5 CEQA Required Conclusions

This chapter presents a summary of the impacts of the proposed Isabel Neighborhood Plan in several subject areas specifically required by CEQA, including growth-inducing impacts, cumulative impacts, significant irreversible environmental changes, impacts found not to be significant, and significant unavoidable impacts. These findings are based on the analysis provided in Chapter 3: Settings, Impacts, and Mitigation Measures.

5.1 Growth Inducing Impacts

CEQA Guidelines require that an EIR "discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly" (CEQA Guidelines §15126.2(d)). This analysis must also consider the removal of obstacles to population growth, such as improvements in the regional transportation system.

Growth-inducing impacts such as those associated with job increases that might affect housing and retail demand in other jurisdictions over an extended time period are difficult to assess with precision, since future economic and population trends may be influenced by unforeseeable events, such as natural disasters and business development cycles. Moreover, long-term changes in economic and population growth are often regional in scope; they are not influenced solely by changes in policies or specific development projects. Business trends are influenced by economic conditions throughout the state and country as well as around the world.

Another consideration is that the creation of growth potential does not automatically lead to growth. Growth occurs through capital investment in new economic opportunities by the private or public sector. These investment patterns reflect, in turn, the desires of investors to mobilize and allocate their resources to development in particular localities and regions. Despite these limitations on the analysis, it is still possible to qualitatively assess the general potential growth-inducing impacts of the proposed Plan.

PROJECTED GROWTH

The proposed Plan allows for new residential and commercial development which will result in an increase in population, housing, and jobs.

Population and Housing

The current population within the Planning Area is estimated to be 3,920, constituting 4 percent of the City of Livermore's total population of 89,115 (U.S. Census Bureau, 2017). With the proposed Plan, the Planning Area would accommodate a total of 4,095 new housing units in the Planning Area,

increasing the number of housing units from 1,380 to 5,475. This increase in housing units would accommodate a population of approximately 13,720 people, an increase of about 9,800 people, representing a 250 percent increase in population. This represents an average annual growth rate of 5.4 percent over 24 years in the Planning Area.

Although the population within the Planning Area is projected to increase substantially, the proposed Plan would not be considered to have significant growth-inducing impacts, as it is assumed that it would accommodate a large share of projected growth for the City of Livermore. ABAG projects an increase in citywide population by 2040 from 89,115 people to 104,300 people, a difference of 15,185 people (ABAG, 2013). By accommodating 9,800 new residents, the proposed Plan would absorb about 65 percent of this growth. Consistent with regional land use goals and policies, the proposed Plan would accommodate a large share of projected growth in an area well served by existing roadways and planned transit, utility infrastructure, and service systems.

As discussed in Section 3.1 of this EIR, the City's General Plan allocates about 4,500 dwelling units associated with a Bay Area Rapid Transit (BART) station to the Greenville Road area. Development of the Greenville Transit-Oriented Development (TOD) area is contingent upon preparation of a specific plan and a BART extension to Greenville Road. Since adoption of the General Plan in 2004, BART has begun planning for an Isabel station rather than one at Greenville. Shifting the capacity associated with a BART station from the Greenville TOD to the Isabel Neighborhood reflects the current status of the BART to Livermore project. With this shift, there is sufficient capacity under the current General Plan to accommodate the envisioned level of development for the Isabel Neighborhood.

Employment

The number of jobs in the Planning Area would increase by 105 percent from 8,740 to 17,890. The 9,100 new jobs accommodated under the proposed plan would accommodate 84 percent of the 10,930 projected new jobs for Livermore by 2040 (ABAG, 2013).

JOBS-TO-EMPLOYED RESIDENTS RATIO

If the number of jobs in the city equaled the number of employed residents, the city's jobs-to-employed residents ratio would be 1.0. In theory, such a balance would eliminate the need for commuting. More realistically, a balance means that in-commuting and out-commuting are matched, leading to efficient use of the transportation system, particularly during peak hours. The current jobs-to-employed residents ratio for the Planning Area is 4.46. A high jobs-to-employed residents ratio is associated with more in-commuting and higher demand for housing. Implementation of the proposed Plan would make the Isabel Neighborhood a transit center with a greater proportion of the commute borne by public transportation.

While the increase in new jobs would exceed the increase in new employed residents, the combined effect would result in a more balanced ratio of 2.61, reducing in-commuting. Table 5.1-1 shows existing and projected jobs-to-employed residents ratios.

Table 5.1-1: Jobs to Employed Residents, in Planning Area, Existing and Projected

	Existing (2016)	*Net New (2040)*	*Total in 2040*
Jobs	8,740	9,150	17,890
Employed Residents[1]	1,960	4,900	6,860
Jobs-to-Employed Residents Ratio	4.46	1.87	2.61

Notes:
Employed residents at buildout were calculated assuming 0.50 employed residents per capita.

Source: ABAG Projections, 2013; Dyett & Bhatia, 2017.

INCREASE IN REGIONAL HOUSING DEMAND

As the employment base in Livermore increases, more people may be drawn to the area, and as a result, housing demand may increase in both Livermore and adjacent areas within commuting distance. The proposed Plan would result in development of approximately 4,095 new dwelling units by the year 2040, resulting in a total of 5,475 units in the Planning Area when added to the existing housing stock. This additional housing will help meet some of the increased housing need.

The City of Livermore adopted its most recent Housing Element in March 2015. The purpose of the Housing Element is to ensure that housing is available to meet the needs of future residents. The Housing Element contains an analysis of the community's housing needs, resources, constraints, and opportunities; it also contains goals, policies, and programs for housing and an action plan which details the actions to be taken by the City to respond to the community's evolving housing needs. Given that the Housing Element covers the years 2015-2022, it does not assume any new housing in the Plan area. However, to plan for future Housing Element cycles, Program 1.2.2 in the current Housing Element calls for the development of a "Specific Plan for the area surrounding the future Isabel BART Station, and [revision of] the General Plan and Zoning designations accordingly to allow for residential transit-oriented development."

GROWTH MANAGEMENT

Residential development under the proposed Plan will be subject to the City's growth management policies and the Housing Implementation Program (HIP). The HIP establishes three pools of development capacity to ensure an overall residential growth rate of 140 to700 units per year (equivalent to 0.5 percent to 2.5 percent of the total housing units in Livermore as of 2002). The City allocates units from these pools to development projects at the time of entitlement. The City updates the HIP every three years. The update includes preparation of a Community Infrastructure and Services Report to ensure that the capacity of infrastructure and services will keep up with demand generated by residential development and population growth.

The proposed Plan includes establishing a new development pool under the HIP for the Isabel Neighborhood Plan. The proposed allocation to the Isabel Neighborhood is based on the INP Phasing Plan and will be integrated in the HIP with the ability to borrow from future years within a HIP cycle and to roll over unused units to future cycles. This is similar to the approach for the Downtown Specific Plan pool under the HIP.

5.2 Cumulative Impacts

CEQA requires that the EIR examine cumulative impacts. As defined in CEQA Guidelines §15355, a cumulative impact is "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The analysis of cumulative impacts need not provide the level of detail required of the analysis of impacts from the project itself, but shall "reflect the severity of the impacts and their likelihood of occurrence" (CEQA Guidelines §15130(b)).

The cumulative analysis examines impacts of a proposed project taken together with past, present, and probable future projects producing related impacts. The analysis in this section includes:

- A determination of whether the long-term impacts of all related past, present, and probable future plans and projects—referred to as the "Cumulative Context"—would cause cumulatively significant impacts; and
- A determination as to whether implementation of the proposed Plan would have a "cumulatively considerable" contribution to any significant cumulative impact.

The two above determinations are evaluated using two key terms: (1) Cumulative Context and (2) Cumulative Scenario. The Cumulative Context describes past, present, and probable future plans and projects. The Cumulative Scenario describes the assumptions used for the proposed Plan for evaluating contributions to any cumulative impacts that would occur under the Cumulative Context. The Cumulative Context and the Cumulative Scenario are described below.

CUMULATIVE CONTEXT

The Cumulative Context represents past, present, and probable future projects that may have impacts to which the project would contribute. For the purposes of evaluative cumulative impacts, the CEQA Guidelines describe two alternative methods to determine the scope of the related projects to be considered:

- List method—A list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the lead agency.
- Plan method—A summary of projections contained in adopted general plans or related planning documents, or in a prior environmental document that has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact.

This EIR uses a combination of the two approaches. The list of probable future projects/plans considered in the Cumulative Context are given in Appendix G. As appropriate, population, housing, and employment projections from ABAG's Plan Bay Area Projections and SJCOG's Regional Transportation Plan/Sustainable Communities Strategy help inform analysis of the Cumulative Context, as shown in Table 5.2-1.

Table 5.2-1: Growth Projections Related to the Cumulative Context (2040)

	Existing[a, b]	*2040*	*Percent Increase (Existing to 2040)*
Population			
Alameda County (total)	1,559,308	1,987,900	27%
Dublin	49,694	73,800	49%
Pleasanton	73,164	91,800	25%
Livermore	83,901	104,300	24%
San Joaquin County	742,781	1,070,486	44%
Households			
Alameda County (total)	551,734	705,330	28%
Dublin	16,476	23,610	43%
Pleasanton	25,222	32,300	28%
Livermore	29,956	38,940	30%
San Joaquin County	231,693	319,756	38%
Jobs			
Alameda County (total)	746,688	947,650	27%
Dublin	19,138	31,650	65%
Pleasanton	64,152	69,640	9%
Livermore	44,953	53,210	18%
San Joaquin County	219,330	299,717	37%

Notes:

a. Existing population and households for Alameda County and municipalities are from the 2010-2014 American Community Survey 5-Year Estimates. Existing population and households for San Joaquin County are 2015 estimates from the SJCOG Regional Transportation Plan/Sustainable Communities Strategy.

b. Existing jobs are shown for 2012 for Alameda County and municipalities, and for 2015 for San Joaquin County.

Source: U.S. Census Bureau, 2014 [for existing population and households – Alameda County and municipalities]; U.S. Census Bureau, 2012 [for existing jobs – Alameda County and municipalities] Association of Bay Area Governments (ABAG), 2013 [for 2025 and 2040 data – Alameda County and municipalities]; Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC), 2013; Draft Plan Bay Area, Final Forecast of Jobs, Population and Housing. July. [for 2025 and 2040 data – Alameda County and municipalities]; San Joaquin Council of Governments (SJCOG), 2014 [for existing, 2025, and 2040 data – San Joaquin County]

CUMULATIVE SCENARIO

The Cumulative Scenario is defined as both the proposed Plan and the BART to Livermore Extension Project (BART Extension) (BART, 2017). The BART Extension is a separate but related project to the proposed Plan. The BART Extension involves extending the BART system, using conventional BART technology, from the existing terminus of the Daly City-Dublin/Pleasanton Line at the Dublin/Pleasanton Station approximately 5.5 miles to the east, to a new station located at the Isabel Avenue/I-580 interchange in Livermore. As of October 16, 2017, the comment period for the BART Extension draft EIR has closed. The BART Board of Directors is anticipated to select either the proposed project (full BART service) or one of the alternatives in spring 2018. One of BART's

requirements for the implementation of the BART Extension is for the City of Livermore to create a Ridership Development Plan for the area around the potential future BART station at Isabel Avenue. The proposed Plan meets the Ridership Development Plan requirements.

CUMULATIVE ANALYSIS

Cumulative Analysis Provided in Chapter 3

Several analyses presented in Chapter 3: Settings, Impacts, and Mitigation Measures represent cumulative analyses of issues because they combine the anticipated effects of the proposed Plan with anticipated effects of regional growth and development. By their nature, the air quality; transportation; noise; and energy, greenhouse gas emissions, and climate change analyses presented in Chapter 3 represent a cumulative analysis, because the effects specific to the proposed Plan cannot reasonably be differentiated from the broader effects of regional growth and development. Thus, analyses for these topics reflect not just growth in the Planning Area, but impacts of the proposed Plan within a larger context of growth and development. The cumulative conclusions are summarized there, and where applicable, significant unavoidable impacts are listed in Section 5.3. Other cumulative impacts are identified below.

Utilities and Service Systems

Development in the Cumulative Context could result in an increase in solid waste and demand for landfill capacity. The Alameda County Waste Integrated Management Plan analyzes landfill capacity within the county. Between the Altamont Landfill and the Republic/Vasco Road Landfill, the Countywide Integrated Waste Management Plan estimates that the county has sufficient landfill capacity until 2049 (BART, 2017). Implementation of the BART Extension and proposed Plan would generate solid waste. However, given the remaining capacity in area landfills, meeting the collection, transfer, recycling, and disposal needs of the projected population increase of the proposed Plan (which does not exceed growth expected under the Livermore General Plan) would not result in adverse impacts on landfill facilities. It is also likely that changes in regulations will occur that will decrease the need for landfill capacity through new recycling measures. The Cumulative Scenario makes a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to being served by a landfill with insufficient permitted capacity to accommodate the Cumulative Scenario's solid waste disposal needs or violating applicable federal, State, and local statutes and regulations related to solid waste.

Similarly, an increase in population and employment from new development in the Cumulative Context would result in increased demand for water and wastewater services. However, the projected water treatment facilities and wastewater treatment facilities are expected to be adequate in capacity to serve the Cumulative Context (BART, 2017). The Zone 7 2015 Urban Water Management Plan (UWMP) estimates demand in 2035 will be 92,800 afy (acre feet per year, and the supply will be 99,500 afy (BART, 2017). The proposed Plan would not increase the projected water demand, as the overall development would be consistent with the Livermore General Plan.

The Dublin San Ramon Services District and the City of Livermore provide wastewater treatment for the area encompassing the Cumulative Context. The Dublin San Ramon Services District has a maximum capacity of 17 mgd (million gallons per day), and the demand as of 2017 is 8.1 mgd. The Livermore Water Reclamation has a capacity of 8.5 mgd, and the demand as of 2017 ranges from 4

to 7 mgd (BART, 2017). The BART Extension and proposed Plan would not cause the need for new facilities. The Cumulative Scenario makes a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to requiring or resulting in (1) new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; (2) water demand that exceeds available water; (3) wastewater that exceeds treatment capacity; or (4) wastewater that exceeds treatment requirements.

Development in the Cumulative Context would increase the amount of impervious surface in the area and would require the construction of new storm drainage facilities. City of Livermore Standard Conditions and Zone 7 regulations require all development projects to meet hydromodification requirements that limit storm runoff from new construction to the pre-project flow levels. This results in a net-zero increase in storm water drainage flowing to and through the existing drainage infrastructure. Chapter 7 of the Alameda County C3 Technical Guidance Manual identifies three types of hydromodification management measures: on-site controls, regional controls, and in-stream measures (Alameda Countywide Clean Water Program, 2016). Therefore, the Cumulative Scenario makes a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to requiring or resulting in new stormwater drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

Public Services and Recreation

Construction of projects in the Cumulative Context could result in the need for additional services to enforce safety, prevent fire, and provide emergency medical response. Mitigation Measure TRAN-1 of the BART Extension EIR requires a construction phasing and a traffic management plan for construction of the BART Extension, which would reduce potential impacts. After construction, the projects in the Cumulative Context may result in a greater population and number of employees in the area, which would require an increase in public services. However, the growth expected from implementation of the BART Extension and the proposed Plan is already accounted for in the Livermore General Plan. The proposed Plan shifts growth previously anticipated for other areas of the city to the area around the proposed Isabel Avenue BART Station. Therefore, the Cumulative Scenario would make a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to resulting in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives for police, fire, and emergency response.

The increase in population in the area encompassed by the Cumulative Context may result in the need for new or expanded recreational facilities. Each project in the Cumulative Context would be subject to existing building and construction regulations that would ensure that construction activities have a minimal effect on the surrounding environment, and each project would undergo environmental review per CEQA. The Cumulative Scenario makes a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to increasing the use of existing recreational facilities causing substantial physical deterioration, including recreational facilities, or requiring the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Land Use, Population, and Housing

Projects in the Cumulative Context would not create physical divisions within or between existing communities. The majority of the components of the BART Extension would be located in the I-580 median or along the existing I- 580 corridor, adjacent to and surrounded by existing transportation infrastructure. The location of the BART Extension generally within the I-580 corridor, which already serves as a physical barrier, would not result in further separation of the communities along the corridor. The proposed Plan would improve connections to and continuity with surrounding neighborhoods. The Cumulative Scenario would make a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to physically dividing an established community.

Implementation of the proposed Plan would not result in conflicts with adopted land use plans, and BART is exempt under State law from compliance with local land use ordinances for their transportation related facilities. The proposed Plan's regulatory framework would replace the existing General Plan land use designations and zoning standards regulating the development of properties in the Planning Area. Therefore, The Cumulative Scenario would make a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to conflicting with a plan or policy.

The BART Extension could indirectly induce growth by improving access in the area to regional job centers and other destinations, which would attract new residents. The proposed Plan is designed to accommodate this new growth by allowing denser development around the proposed Isabel Station than is currently allowed by the General Plan. However, both the expansion of BART service and the potential amount of new development from implementation of the proposed Plan is within the overall capacity of the General Plan. In addition, the pattern of growth from implementation of the Cumulative Scenario would be compact and transit-oriented, consistent with ABAG's Plan Bay Area goals to increase density and reduce vehicle miles traveled (VMT). Given that the amount of development that could result from the Cumulative Scenario is consistent with the Livermore General Plan and Plan Bay Area, the Cumulative Scenario would make a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to inducing growth directly or indirectly not in accordance with existing community or city plans.

The proposed Plan is expected to add housing and not hinder the City from meeting its Regional Housing Needs Allocation of affordable housing for various income levels. However, the BART Extension would result in displacement of existing housing or people. Mitigation Measure PH-2 of the BART to Livermore Extension Project EIR (BART, 2017) reduces the displacement impact by requiring the BART Real Estate Department to implement an acquisition and relocation program, in accordance with the California Relocation Assistance and Real Property Acquisition Guidelines. Development projects assumed in the Cumulative Context would generally be located on parcels that are currently undeveloped. The proposed Plan would not result in the direct displacement of any housing or residents, as existing residential areas within the Planning Area would retain a residential land use designation, consistent with existing densities. The proposed Plan, along with the BART Extension, could increase property values and rents, thereby indirectly displacing existing renters living within and adjacent to the Planning Area. However, the proposed Plan provides a diversity of housing opportunities, including affordable housing, and includes policies to reduce potential displacement. Due to the direct displacement from the BART Extension, the Cumulative Scenario

makes a **cumulatively considerable contribution to a significant cumulative impact** related to displacing substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere or displacing substantial numbers of existing businesses.

Aesthetic and Visual Resources

The scenic quality of Livermore is characterized by extensive views to hills and ridgelines that surround the city. Scenic vistas of the hills and ridgelines are especially notable along the edge of the urbanized areas, where views of the surrounding rangeland and agricultural land are unimpeded by built structures. I-580 is a State-designated Scenic Route through the area, offering views of the hills and ridgelines in certain areas.

Development in the Cumulative Context will change the visual character of the area, introducing new buildings and facilities on undeveloped land. The proposed Plan will have substantial effects on the visual character of the area. Policies in the Livermore General Plan limit development on ridgelines and hilltops and prohibit the alteration of ridgelines, thus helping to protect scenic vistas. However, implementation of the Cumulative Scenario will result in projects that would partially obstruct existing scenic views of the hills and ridgelines to the north and south of the city from the I-580 scenic corridor.

Since the scenic resources—the hillsides and ridgelines to the north and south of the city—are located outside of the footprint of the Cumulative Scenario, implementation of the Cumulative Scenario would not adversely affect these resources themselves. The BART Extension would result in changes to the viewshed along the I-580 Scenic Route. However, the area in the immediate vicinity of I-580 is already largely urbanized and does not contribute to the scenic resources along the corridor. In addition, the proposed Plan policies and development standards would protect against new nighttime light pollution or daytime glare.

New development under the Cumulative Scenario associated with the BART Extension would include new infrastructure along the I-580 corridor, including a solid sound wall, as well as a new tunnel in the Cayetano Creek Area, and a storage and maintenance facility. New development associated with the proposed Plan would change the vacant and low-intensity condition of the Planning Area with higher-intensity transit-oriented development. Assessment of visual quality of any new infill development is a subjective matter—reasonable people may differ as to whether development of urban uses would constitute a substantial degradation of the existing visual character or quality of the region. However, the amount of visual change from the BART Extension and proposed Plan is substantial. The Cumulative Scenario makes a **cumulatively considerable contribution to a significant cumulative impact** related to degrading the existing visual character or quality of the site and its surroundings; having a substantial adverse effect on a scenic vista; substantially damaging scenic resources within a State scenic highway; or creating a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

Biological Resources

Of the projects in the Cumulative Context, the Dublin Crossing Specific Plan and the Kaiser Dublin Medical Center are the only projects with potential direct impacts to special-status or rare plants. However, some of the projects in the Cumulative Context were not surveyed for special-status or rare plants, and therefore may have significant impacts. Established mitigation measures would reduce

potential project-level impacts of the BART Extension and the proposed Plan on special-status or rare plants. In addition, compliance with federal and State requirements would reduce potential impacts. However, at a cumulative scale, given the sensitivity of rare plant resources and the ongoing impacts to biological resources, the Cumulative Scenario would have a **cumulatively considerable contribution to a significant cumulative impact** related to adversely affecting, either directly or through habitat modifications, species identified as a candidate, sensitive, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Most of the development projects in the Cumulative Context would not affect wetlands. Mitigation measures established in their respective EIRs would reduce potential project-level impacts of the BART Extension and the proposed Plan on jurisdictional wetlands. Mitigation Measures BIO-11.A and BIO-11.B reduce project-level impacts to jurisdictional wetlands from the BART Extension by requiring avoidance of wetlands and other waterways, as well as compensatory mitigation for wetlands (BART, 2017). Mitigation measures MM-BIO-12 through MM-BIO-13 in Section 3.7 Biological Resources of this EIR would avoid and minimize impacts by requiring the identification and fencing or marking of sensitive areas and compensation for any loss that occurs as a result of the proposed Plan. The Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to substantial adverse effects on State of federally protected wetlands or waters of the U.S. and/or waters of the State through direct removal, filling, hydrological interruption, or other means.

Development in the Cumulative Context could adversely affect areas of ecological sensitivity, including hillsides, alkali springs, creek corridors and watersheds. However, mitigation measures reduce potential project-level impacts of the BART Extension and the proposed Plan on sensitive natural communities. Other projects in the Cumulative Context would not impact sensitive natural communities. In addition, compliance with federal and State laws protecting these resources would serve to reduce cumulative impacts. The Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to substantially adverse effects on riparian habitat or sensitive natural communities identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Wildlife, or U.S. Fish and Wildlife Service.

Projects in the Cumulative Context would have a less than significant impact on migratory wildlife corridors. In combination with these projects, neither the BART Extension nor the proposed Plan would substantially affect migratory wildlife corridors. The Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to substantially adverse effects related to interfering with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impeding the use of native wildlife nursery sites.

Exclusive of the BART Extension and the proposed Plan, other projects in the Cumulative Context do not have significant impacts on protected trees. Implementation of the BART Extension would result in impacts to protected trees, but Mitigation Measure BIO-15 would require the protection or replacement of trees protected by local ordinances within the construction footprint of the BART Extension (BART, 2017). Potential impacts from the proposed Plan would be reduced by a proposed policy to ensures that any tree removal that occurs as a result of the proposed Plan would be conducted per the City of Livermore's Street Tree and Preservation Ordinance Chapter 12.20. The

Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to the loss of protected trees identified in local policies or ordinances.

Hazards and Hazardous Materials

Projects in the Cumulative Context are not anticipated to present a public health hazard to residents. New development in the area may result in an increase in routine use, transportation, and disposal of hazardous materials, as well as handling of hazardous materials near existing and proposed schools. However, existing federal, State, and local regulations create and enforce standards for these activities. Upset or accident conditions, emissions of hazardous materials, and development on a site listed as containing hazardous materials usually occur on a project-by-project basis, rather than in a cumulative manner. Individual projects would be required to comply with federal, State, and local regulations. Implementation of the BART Extension and proposed Plan could result in increased risk from hazardous materials due to land uses potentially requiring the handling or transport of such materials. However, federal, State, and local programs would require responsible transport, use, and disposal of these materials. Furthermore, the City of Livermore General Plan's Public Safety Element, requires environmental investigation as necessary to ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses, and lead and asbestos potentially present in building materials, would not have the potential to affect the environment or the health and safety of future property owners or users. Therefore, the Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials; or reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or being located on a hazardous materials site pursuant to Government Code Section 35962.5**.**

Several of the projects in the Cumulative Context are within the Livermore Municipal Airport Airport Influence Area. Compliance with the Livermore Municipal Airport's Land Use Compatibility Plan (ALUCP) and existing federal, State, and local laws would protect the safety of people near airports and private airstrips.The proposed Plan anticipates new development in the Airport Influence Area regulated by the Livermore Municipal Airport ALUCP. These land uses will be subject to ALUCP height limits, regulations on airspace protection, and land use compatibility criteria. These standards would prevent safety hazards for people residing and working in the Planning Area near the Livermore Municipal Airport. There are no private airstrips within two miles of the Planning Area. Therefore, the Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant cumulative impact** related to being located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and would result in a significant safety hazard for people residing or working in the project area.

Most projects in the Cumulative Context would be located in areas of local fire responsibility, although some are located in State Responsibility Areas in areas designated as high wildfire hazard potential zones. Components of the BART Extension would be located in areas of moderate and high wildfire hazard potential according to CAL FIRE, and therefore the BART Extension would be required to comply with BART Facilities Standards regarding fire safety, and the storage and maintenance facility would be required to conform with the California Building Code. No portions

of the BART Extension nor the proposed Plan would be located within very high wildfire hazard potential zones. Consistency with State and local regulations would reduce potential wildland fire impacts. The Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant impact** related to exposing people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Projects in the Cumulative Context could cumulatively interfere with local emergency and evacuation plans during construction, due to simultaneous construction timelines. Mitigation Measure TRAN-1 under the BART Extension EIR would require a construction phasing and traffic management plan (BART, 2017). After construction is completed, projects in the Cumulative Context would not have a cumulative impact. The BART Extension would be developed in coordination with local emergency response agencies and would incorporate access for emergency response vehicles. Furthermore, the proposed Plan includes policies to maintain and improve emergency preparedness. The Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant impact** related to impairing implementation of or physically interfering with an adopted emergency response or emergency evacuation plan.

Hydrology and Water Quality

Projects in the Cumulative Context could increase the amount of impervious surface area, by developing buildings, infrastructure, and parking on currently undeveloped land. An increase in impervious surface area reduces the potential for groundwater recharge. However, State and regional regulations described in Chapter 3.9 of this EIR, "Hydrology and Water Quality," will facilitate groundwater infiltration to meet requirements of Title 22, California Toxics Rule (CTR), Basin Plan water quality objectives, and other program objectives. The Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant impact** related to substantially depleting groundwater supplies or interfering substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

Components of the Cumulative Context would result in new or modified structures and/or fill that could encroach on 100-year flood hazard areas. The development projects could increase the risk of flood conveyance capacity loss. Floodplain and floodway development is regulated by FEMA, which requires review of all projects in a floodway to determine their effect on flood flows and to ensure that they do not limit the capacity of the floodway. In addition, Zone 7 Water Agency manages and maintains most of the flood conveyance channels in the area encompassing the Cumulative Context, and the Zone 7 Stream Management Master Plan will help improve the drainage system for flood control. Mitigation Measure HYD-9 under the BART Extension EIR would reduce the impact of the BART Extension (BART, 2017), and proposed Plan policies would reduce the impact of the proposed Plan by requiring the identification of mitigation strategies to reduce potential flooding . The Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant impact** related to impeding or redirecting flood flows within a 100-year flood hazard area.

Portions of the Cumulative Context are vulnerable to potential inundation from the Lake Del Valle Dam. However, impacts from dam inundation are site-specific and not cumulative in nature. The

Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant impact** related to exposing people or structures to a significant risk of loss, injury, or death in the event of flooding, including flooding as a result of the failure of a levee or dam.

New development in the Cumulative Context could result in combined erosion effects. Simultaneous construction of projects with large footprints, such as the Dublin Crossing Specific Plan and the proposed Plan, could cause substantial erosion. However, construction activities would be required to implement erosion and sediment control BMPs required by the Construction General Permit and MS4 Permit regulations. Compliance with these regulations would ensure substantial erosion or siltation does not occur onsite during construction. In regards to the long-term operations of projects in the Cumulative Context, development has the potential to generate impacts related to violation of water quality standards, and erosion and sedimentation. Adherence to State and regional regulations described in Chapter 3.9 of this EIR, "Hydrology and Water Quality," will serve to reduce the rate of runoff, filter out pollutants, and/or facilitate groundwater infiltration to meet requirements of Title 22, California Toxics Rule (CTR), Basin Plan water quality objectives, and other program objectives. Construction activities are required to comply with the State Water Resources Control Board statewide NPDES stormwater permit program and any other necessary site-specific waste discharge requirements (WDRs) or waivers under the Porter-Cologne Act, as well as local agency public works construction standards and applicable ordinances that regulate construction discharges. Additionally, future development projects would be subject to local Alameda County Municipal NPDES permit (MS4) regulations for hydrology, water quality, and hydromodification impacts, ensuring that risks from developed conditions are minimized. With proposed policies, implementation of the proposed Plan would not exceed the capacity of existing or planned stormwater drainage systems. The Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant impact** related to violating water quality standards or waste discharge requirements, including through the alteration of an existing drainage pattern or the course of a stream or river, in a manner that would result in substantial erosion or sedimentation on or off site.

Geology and Soils

Livermore is affected by an Alquist-Priolo Earthquake Fault Zone, and future development may bring additional people and structures to the area. In terms of groundshaking, development in the Cumulative Context would be required to conform to the seismic design provisions of the most current version of the California Building Code (CBC), which contains the latest seismic safety requirements to resist ground shaking through modern construction techniques. The impacts from ground failure, including liquefaction and landslides, from development of land uses would be addressed through site-specific geotechnical studies prepared in accordance with CBC requirements and standard industry practices. In addition, policies in the Livermore General Plan and mitigation measures of the BART Extension EIR would further reduce the risk of seismic hazards, including fault rupture hazards, expansive soils, and landslides.

Some improvements associated with implementation of the proposed Plan could be located on geologic units or soils that are unstable, or that could become unstable and result in geologic hazards if not addressed appropriately. The potential hazards of unstable soil or geologic units would be addressed largely through the integration of geotechnical information in the planning and design process for individual projects to determine the local soil suitability for specific projects in

accordance with standard industry practices and State-provided requirements. The Cumulative Scenario would thus have a **less than cumulatively considerable contribution to a potentially significant impact** related to exposing people or structures to potential substantial adverse effects related to known faults, strong seismic groundshaking, seismic-related ground failure, including liquefaction, landslides, unstable soils or geologic units, or expansive or corrosive soils.

Development in the Cumulative Context would include earthwork activities that could expose soils to the effects of erosion or loss of topsoil. However, the City's standards are applied through the Planning and Building review process to minimize siltation and erosion. Development that disturbs more than one acre would be subject to compliance with a National Pollutant Discharge Elimination System (NPDES) permit, including the implementation of best management practices (BMPs), some of which are specifically implemented to reduce soil erosion or loss of topsoil. These regulations would minimize the impacts of the BART Extension and the proposed Plan. The Cumulative Scenario would have a **less than cumulatively considerable contribution to a potentially significant impact** related to substantial soil erosion or the loss of topsoil.

Cultural and Tribal Resources

The Livermore-Amador Valley has been inhabited by prehistoric and historic-era peoples for thousands of years. There are known historical resources, including in Downtown Livermore, as well as the potential for unknown archaeological resources that could be affected by new development in the Cumulative Context. Impacts could occur through future ground-disturbing activities such as grading and excavation, or the demolition of resources. Mitigation measures for the BART Extension EIR, as well as goals and policies in the proposed Plan that focus on preserving and protecting significant historical, archaeological, and paleontological resources, would help reduce impacts. However, it is not always feasible to protect cultural resources, particularly when preservation in place or avoidance measures would limit implementation of projects. The Cumulative Scenario would have a **cumulatively considerable contribution to a significant impact** related to substantial adverse change in the significance of a historical resource, archaeological resources, or disturbance of human remains during construction.

Development of projects in the Cumulative Context could disrupt paleontological resources. However, BART Extension mitigation measures PALEO-1A, PALEO-1B, and PALEO-1C would reduce the potential impacts from the BART Extension by requiring a paleontological survey of the Cayetano Creek Area, a paleontological monitor during construction activities, and protocol for discovery of paleontological resources, respectively (BART, 2017). With proposed policies, the proposed Plan would have minimal impacts on paleontological resources. The Cumulative Scenario would have a **less than cumulatively considerable contribution to a significant impact** related to directly or indirectly destroying unique paleontological resources.

Agricultural Resources

According to the California Department of Conservation, Alameda County lost 22,137 acres of agricultural land from 1984 to 2014, including 251 acres of Important Farmland between 2012 and 2014 alone (BART, 2017). Alameda County's population is projected to grow; therefore, depending on the pattern of development, more agricultural land could be converted. The BART Extension could result in the loss of 6.3 acres of Prime Farmland and approximately 5.5 acres of Unique Farmland currently in agricultural use, and approximately 0.2 acres of Prime Farmland not currently in agricultural use. In addition, the BART Extension would result in development of new storage and

maintenance facilities on land that is currently zoned agriculture in the Cayetano Creek Area. Loss of agricultural land from the BART Extension would be mitigated at a ratio of 1-to-1, due to Mitigation Measure AG-1 (BART, 2017). The proposed Plan is expected to result in the conversion of 27.5 acres of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. Although there are policies in the proposed Plan to reduce this impact, it would remain significant and unavoidable. The Cumulative Scenario would have a **cumulatively considerable contribution to a significant impact** related to converting Prime farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency.

5.3 Significant Unavoidable Impacts

Significant unavoidable impacts are those that cannot be mitigated to a level that is less than significant. According to CEQA Guidelines 15126(b), an EIR must discuss any significant environmental impacts that cannot be avoided under full implementation of the proposed program. Chapter 3 identified the following significant unavoidable impacts when comparing the proposed Plan to existing conditions:

Aesthetics

As discussed above, the proposed Plan amends existing General Plan Scenic Corridor policies to increase maximum building height limits beyond the stated view planes. In addition, it amends the existing Development Code standard that limits buildings within 500 feet of an airport runway to 40 feet in height, as described in Figure 3.1-4. As these existing regulations have the effect of preserving generally unbroken views of the ridgelines to the north as seen from the northernmost lane of I-580, implementation of the proposed Plan would have a substantial adverse effect on some scenic vistas. The views most impacted would be the oblique views to the north over the "core area" of the Planning Area. While these views will be impacted, the proposed Plan is designed to create new view corridors from within the planning area (Shea center Drive and Main Street); preserve key portions of the currently unbroken ridgelines views; and locate the tallest buildings in view cones from which views of ridgelines and hillsides are currently blocked by existing infrastructure (the Isabel /I-580 interchange) and vegetation just north of I-580.

Agricultural Resources

The Planning Area contains lands identified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland by the Farmland Mapping and Monitoring Program (FMMP) along the west side of East Airway Boulevard; on the unincorporated Gandolfo property area east of East Airway Boulevard; and in two locations along the northwestern boundary of the Planning Area.

The unincorporated Gandolfo property is currently designated as Prime Farmland by FMMP. The proposed Plan proposes to annex and designate the property for urban development with residential and open space uses. Therefore, buildout of the proposed Plan would result in the full conversion and loss of this Prime Farmland, resulting in conversion of agricultural lands to urban uses. While this impact is significant and unavoidable, the Plan does require that Development of the Gandolfo property shall acquire Prime farmland at a 1:1 ratio of compensatory mitigation under permanent easement or participate in the City's TDC program.

On portions of the Prime Farmland and Unique Farmland in the southern portion of the Planning Area, west of East Airway Boulevard, the proposed Plan's recommendation to apply Education/Institution, Open Space, and Parking and a Retail overlay would also be considered significant and unavoidable. Similarly, the designations of Unique Farmland and Farmland of Statewide Importance located along the northwestern edge of the Planning Area to urban land use would be a significant and unavoidable impact. The proposed Plan, however, seeks to reduce this impact through a policy stating that Open space preservation should prioritize land that is adjacent to urban growth boundaries and/or existing easements.

Implementation of the proposed Plan would also lead to a significant and unavoidable impact in terms of conflict with existing zoning for agricultural use. On the north edge of the Planning Area, one existing PD currently allows for agriculture. The proposed Plan would designate these parcels as Transition Residential. Thus, because the proposed Plan land use designation would conflict with the existing zoning to permit only agricultural plantings on the northern parcel, there would be a significant and unavoidable impact related to zoning for agricultural use.

Noise

The proposed Plan would result in significant changes to the existing noise environment in the Planning Area. Specifically, the impacts associated with operation traffic in the Planning Area would be significant and unavoidable. Mitigation Measure NOI-1 requires the implementation of traffic noise reduction measures at existing sensitive receptors, and the proposed Plan furthermore establishes policies to require acoustical analyses to determine needed insulation and protection features, as well as limits to the hours of operation of noise-generating land uses. However, the proposed Plan would not guarantee that noise generated from traffic operations will be reduced to a less than significant level. While implementation of Mitigation Measure NOI-1 could reduce noise levels at impacted receptors along these roadway segments to less than significant levels, it may not be feasible in all cases to implement the measures identified in Mitigation Measure NOI-1. This impact is therefore considered to be significant and unavoidable.

While the proposed Plan requires reduction of vibration impacts associated with construction near sensitive receptors, implementation of the proposed Plan may expose persons to or generate excessive ground-borne vibration or ground-borne noise levels to a significant and unavoidable level. The increase in noise levels compared to existing conditions would also result in a significant and unavoidable impact related to a substantial permanent increase in ambient noise levels.

Air Quality

While the proposed Plan would be consistent with the Bay Area Air Quality Management District's (BAAQMD's) regional air quality strategy, individual development projects may still generate construction and operational emissions in excess of BAAQMD's project-level thresholds. With respect to construction emissions, however, implementation of Mitigation Measures AQ-1 through AQ-3 in addition to proposed Plan policies would reduce construction-related emissions to a less-than-significant level.

With respect to operational emissions, it was determined that only particulate matter (PM10 and PM2.5) emissions associated with the proposed Plan would exceed BAAQMD's project-level thresholds. However, because the vast majority of these PM10 and PM2.5 emissions would be

generated from mobile sources (i.e., passenger vehicles) that are not regulated at the City level, no feasible mitigation measures are available to reduce these operational emissions. As such, although implementation of the comprehensive suite of proposed Plan policies would reduce the severity of growth-oriented criteria pollutants by reducing VMT, locating uses near the BART station, fostering bicycle and pedestrian infrastructure, and supporting sustainable land use patterns, including mixed-use design and increased density, the proposed Plan's operational emissions of PM10 and PM2.5 would remain significant and unavoidable. These operational emissions would also result in a cumulatively considerable air quality impact within the San Francisco Bay Area Air Basin (SFBAAB).

Future projects under the proposed Plan may expose sensitive receptors to substantial toxic air contaminant (TAC) concentrations. Based on an inventory of existing stationary and roadway sources, several locations within the Planning Area include sources currently in excess of BAAQMD's project-level and cumulative health risk thresholds. The proposed Plan has policies to minimize risks to future residents. Operation of new stationary sources developed under the proposed Plan would be subject to the permit authority of BAAQMD, which prohibits sources with health risks in excess of air district thresholds. Construction activities of future development may expose existing and future receptors to significant health risks. Implementation of Mitigation Measure AQ-1 would reduce construction-related emissions, and Mitigation Measure AQ-4 would provide a project-level evaluation of construction-related health risks from future projects within 1,000 feet of sensitive receptors. Despite these measures, there may be instances where project-specific conditions preclude the reduction of health risks below adopted thresholds, resulting in a significant and unavoidable impact.

Cultural and Tribal Resources

The Gandolfo Ranch historic district, identified as eligible for listing in the national Historic Properties, consists of 16 separate building and associated landscape features. It is located on the unincorporated property along East Airway Boulevard. The proposed Plan designated this areas with urban land uses, resulting in a significant and unavoidable impact on this cultural resource. Plan policies, however, require elements commemorating the Gandolfo Ranch into park development in order to promote understanding of the site's historical significance.

Transportation

For the purposes of this EIR, acceptable roadway conditions are evaluated using level of service (LOS). A negative impact occurs if LOS is reduced from acceptable to unacceptable, or if the segments where the LOS is already deficient under existing conditions experience increased traffic volumes. According to traffic modeling of the proposed Plan, under 2025 and 2040 conditions, intersection operations are expected to degrade due to additional traffic as a result of growth from proposed Plan implementation. At the intersection of North Livermore Avenue and Portola Avenue, adding additional left turn lanes to the impacted intersection under 2025 and 2040 Conditions could address impacts to intersection operations. However, the addition of left turn lanes would require that both roads be widened. Due to roadway right-of-way constraints on North Livermore Avenue and Portola Avenue, the addition of more travel lanes is not feasible. Therefore, no additional improvements would be feasible to address this significant impact, and it remains significant and unavoidable. The proposed Plan includes new pedestrian and bicycle connections within the Planning Area that support the policies in the City of Livermore General Plan and the Livermore Bikeways and Trails

Master Plan. However, even considering proposed Plan policies and mitigation measures, the impact on the performance on circulation systems remains significant and unavoidable.

Freeway and arterial segments were evaluated according to the Alameda County Transportation Commission Congestion Management Plan criteria. With the implementation of the proposed Plan, regional traffic volumes would increase, with notable increases in some corridors and decreases in others during peak periods. While the addition of the BART Extension would relieve some corridors, the increase in land uses associated with the proposed Plan increases traffic levels. While the increase in traffic is less than significant for the 2025 conditions, for 2040 buildout, several general purpose freeway and arterial segments would, at times, operate at unacceptable levels. Typical mitigation measures that would address impacts to general purpose freeway segments and arterials entail adding or modifying ramp metering, adding express lanes, and constructing other capacity enhancements such as additional travel lanes. However, the transportation analysis already accounts for these types of planned and programed operational improvements along the study area segments of I-580. No additional improvements would be feasible to address this significant impact. Specifically, while adding travel lanes to I-580 or arterial segments would increase the capacity of roadways and reduce this impact, physical constraints and the existing ROW along the affected roadways would make this infeasible. Therefore, the impact would remain significant and unavoidable.

5.4 Significant Irreversible Environmental Changes

CEQA Guidelines require the EIR to consider whether "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely" (CEQA Guidelines Section 15126.2(c)). "Nonrenewable resource" refers to the physical features of the natural environment, such as land, waterways, etc. Irretrievable commitments of non-renewable resources associated with the proposed Plan are described below.

WATER CONSUMPTION

New development under the proposed Plan would increase the demand for water supplies for residential, commercial, and industrial uses. It would place a greater demand on the City of Livermore municipal water supply and the California Water Service Company, which purchases water supplies from the Alameda County Flood Control and Water Conservation District (Zone 7). This increased demand for public water represents an irreversible environmental change.

ENERGY SOURCES

Residential and non-residential developments use electricity, natural gas, and petroleum products for lighting, heating, and other indoor and outdoor power demands, while cars use both oil and gas. New development under the proposed Plan would result in increased energy use for the construction and operation of new buildings and for transportation. This new development would therefore result in an overall increased use of both renewable and nonrenewable energy resources. To the extent that new development uses more nonrenewable energy sources, this would represent an irreversible environmental change.

CONSTRUCTION-RELATED IMPACTS

Irreversible environmental changes could also occur during the course of constructing development projects made possible by the proposed Plan. New construction would result in the consumption of building materials (such as lumber, sand and gravel), natural gas, electricity, water, and petroleum products to process, transport, and build with these materials. Construction equipment running on fossil fuels would be needed for excavation and the shipping of building materials. Due to the non-renewable or slowly renewable nature of these resources, this represents an irretrievable commitment of resources.

LOSS OF IMPORTANT FARMLAND

The proposed Plan is expected to result in the conversion of 27.5 acres of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, as classified by the California Farmland Mapping and Monitoring Program. These designations identify high quality agricultural resources, and the loss of these resources due to conversion of designated land to non-agricultural uses may be considered an irreversible environmental change.

5.5 Impacts Found Not to Be Significant

CEQA requires that an EIR provide a brief statement indicating why various possible significant impacts were determined to be not significant. Chapter 3 of this EIR discusses all potential impacts, regardless of their magnitude. A similar level of analysis is provided for impacts found to be less than significant as impacts found to be significant. Significance of an impact is assessed in relation to the significance criteria provided in each section in Chapter 3. A summary of all impacts is provided in the Executive Summary of this EIR.

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