measure NOI-2 is proposed that would require such residences to include an alternate form of ventilation, such as an air conditioning system, in order to ensure that windows can remain closed for a prolonged period of time. Other projects listed in in Table 4-1 that would expose persons to unacceptable interior noise levels would be expected to implement similar mitigation. Nonetheless, because exposure to on-site noise is a localized, the Project would not contribute to a cumulatively significant operational noise impact.

The Project's construction and operational vibration levels would not exceed annoyance thresholds. Because vibration is a highly localized phenomenon, there would be no possibility for vibration associated with the Project to combine with vibration from other projects because of their distances from the Project Site. Therefore, the Project would not contribute to a cumulatively significant vibration impact.

The Project's vehicular trips would not make a substantial incremental contribution to ambient noise levels under Existing with Project and Cumulative with Project conditions. These noise levels account for existing vehicle trips as well as vehicle trips from future projects. In addition, other projects would be required to evaluate off-site roadway noise and, if necessary, mitigate for such impacts pursuant to local regulations. Finally, because most of the other projects listed in Table 4-1 are more than 1 mile from the Project Site, vehicular trips would be unlikely to add to roadway noise levels in the Project vicinity. Thus, the Project would not combine with other projects to cause a cumulatively considerable increase in ambient roadway noise.

Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to noise.

4.2.11 - Public Services and Recreation

The geographic scope of the cumulative public services and recreation analysis is the service area of each of the providers serving the Project. Because of differences in the nature of the public service and recreation topical areas, they are discussed separately.

Fire Protection and Emergency Medical Services

The geographic scope of the cumulative fire protection and emergency medical services analysis is the San Ramon Valley Fire Protection District's service area, which consists of the communities of Alamo and Blackhawk; the Town of Danville; Diablo; the City of San Ramon; and the southern area of Morgan Territory and the Tassajara Valley.

The Project would result in the development of 125 residences and associated infrastructure, two trail staging areas, and a pedestrian/equestrian trail on the Northern Site. The Project Site is located across the street from the nearest fire station and is within an acceptable response time for fire protection. As such, the Project would not create a need for new or expanded fire protection facilities and would not result in a physical impact on the environment. Additionally, the Project would comply with all applicable requirements of the California Fire Code, including provision of adequate emergency access points, and it would be accessible to fire apparatus. Other development projects in the Fire District service area would similarly be reviewed for impacts on fire protection and emergency medical services and would be required to address any potential impacts with mitigation. Demand for fire protection and emergency medical services is highly dependent on a number of factors that vary substantially by project (hours of operation, fire prevention measures, occupancy by sensitive populations, etc.). Therefore, it is unlikely that there would be substantial overlap in demand between projects in Table 4-1 and the Project that would result in a cumulatively significant impact such that new facilities are necessary. Therefore, the Project, in conjunction with other future projects, would not have a cumulatively significant impact related to fire protection and emergency medical services.

Law Enforcement

The geographic scope of the cumulative police protection analysis is the service area of the Contra Costa County Sheriff's Office local service areas, which consists of unincorporated areas of Contra Costa County.

The Project would result in the development of 125 residences, two trail staging areas, and a pedestrian/equestrian trail on the Northern Site. The future on-site residential population of 375 persons would represent less than 1 percent of the population that currently is served by the Sheriff's Office. Use of the staging areas and trail and any potential calls for service would similarly be expected to represent a very small percentage of existing law enforcement services. As such, the Project would not create a need for new or expanded law enforcement facilities and would not result in a physical impact on the environment. Other development projects within the service area of the Sheriff's Office would be reviewed for impacts on law enforcement services and would be required to address any potential impacts with mitigation. Because demand for law enforcement services is highly dependent on a number of factors that vary substantially by project (clientele, hours of operation, crime prevention measures, etc.), it is unlikely that there would be substantial overlap in demand that would result in a cumulatively significant impact such that new facilities are necessary. Therefore, the Project, in conjunction with other future projects, would not have a cumulatively significant impact related to law enforcement services.

School

The geographic scope of the cumulative school services analysis is the service area of the San Ramon Valley Unified School District (SRVUSD), which consists of the communities of Alamo, Blackhawk, Danville, Diablo, and San Ramon as well as a small portion of the cities of Walnut Creek and Pleasanton.

The Project's 125 new single-family homes are expected to generate approximately 121 total new students. While the Project alone is unlikely to result in a need for new or expanded district facilities, when coupled with other residential development projects and population growth in the Project vicinity, the Project could incrementally contribute to the need for additional district resources. To help offset the construction or expansion of facilities, the procurement of equipment, and the hiring and training of additional personnel, the SRVUSD collects mandatory school facility fees on new development projects in accordance with Senate Bill 50 and related state laws. As part of the Project entitlement process, the Project applicant would be responsible for paying its fair share of these school facility fees. Other projects in the District would also be required to pay school facility fees. As such, the Project, in conjunction with other future projects, would not have a cumulatively significant impact related to school services.

Other Public Facilities (Libraries)

The geographic scope of the cumulative other public facilities analysis is the service area of the Contra Costa County Libraries within proximity of the Project, which include the Danville Library, San Ramon Library, and Dougherty Station Library.

The Project's potential increase of 375 residences would not be expected to require new or substantially altered library facilities. As such, the Project would not create a need for new or expanded library facilities and would not result in a physical impact on the environment. Other projects in Table 4-1 may also result in the increase in library use, but would similarly be required to pay development fees. As such, the Project, in conjunction with other future projects, would not have a cumulative significant impact related to library services.

Park and Recreation Facilities

The geographic scope of the cumulative parks and recreation analysis consists of the local and regional parks in the Project vicinity.

The 125 residential units would be expected to result in a population of 375 persons, resulting in the need for 1.125 acres of park to assist in achieving the County's parkland goal. The Project would satisfy the county parkland requirement by the conveyance of 1.84 acres to EBRPD on the Northern Site; consisting of the Future Equestrian Staging area (1.25 acres), Pedestrian Staging area (0.19 acres) and the trail (0.40 acres). In addition, approximately 609 acres of the Project Site would be conveyed to the East Bay Regional Park District (EBRPD) for open space, park, recreational and other non-urban uses. In addition, the Project applicant would fund and construct the Pedestrian Staging Area for the benefit of EBRPD, which would facilitate public access and use of the Preservation Area on the Northern Site. Further, the applicant would dedicate the lands for the Future Equestrian Staging Area as well as a perpetual easement for the proposed trail alignment. Any potential future

recreational facility development proposed by the EBRPD is not a component of this Project and, if pursued, would be required to undergo additional CEQA review, as applicable, to ensure that future recreational development would not result in adverse environmental impacts. As such, the Project would not result in the off-site construction of new or expanded existing park facilities and would not result in a physical impact on the environment. Other projects listed in Table 4-1 would similarly be required to provide parkland or pay in-lieu fees to assist in achieving the County's parkland goal. As such, the Project, in conjunction with other future projects, would not have a cumulative significant impact related to park facilities.

4.2.12 - Transportation

The geographic scope of the cumulative transportation analysis is the Project vicinity and selected transportation facilities as listed in Section 3.12, Transportation and Traffic. As discussed in Section 3.12, two roadway segments and four freeway segments currently operate at an unacceptable LOS, and, therefore, there is an existing cumulatively significant transportation impact related to these roadway facilities. Because of compliance with County standards and other regulatory requirements, there are no existing cumulatively significant impacts related to other transportation areas (air traffic patterns, emergency access and roadway safety hazards and public transit, bicycles and pedestrians).

The Project would result in a net increase of 1,632 (weekday) daily trips, including 204 trips during the weekday morning peak hour and 161 trips during the weekday afternoon peak hour. The Project would contribute trips to freeway segments already operating below acceptable LOS standards. In addition, the Project would cause intersections on Camino Tassajara to operate below acceptable LOS standards. With the implementation of mitigation, impacts to Camino Tassajara would be reduced to less than significant. However, mitigation requiring the payment of applicable Tri-Valley Transportation Development fees would not fully mitigate the Project's contribution to unacceptable LOS on impacted freeway segments in the Existing, Near-Term, or Cumulative Plus Project scenarios.

Projects listed in Table 4-1 would also generate new vehicle trips that may trigger or contribute to unacceptable intersection, roadway, and freeway operations. All projects would be required to mitigate for their fair share of impacts. However, similar to the Project, other projects may contribute to unacceptable LOS standards on freeway segments. Therefore, the Project, in conjunction with other projects, would result in a cumulatively significant impact to unacceptable freeway operations.

Similarly, because of the Project's contribution to unacceptable LOS on freeway segments, the Project would conflict with the applicable Congestion Management Plans (CMPs), which establish the freeway LOS standards. Other projects listed in Table 4-1 that contribute trips to the identified freeway segments would also conflict with the CMPs. Therefore, the Project, in conjunction with other projects, would result in a cumulatively significant impact regarding CMP consistency.

For other transportation-related areas (air traffic patterns; emergency access and roadway safety hazards; and public transit, bicycles, and pedestrians), the Project would have potentially significant impacts on roadway safety, but after the implementation of mitigation, these impacts would be reduced to a level of less than significant. Other projects that result in similar impacts would be

required to mitigate for their impacts. Because the Project can mitigate all other transportation impacts to a level of less than significant, it would not have a related cumulatively significant impact with respect to these other topics.

4.2.13 - Utilities

The geographic scope of the cumulative utilities analysis is the service area of each of the providers serving the Project. Because of differences in the nature of the utility service areas, they are discussed separately.

Water

The geographic scope of the cumulative potable water analysis is the EBMUD service area, which covers approximately 331 square miles from northern Contra Costa County south to Hayward and from San Francisco east to Walnut Creek and the San Ramon Valley.

The Project is estimated to demand approximately 48 acre-feet of water annually. As indicated in Section 3.13, Utilities and Service Systems, the Project applicant seeks to have EBMUD play a role in implementing the Project's water strategy (subject to EBMUD Board's discretion). In any case, water supplies provided to the Project Site would be in addition to current EBMUD water supplies, resulting from either the transfer of Calaveras Public Utility District (CPUD) water to EBMUD or augmenting the availability of potable water from EBMUD by accelerating currently planned conservation and/or expanding conservation beyond currently planned levels within EBMUD's service area by an amount sufficient to offset the Proposed Project's water demand. Either water supply would be sufficient to serve the Project, as evaluated more fully in Section 3.13 (Utilities and Service Systems).

Because the Project is not currently located within the service area of any existing public water system, and there are no other existing or future customers, water availability for existing EBMUD and CPUD customers and planned future land uses would remain unchanged from conditions otherwise planned. Furthermore, in order to secure service, the Project would be required to demonstrate that its proposal would not adversely impact EBMUD customers within its existing service area.

Other projects listed in Table 4-1 would also be required to demonstrate that they would be served with potable water service as a standard requirement of the development review process, and these projects may be required to implement water conservation measures to the extent they are required. Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to potable water supply.

Wastewater

The geographic scope of the cumulative wastewater analysis is the Central Contra Costa Sanitary District service area, which encompasses approximately 146 square miles and includes the cities of Pleasant Hill, Walnut Creek, Lafayette, and Orinda; the towns of Danville and Moraga, unincorporated areas in central Contra Costa County, and a portion of the cities of San Ramon and Martinez.

All future projects would be required to demonstrate that sewer service is available to ensure that adequate sanitation can be provided. The Project is conservatively estimated to generate approximately 0.04 million gallons of wastewater per day (mgd) (41,959 gallons per day [gpd]). The Project Site would be served by the Central Contra Costa Sanitary District Treatment Plant, which has a treatment capacity of 54 mgd, 240 mgd for wet weather flow, and currently treats an average of approximately 45 mgd. Thus, approximately 8.8 mgd of treatment capacity is available. The Project's estimated wastewater generation of 0.04 mgd per day would represent less than 0.5 percent of the 8.8 mgd of available treatment capacity. Therefore, no new facilities are necessary. Some of the projects listed in Table 4-1 that are located within the Central Contra Costa Sanitary District Treatment Plant service area would be required to demonstrate that they would be served with wastewater service as a standard requirement of the development review process. Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to wastewater.

Storm Drainage

The geographic scope of the cumulative storm drainage analysis is the Project vicinity, consisting of areas that drain to Tassajara Creek.

The majority of projects in Table 4-1 are located in more urban areas and would be served by municipal storm drainage systems that likely do not flow to Tassajara Creek. All future development projects in the Project vicinity would be required to provide drainage facilities that collect and detain runoff such that off-site releases are controlled and do not create flooding. The Project would install an on-site storm drainage system that would consist of a network of street gutters, inlets, basins, and underground piping that would ultimately convey runoff to the proposed approximately 7.6-acre-foot detention basin. The detention basin outfall would drain to an existing drainage area along Camino Tassajara and would be metered to pre-Project levels. This would ensure that the Project would not contribute to downstream flooding conditions during peak storm events. As such, the Project would ensure that no net increase in stormwater would leave the Project Site during a peak storm event, and would avoid cumulatively significant stormwater impacts to downstream waterways at times when capacity is most constrained. The Project would implement standard pollution prevention measures during construction to ensure that downstream water quality impacts are minimized to the greatest extent possible. In addition, the Project would provide water quality measures to prevent pollution during project operations. Other projects would similarly be required to implement required pollution prevention measures. Therefore, the Project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to storm drainage.

Solid Waste

The geographic scope of the cumulative solid waste analysis is the Central Contra Costa Solid Waste Authority's service area, which provides solid waste and recycling collection services to residential and commercial customers in Contra Costa County.

Future development projects would generate construction and operational solid waste, and depending on the volumes and end uses, would be required to implement recycling and waste

reduction measures. The Project is anticipated to generate 1,337 cubic yards of solid waste during construction and 319.3 cubic yards annually during operations. This waste volume represents less than 0.01 percent of the available landfill capacity in Contra Costa County. As such, sufficient capacity is available to serve the Project as well as existing, planned, and probable future land uses in the County for the foreseeable future. Accordingly, the Project, in conjunction with other future projects, would not have a cumulatively significant impact related to solid waste.

Energy

The geographic scope of the cumulative energy analysis is the Pacific Gas & Electric (PG&E) service area. PG&E's electrical service area consists of all or part of the 47 counties in California (including Contra Costa County), while its natural gas service area consists of 39 counties in California comprising most of the northern and central portions of the State (including Contra Costa County).

The Project would demand an estimated 861,000 million kilowatt-hours of electricity and 5 million cubic feet of natural gas on an annual basis. The Project's structures would be designed in accordance with Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings as applicable. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), and indoor and outdoor lighting. The incorporation of the Title 24 standards into the Project would ensure that the Project would not result in the inefficient, unnecessary, or wasteful consumption of energy. Future development projects in the PG&E service area would also be required to comply with Title 24 energy efficiency standards. Therefore, the Project, in conjunction with other future projects, would not have a cumulatively significant impact related to energy consumption.