Gilroy Data Center Draft Environmental Impact Report

Gilroy Data Center

State Clearinghouse No. 2022110127

City File Number: AS 20-30

Prepared for

August 2024

This page is intentionally left blank.

Table of Contents

ES 1 Summary v

ES 1.1 Introduction v

ES 1.2 Summary of the Project v

ES 1.3 Project Objectives vi

ES 1.4 Summary of Significant Impacts and Mitigation Measures vi

ES 1.5 Summary of Project Alternatives xx

1. Introduction 1

1.1 CEQA Lead Agency 1

1.2 Purpose of the Environmental Impact Report 1

1.3 Environmental Review Process 1

1.4 Organization of this EIR 4

1.5 Agency Contact 5

2. Project Description 6

2.1 Project Overview 6

2.2 Project Objectives 7

2.3 Project Location 8

2.4 Site Characteristics 8

2.5 Project Components 12

2.6 Construction Schedule 25

2.7 Permits and Approvals 26

3. Environmental Setting, Impacts, and mitigation 27

3.1 Aesthetics 29

3.2 Agricultural and Forestry Resources 37

3.3 Air Quality 43

3.4 Biological Resources 62

3.5 Cultural Resources 74

3.6 Energy 81

3.7 Geology, Soils, and Seismicity 91

3.8 Greenhouse Gas Emissions 99

3.9 Hazards and Hazardous Materials 116

3.10 Hydrology and Water Quality 126

3.11 Land Use and Planning 135

3.12 Mineral Resources 139
3.13 Noise 141
3.14 Population and Housing 156
3.15 Public Services 160
3.16 Recreation 165
3.17 Transportation 168
3.18 Tribal Cultural Resources 176
3.19 Utilities and Service Systems 180
3.20 Wildfire 188
4. Growth Inducing Impacts 192
5. Significant and Irreversible Environmental Changes 193
5.1 Changes in Land Use Which Would Commit Future Generations 193
5.2 Irreversible Changes from Environmental Actions 193
5.3 Consumption of Non-Renewable Resources 193
6. Significant and Unavoidable Impacts 195
7. Alternatives 196
7.1 Significant Impacts of the Project 196
7.2 Project Objectives 198
7.3 Alternatives Considered but Rejected 199
7.4 Alternatives Selected for Further Analysis 203
7.5 Environmentally Superior Alternative 223
8. Lead Agency and Consultants 224
8.1 Lead Agency 224
8.2 Consultants 224
9. References 226
10. Acronyms and Abbreviations 231

List of Figures

Figure 2-1 Project Location Map 10
Figure 2-2 City of Gilroy Land Use Map 11
Figure 2-3 Site Plan 14
Figure 2-4 Project Renderings 15
Figure 2-5 Agricultural Buffer 17
Figure 2-6 Example Substation 20

Figure 2-7 FEMA Floodplains Map 24
Figure 3-1 Existing View from U.S. 101, Looking East Toward Project Site 34
Figure 3-2 Photos of Existing Conditions 36
Figure 3-3 Habitat Plan Reserve System 66
Figure 3-4 Habitat Plan Land Cover Map 70
Figure 3-5 Ambient Noise Monitoring Stations 146
Figure 3-6 Noise and Vibration Receptor Location 147
Figure 3-7 Noise Barrier Locations (Construction Phase I) 154
Figure 3-8 Noise Barrier Locations (Construction Phase II) 155

List of Tables

Table ES-1 Summary of Impacts and Mitigation Measures viii
Table 1-1 Summary of Public Scoping Comments 1
Table 2-1 Project Phasing 12
Table 2-2 Construction Phasing 25
Table 3-1 Summary of Health and Environmental Effects of Key Criteria Pollutants 43
Table 3-2 BAAQMD Air Quality Significance Thresholds 49
Table 3-3 Representative Air Quality Monitoring Stations for the Project Area 51
Table 3-4 Ambient Air Quality Standards Violations and Highest Concentrations 51
Table 3-5 Construction Phase Health Risk Assessment Results 53
Table 3-6 Operations Phase Health Risk Assessment Results 54
Table 3-7 Project Construction Criteria Pollutant Emissions 55
Table 3-8 Project Operational Criteria Pollutant Emissions 59
Table 3-9 Impacts from Cumulative Sources 60
Table 3-10 BAAQMD Best Management Practices for Construction GHG Emissions 102
Table 3-11 Annual GHG Operational Emissions 111
Table 3-12 Project Consistency with Applicable 2020 Gilroy General Plan Policies 112
Table 3-13 Land Uses Surrounding the Project Site 136
Table 3-14 Groundborne Vibration Impact Criteria 142
Table 3-15 City of Gilroy Permissible Maximum Outdoor Levels 143
Table 3-16 Pile Driver Vibration Impacts 149
Table 3-17 Normal and Maintenance Operation Sound Level Impacts 150
Table 3-18 Noise Effects During Construction before Mitigation 151
Table 3-19 Noise Effects During Construction with Mitigation (Construction Noise Barriers) 152
Table 3-20 Noise Effects During Construction with Mitigation (Auger Cast Piles) 153
Table 7-1 Comparison of Environmental Impacts for Alternatives to the Project 206

List of Appendices

Appendix A: Notice of Preparation Letter and Public Comments

Appendix B: Air Quality Impact Assessment

Appendix C: Natural Resources Assessment Memorandum

Appendix D: Arborist Report

Appendix E: Cultural Resources Literature Search

Appendix F: Geotechnical Engineering Report

Appendix G: Phase I Environmental Assessment

Appendix H: Engineering Flood Potential Evaluation

Appendix I: Noise and Vibration Assessment

Appendix J: Fire Water Study Memorandum

Appendix K: VMT Assessment

Appendix L: Preliminary Storm Water Operations and Maintenance Plan

Appendix M: Stormwater Control Plan, Hydrology, and Hydraulic Report

Appendix N: Tribal Consultation Outreach Letters

ES 1 SUMMARY

ES 1.1 Introduction

The City of Gilroy (the City), as the Lead Agency, has prepared this Draft Environmental Impact Report (EIR) for the Amazon Data Services data center project (the project) in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. As the Lead Agency, the City is required to consider the information in this EIR along with any other available information in deciding whether to approve the project. As outlined in the CEQA Guidelines Section 15121(a), the EIR is an informational document that analyzes the environmental impacts of a project and identifies mitigation measures and project alternatives that could reduce or avoid adverse environmental impacts. The basic requirements for an EIR include discussions of the environmental setting, significant environmental impacts including growth-inducing impacts and cumulative impacts, mitigation measures, and alternatives. An EIR does not recommend either approval or denial of a project.

ES 1.2 Summary of the Project

The project site is at the southeast end of Arroyo Circle, right before Arroyo Circle becomes Camino Arroyo within the City of Gilroy, approximately 0.2 miles east of Highway 101 and north of East 6th Street before it becomes Gilman Road. The 56-acre project site (APN 841-69-044) is designated as General Industrial by the Gilroy 2040 General Plan and zoned M2-General Industrial. Other land use designations surrounding the project site include M2-General Industrial to the north, west, and southwest and General Services Commercial (zoned C-3 Shopping Center Commercial) to the west and northwest. The parcels that border the project site to the east and southeast are unincorporated and are zoned Exclusive Agriculture-Scenic Road Combining District by the Santa Clara County Zoning Ordinance.

The project would be constructed in two phases. Phase I would include the first single-story (approximately 35-foot high) data center building of approximately 218,000 square feet (Building 1), a security building, a substation/switchyard, offsite transmission upgrades to the existing Pacific Gas and Electric transmission and distribution system, potentially a future Battery Energy Storage System (Phase I BESS) of up to 50-megawatt (MW), and other utility interconnections. Building 1 would require a 49 MW connection to Pacific Gas & Electricity (PG&E) service and would be supported by twenty-five 2.5 MW emergency generators to power the servers in the event of an emergency, and one 600-kilowatt (kW) generator to power other essential building functions such as lighting, in case of a power outage. During a loss of utility power, lithium-ion batteries connected to each server rack would provide several minutes of power, allowing backup generators the necessary time to start up. The security building would include a separate 175 kW emergency generator.

Phase II would include a similar single-story, 35-foot-high data center building of 218,000 square feet (Building 2) that would utilize the aforementioned utilities that would be constructed in Phase I. Building 2 would not include diesel generators; instead, backup power would be provided via emerging battery or fuel cell technology in a standalone building constructed during Phase 2 (Phase II Backup Power (BP)). Building 2 would also employ lithium-ion battery modules connected to each server rack in order to provide power while the Phase II BP facility starts up.

The existing 12-inch water main in Camino Arroyo would be extended approximately 135 linear feet to provide potable water to the project site. The project would provide approximately 115 parking spaces at full buildout. A total of 60 parking spaces would be provided during Phase I; the remaining parking spaces would be constructed during Phase II.

ES 1.3 Project Objectives

The project objectives are as follows:

- Develop a data center large enough to meet projected customer demand;
- Develop a data center on land that permits data centers as a use based on its current zoning;
- Develop a data center that can be constructed in phases which can be timed to match projected demand;
- Minimize the use of water and electricity;
- Incorporate reliable and flexible backup power technology that meets industry standards and customer expectations, to ensure a viable project. The following evaluation criteria will ensure the project is reliable and marketable:
    - Reliability: The selected backup power technology must be reliable in the case of an emergency loss of electricity from the utility.
        - The backup power source must provide a higher reliability than 99.999 percent.
        - The selected backup power source technology must have a proven built-in resilience so if any of the backup unit fails due to external or internal failure, the system would have redundancy to continue to operate without interruption.
    - Commercial Availability and Feasibility: The selected backup electric generation technology must currently be in use and proven as an accepted industry standard in order for the project to be feasible. It must be operational within a reasonable timeframe where permits and approvals are required.
    - Technical Feasibility: The selected backup power source technology must utilize systems that are compatible with one another.

ES 1.4 Summary of Significant Impacts and Mitigation Measures

Table ES-1 includes a summary of the potential significant environmental impacts identified and discussed in the EIR, and the mitigation measures proposed to avoid or reduce those impacts. The project description and full discussion of the impacts and mitigation measures can be found in Section 2, Project Description and Section 3, Environmental Setting, Impacts, and Mitigation of this EIR. As shown in **Table ES-1**, the following impacts would be less than significant with mitigation:

- **Impact AQ-1:** Potential to conflict with or obstruct implementation of the applicable air quality plan.
- **Impact BIO-1:** The project could impact nesting birds due to the removal of trees.

- **Impact BIO-2:** The project could impact migratory nesting birds due to the removal of trees.
- **Impact CUL-1:** The project could adversely impact the significance of an archaeological resource.
- **Impact CUL-2:** The project could disturb human remains.
- **Impact GEO-1:** Potential damage from seismic shaking.
- **Impact GEO-2:** The project could adversely impact the significance of an undiscovered paleontological resource.
- **Impact GHG-1:** The project would generate construction-related GHG emissions.
- **Impact GHG-2:** The project would generate operation-related GHG emissions.
- **Impact GHG-3:** Potential to conflict with an applicable plan adopted for the purpose of reducing the emissions of GHGs.
- **Impact HAZ-1:** Construction workers could be exposed to contaminated soil during grading and construction activities.
- **Impact HAZ-2:** The BESS and BP facilities could create fire hazards.
- **Impact HYD-1:** The project will require fill to raise the site above base flood elevation and could impede or redirect flood flows.
- **Impact NOI-1:** The project would generate a substantial increase in ambient noise levels during construction.
- **Impact TRC-1:** Potential for discovery of Native American Artifacts or Human Remains.

The following impact would be significant and unavoidable:

- **Impact AG-1:** The project would convert Prime Farmland and Farmland of Statewide Importance to non-agricultural uses.
- **Impact TRA-1:** The project would result in exceedance of applicable VMT thresholds, and would conflict with CEQA Guidelines section 15064.3.

Table ES-1 Summary of Impacts and Mitigation Measures

Impact	Mitigation Measure	Level of Significance after Mitigation
Agricultural and Forestry Resources		
Impact AG-1: The project would convert Prime Farmland and Farmland of Statewide Importance to non-agricultural uses.	**AG MM-1: Compliance with the City of Gilroy's Agricultural Mitigation Policy.** Under the City of Gilroy Agricultural Mitigation Policy, the project applicant shall carry out one of the following measures: • Mitigation Option 1: Purchase an equal amount of land (1:1 ratio) of agricultural land within the "Preferred Preservation Areas" and the transfer of ownership of this land to the Silicon Valley Land Conservancy or other city approved agency, or • Mitigation Option 2: Purchase of development rights to a 1:1 ratio on agricultural land within the "Preferred	**Significant and Unavoidable Impact.**

Impact	Mitigation Measure	Level of Significance after Mitigation
	Areas" and the transfer of ownership of these rights to the Silicon Valley Land Conservancy or other city-approved agency. The options shall include all costs to cover program administration, monitoring, and management of established easements.	
	Air Quality	

Impact AQ-1: Potential to conflict with or obstruct implementation of the applicable air quality plan.	**AQ MM-1**: The project shall include construction equipment basic measures, and exhaust controls and measures, to control dust and exhaust during construction. The contractor shall implement the following best management practices (BMPs):
	• Basic Measures:
	  • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
	  • All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
	  • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
	  • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
	  • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
	  • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, California Code of Regulations, Section 2485). Clear signage shall be provided for construction workers at all access points.
	  • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
	  • Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.
		Less than Significant Impact with Mitigation Incorporated.

Impact	Mitigation Measure	Level of Significance after Mitigation

	• Exhaust Control Measures
	  • The Applicant shall implement the following measures such that the off-road equipment to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) shall meet the emission values as summarized in Table 3 7 above. Acceptable methods for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. The following are examples of feasible methods:
	  • The following construction equipment used at the site during Phase I and Phase II shall be electric:
	  • Pressure Washer
	  • Wielder
	  • The following construction equipment used at the site during Phase I and Phase II shall meet U.S. EPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB Level 2 verifiable diesel emission control devices that altogether achieve a 85 percent reduction in particulate matter exhaust:
	  • Air Compressors
	  • Concrete/Industrial Saws
	  • Forklifts
	  • Generator Sets
	  • Other Construction Equipment, such as Concrete Vibrators
	  • Pavers
	  • Pumps
	  • Rollers
	  • Sweeper/Scrubbers
	  • Tractors/Loaders/Backhoes
	  • The following construction equipment used at the site during Phase I shall meet U.S. EPA Tier 4 final emission standards according to one of the following options:
	  • Option 1: Cranes, Graders, Rubber Tired Dozers, Tractors/Loaders/ Backhoes
	  • Option 2: Cranes, Graders, Rubber Tired Dozers, Bore/Drill Rigs
	  • Option 3: Cranes, Graders, Rubber Tired Dozers, Excavators	

Impact	Mitigation Measure	Level of Significance after Mitigation

	• The following construction equipment used at the site during Phase II shall meet U.S. EPA Tier 4 final emission standards:
	  • Cranes
	  • Scrapers	

Biological Resources		
Impact BIO-1: The project could impact nesting birds due to the removal of trees.	**BIO MM-1: Nesting Bird Survey.** If removal of the trees on-site or along the transmission line route would take place between January and September, a pre-construction survey for nesting raptors will be conducted by a qualified ornithologist to identify active nesting raptor nests that may be disturbed during project implementation. Between January and April (inclusive) pre-construction surveys will be conducted no more than 14 days prior to the initiation of construction activities or tree relocation or removal. Between May and August (inclusive), pre-construction surveys will be conducted no more than thirty (30) days prior to the initiation of these activities. The surveying ornithologist shall inspect all trees in and immediately adjacent to the construction area to be disturbed by these activities, and the ornithologist shall, in consultation with the State of California, Department of Fish and Wildlife (CDFW), designate a construction-free buffer zone (typically 250 feet) around the nest until the end of the nesting activity. The applicant shall submit a report indicating the result of the survey and any designated buffer zones to the satisfaction of the Community Development Director prior to the issuance of a tree removal permit by the City Arborist.	**Less than Significant Impact with Mitigation Incorporated.**
Impact BIO-2: The project could impact migratory nesting birds due to the removal of trees.	**BIO MM-1: Nesting Bird Survey.** Please see Impact BIO-1.	**Less than Significant Impact with Mitigation Incorporated.**
Cultural Resources		
Impact CUL-1: The project could adversely impact the significance of an archaeological resource.	**CUL MM-1: Archaeological Monitoring.** A Secretary of the Interior-qualified archaeologist and a Native American cultural resources monitor shall be on site to monitor grading of native soil. The project applicant shall submit the name and qualifications of the selected archaeologist and Native American Monitor to the Director of Community Development prior to the issuance of a grading permit. Preference in selecting Native American monitors shall be given to Native Americans with: • Traditional ties to the area being monitored. • Knowledge of local historic and prehistoric Native American village sites.	**Less than Significant Impact with Mitigation Incorporated.**

Impact	Mitigation Measure	Level of Significance after Mitigation
	• Knowledge and understanding of Health and Safety Code, Section 7050.5 and Public Resources Code, Section 5097.9 et seq. • Ability to effectively communicate the requirements of Health and Safety Code, Section 7050.5 and Public Resources Code, Section 5097.9 et seq. • Ability to work with law enforcement officials and the NAHC to ensure the return of all associated grave goods taken from a Native American grave during excavation. • Ability to travel to project sites within traditional tribal territory. • Knowledge and understanding of Title 14, California Code of Regulations, Section 15064.5. • Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding CEQA mitigation provisions. • Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the NAHC's Sacred Lands Inventory. • Knowledge and understanding of archaeological practices, including the phases of archaeological investigation. • The Native American monitor shall provide written approval of the selected qualified archaeologist. **CUL MM-2: Unanticipated Discovery of Archaeological Resources.** In the event archaeological resources are encountered during construction, work shall be halted within 100 feet of the discovered materials and workers shall avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. If an archaeological resource is encountered in any stage of development, a qualified archaeologist will be consulted to determine whether the resources qualify as historical resources or unique archaeological resources. In the event that the encountered resources qualify, the archaeologist will prepare a research design and archaeological data recovery plan to be implemented prior to resuming construction at the affected area. The archaeologist shall also prepare a written report of the finding, file it with the appropriate agency, and arrange for curation of recovered materials, subject to consultation with the Native American monitor and/or most likely descendant affiliated with the recovered resources.	
Impact CUL-2: The project could disturb human remains.	**CUL MM-3: Protocol for Human Remains Discovery.** In the event that human remains are discovered during presence/absence testing or excavation and/or grading of the project site, all activity within a 50-foot radius of the find will	**Less than Significant Impact with Mitigation Incorporated.**

Impact	Mitigation Measure	Level of Significance after Mitigation
	be stopped. The County Coroner will be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the NAHC immediately. Once NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines. All actions taken under this mitigation measure shall comply with Health and Human Safety Code § 7050.5(b). Costs associated with reburial either on-site or off-site shall be paid by the property owner.	
Geology, Soils, and Seismicity		
Impact GEO-1: Potential damage from seismic shaking.	**GEO MM-1: Geotechnical Investigation.** In order to ensure the project design conforms to the requirements of a final geotechnical engineering investigation and California and local building standards and codes, the following mitigation shall be completed to ensure seismic hazards are reduced to less than significant levels: • To avoid or minimize potential damage from seismic shaking, the project shall be built using standard engineering and seismic safety design techniques appropriate for the region and site-specific conditions. • Building design and construction at the project site shall be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be included in a report to the City. The report shall be reviewed and approved by the City of Gilroy's Building & Safety Division as part of the building permit review and issuance process. • The building shall meet the requirements of applicable Building and Fire Codes, including the 2022 California Building Code and 2022 California Fire Code, as adopted or updated by the City. • The project shall be designed to withstand potential geologic hazards identified on the project site including expansive soils, and the project shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.	**Less than Significant Impact with Mitigation Incorporated.**
Impact GEO-2: The project could adversely impact the significance of an undiscovered paleontological resource.	**GEO MM-2: Unrecorded Paleontological Resources.** The applicant shall implement the following best management practices to ensure the proper handling of any unrecorded paleontological resources on the project site, including but not limited to: • Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors shall receive training by a qualified professional	**Less than Significant Impact with Mitigation Incorporated.**

Impact	Mitigation Measure	Level of Significance after Mitigation
	paleontologist, as defined by the Society of Vertebrate Paleontology, who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and shall follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who shall evaluate its significance. • If a fossil is found and determined by the qualified paleontologist to be significant and avoidance is not feasible, the paleontologist shall develop and implement an excavation and salvage plan in accordance with Society of Vertebrate Paleontology standards. Construction work in these areas shall be halted or diverted to allow recovery of fossil remains in a timely manner. Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and cataloged. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall then be deposited in a scientific institution with paleontological collections. A final Paleontological Mitigation Plan Report shall be prepared that outlines the results of the mitigation program. The Community Development Director shall be responsible for ensuring that the paleontologist's recommendations regarding treatment and reporting are implemented.	
Greenhouse Gas Emissions		
Impact GHG-1: The project would generate construction-related GHG emissions.	**GHG MM-1: Best Management Practices for Construction-Related GHG Emissions.** The applicant shall incorporate the following BMPs, to the extent feasible, to reduce project GHG emissions, as listed in Table 6-1 of BAAQMD CEQA Guidelines (BAAQMD 2022). • Use zero-emission and hybrid-powered equipment to the greatest extent possible, particularly if emissions are occurring near sensitive receptors. • Require all diesel-fueled off-road construction equipment be equipped with EPA Tier 4 Final compliant engines or better as a condition of contract. • Require all on-road heavy-duty trucks to be zero emissions or meet the most stringent emissions standard, such as model year (MY) 2024 to 2026, as a condition of contract. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 2 minutes (A 5-minute limit is required by the state airborne toxics control measure [Title 13, Sections 2449(d)(3) and 2485 of the California Code of	**Less than Significant Impact with Mitigation Incorporated.**

Impact	Mitigation Measure	Level of Significance after Mitigation
	Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and develop an enforceable mechanism to monitor idling time to ensure compliance with this measure. The developer shall prepare all site signage identified in the MMRP for review and approval by the Community Development Director prior to installation and prior to commencement of on-site site disturbance or construction activity. • Prohibit off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day. • Use California Air Resources Board–approved renewable diesel fuel in off-road construction equipment and on-road trucks. • Use U.S. Environmental Protection Agency SmartWay certified trucks for deliveries and equipment transport. • Require all construction equipment be maintained and properly tuned in accordance with manufacturer's specifications. Equipment should be checked by a certified mechanic and determined to be running in proper condition prior to operation. • Where grid power is available, prohibit portable diesel engines and provide electrical hook ups for electric construction tools, such as saws, drills and compressors, and using electric tools whenever feasible. • Where grid power is not available, use alternative fuels, such as propane or solar electrical power, for generators at construction sites. • Encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking to construction workers and offer meal options onsite or shuttles to nearby meal destinations for construction employees. • Reduce electricity use in the construction office by using LED bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones. • Minimize energy used during site preparation by deconstructing existing structures to the greatest extent feasible. • Recycle or salvage nonhazardous construction and demolition debris, with a goal of recycling at least 15% more by weight than the diversion requirement in Title 24. • Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials and based on volume for	

Impact	Mitigation Measure	Level of Significance after Mitigation
	roadway, parking lot, sidewalk, and curb materials). Wood products used should be certified through a sustainable forestry program. • Use low-carbon concrete, minimize the amount of concrete used and produce concrete on-site if it is more efficient and lower emitting than transporting ready-mix. • Develop a plan to efficiently use water for adequate dust control since substantial amounts of energy can be consumed during the pumping of water. • Include all requirements in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant on- or off-road construction equipment for use prior to any ground-disturbing and construction activities.	
Impact GHG-2: The project would generate operation-related GHG emissions.	**TRA MM-1: Transportation Demand Management Program.** Per communication with the project applicant, at full buildout, the project is proposing (and will be conditioned) to implement TDM measures that would help reduce the project's VMT. Specifically, the project plans (and will be conditioned) to implement a voluntary commute trip reduction (CTR) program that shall include each of the following measures/programs to discourage single occupancy vehicle trips and encourage alternative modes of transportation: • Ride sharing • Subsidized transit • Vanpool • Guaranteed ride home • Marketing program The above programs are identified in the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA, 2021), as T-5 (Voluntary CTR Program), one of the Transportation Measure to reduce GHG emissions and VMT. According to the CAPCOA handbook, implementation of the T-5 Program by a project could achieve up to a 4 percent reduction in site employee commute VMT. **GHG MM-2: Purchase of Carbon Offsets.** The project applicant shall purchase carbon offsets in an amount equal to 3,922 MT CO2e, which represents estimated VMT-related CO2e emissions for the life of the project. Such offsets shall be retired prior to the issuance of an occupancy permit for Phase I.	**Less than Significant with Mitigation Incorporated.**

Impact	Mitigation Measure	Level of Significance after Mitigation

	The applicant shall demonstrate its reduction of VMT-related GHG emissions through the retirement of carbon offset credits provided that the following conditions are satisfied:
	• The applicant shall provide proof to the City's Community Development Director that the carbon offset credits were issued by a registry meeting the following requirements:
	  ○ The registry shall account for and quantify emission reductions using clear and defined standards and incorporating recognized principles of GHG emissions reduction accounting, including those set forth in the ISO 14064 and the WRI/WBCSD Greenhouse Gas Protocol for Project Accounting;
	  ○ The registry shall use clear information sufficient for reviewers to assess credibility of GHG emission reductions underlying the carbon offset credits. Upon request by the City's Community Development Director, or his or her designee, any governmental entity, or any stakeholder, the registry shall provide the following information within a reasonable time period in connection with any carbon offset credit retired by the applicant: (i) the applicable quantification protocol; and (ii) all third-party confirmation or verification reports issued in connection with the carbon offset credits. Such information shall be sufficient to monitor compliance by the project applicant with this mitigation measure.
	• The carbon offset credits retired by the applicant for the purpose of mitigating VMT-related GHG emissions shall represent GHG emission reductions that are real, permanent, additional, quantifiable, verifiable and enforceable.
	• To demonstrate compliance with the requirements listed above, the developer shall provide the following to the City's Community Development Director, or his or her designee: (i) the protocol used to quantify and issue such carbon offset credits, (ii) the third-party verification report(s) pursuant to which such carbon offset credits were issued, and (iii) the unique serial numbers of the carbon offset credits to be retired to ensure that the offset cannot be further used in any manner. The Community Development Director, or his or her designee, shall reject any carbon offset credits that do not comply with these requirements, and where reductions are not direct reductions within a confined project boundary or provide opportunities	

Impact	Mitigation Measure	Level of Significance after Mitigation
	for reversal of the avoided emissions. The Community Development Director, or his or her designee shall reject any credits for a project that includes technology or GHG abatement practices that are already widely used. **Geographic Limitations**: The carbon offset credits shall be from credit projects developed in the United States. Carbon offset credits resulting from international credit projects shall not be acceptable to satisfy this mitigation measure. **Enforcement:** The permits relating to the project shall be conditioned on achievement of GHG mitigation milestones. The purchase and retirement of carbon offset credits required to mitigate the GHG emissions resulting from the operation-related VMT shall be a condition of the issuance of a certificate of occupancy for Phase I of the project, temporary or permanent, for the project and as an issuance for continued operation. Should the City determine that the offset credits are non-compliant with the requirements of **GHG MM-2**, the City may issue a notice of non-consistency and cease permitting activities and/or stop project operations, until the City determines via an issued public notice that the offsets comply with the aforementioned standards.	
Impact GHG-3: Potential to conflict with an applicable plan adopted for the purpose of reducing the emissions of greenhouse gases.	**GHG MM-2** (see above)	**Less than Significant Impact with Mitigation Incorporated.**
Hazards and Hazardous Materials		

Impact HAZ-1: Construction workers could be exposed to contaminated soil during grading and construction activities.	**HAZ MM-1: Site Management Plan.** The applicant shall implement the following measures which would reduce potentially significant soil and or groundwater impacts to construction workers to a less than significant level:
	• A Site Management Plan would be prepared to establish management practices for handling impacted groundwater and/or soil material that may be encountered during site development and soil-disturbing activities. Components of the SMP would include:
	  • A detailed discussion of the site background;
	  • Preparation of a Health and Safety Plan by an industrial hygienist;
	  • Protocols for conducting earthwork activities in areas where impacted soil and/or groundwater are present or suspected;
	  • Worker training requirements, health and safety measures and soil handing procedures shall be described;
		Less than Significant Impact with Mitigation Incorporated.

Impact	Mitigation Measure	Level of Significance after Mitigation
	• Protocols shall be prepared to characterize/profile soil suspected of being contaminated so that appropriate mitigation, disposal or reuse alternatives, if necessary, can be implemented; • Notification procedures if previously undiscovered significantly impacted soil or groundwater is encountered during construction; • Notification procedures if previously unidentified hazardous materials, hazardous waste, underground storage tanks are encountered during construction; • On-site soil reuse guidelines; • Sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility; • Soil stockpiling protocols; and • Protocols to manage groundwater that may be encountered during trenching and/or subsurface excavation activities. • Prior to issuance of grading permits, a copy of the SMP must be approved by the Santa Clara County Department of Environmental Health, Gilroy Community Development Department, and the Gilroy Fire Department in its role as part of the City's Certified Unified Program Agency (CUPA). • If contaminated soils are found in concentrations above risk-based thresholds pursuant to the terms of the SMP, remedial actions and/or mitigation measures would be taken to reduce concentrations of contaminants to levels deemed appropriate by the selected regulatory oversight agency for ongoing site uses. Any contaminated soils found in concentrations above thresholds to be determined in coordination with regulatory agencies shall be either (1) managed or treated in place, if deemed appropriate by the oversight agency or (2) removed and disposed of at an appropriate disposal facility according to California Hazardous Waste Regulations and applicable local, state, and federal laws.	
Impact HAZ-2: BESS and BP facilities could create fire hazards.	**HAZ MM-2: Fire Safety.** Prior to obtaining building permits for any BESS or BP facility, the project applicant shall include the following in its design, building permit application, and final plans for review and approval by the City of Gilroy: • The BESS and BP facilities shall comply with applicable federal, state and local building codes and standards in effect at the time of the submittal of the building permit application including, but not limited to: • National Fire Protection Association (NFPA) 855	**Less than Significant Impact with Mitigation Incorporated.**

Impact	Mitigation Measure	Level of Significance after Mitigation
	• Institute of Electrical and Electronics Engineers (IEEE) 1547; and • Underwriters' Laboratories (UL) (9540, 9540A, 1741SA, 1973) • A written description of the integrated fire and thermal runaway protection system for the BESS and BP facilities; • Adequate emergency response equipment access through the security gates and internal roadways to the BESS and BP facilities; and • Final location of fire hydrants within the facility near the BESS and BP facilities.	
Hydrology and Water Quality		
Impact HYD-1: The project will require fill to raise the site above base flood elevation and could impede or redirect flood flows.	**HYD MM-1: Conditional Letter of Map Revision – Fill Study.** Prior to issuance of a grading permit, a Conditional Letter of Map Revision-Fill (CLOMR-F) study shall be completed and submitted to FEMA for review and approval. After completing site grading or construction in the floodplain, a final LOMR-F study shall be completed and submitted to FEMA for review and approval to reflect the as-built conditions on the Flood Insurance Rate Map.	**Less than Significant Impact with Mitigation Incorporated.**
Noise		
Impact NOI-1: The project would generate a substantial increase in ambient noise levels during construction.	**NOI MM-1a: Construction Noise Barriers.** To minimize noise during Phase I and Phase II pile driving activities, the project shall utilize construction noise barriers. Phase I shall require the use of two barriers, Barrier 1, which will be 330 feet in length and 10 feet in height, and Barrier 2, which will be 165 feet in length and 10 feet in height. Phase II construction shall include one noise Barrier which will be 560 feet in length and 13 feet in height. The locations of proposed noise barriers for the construction of Phase I and Phase II are shown in **Figure 3-7** and **Figure 3-8**, respectively. **Table 3-19** depicts noise level impacts with implementation of noise barriers. **NOI MM-1b: Auger Cast Piles.** As an alternative to the noise barriers described under **NOI MM-1a**, the applicant may use auger cast piles instead of pile driving. **Table 3-20** shows the resulting construction noise levels at receptor locations R1, R3, and C1 for Phase I and Phase II construction.	**Less than Significant with Mitigation Incorporated.**
Transportation		
Impact TRA-1: The project would result in exceedance of applicable VMT thresholds, and would conflict with CEQA Guidelines section 15064.3.	**TRA MM-1: Transportation Demand Management Program.** Per communication with the project applicant, at full buildout, the project is proposing (and will be conditioned) to implement TDM measures that would help reduce the project's VMT. Specifically, the project plans (will be conditioned) to implement a voluntary commute trip reduction (CTR) program that shall include each of the following measures/programs to	**Significant and Unavoidable Impact.**

Impact	Mitigation Measure	Level of Significance after Mitigation
	discourage single occupancy vehicle trips and encourage alternative modes of transportation: • Ride sharing • Subsidized transit • Vanpool • Guaranteed ride home • Marketing program The above programs are identified in the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA, 2021), as T-5 (Voluntary CTR Program), one of the Transportation Measure to reduce GHG emissions and VMT. According to the CAPCOA handbook, implementation of the T-5 Program by a project could achieve up to a 4% reduction in site employee commute VMT.	
Tribal Cultural Resources		
Impact TCR-1: Potential for discovery of Native American Artifacts or Human Remains.	**CUL MM-1: Archaeological Monitoring, CUL MM-2: Unanticipated Discovery of Archaeological Resources, and CUL MM-3: Protocol for Human Remains Discovery.** Please see Impact CUL-1 and Impact CUL-2.	**Less than Significant with Mitigation Incorporated.**

ES 1.5 Summary of Project Alternatives

CEQA requires that an EIR identify alternatives to the project as proposed. The CEQA Guidelines Section 15126.6 states that an EIR must identify alternatives that would feasibly attain most of the objectives of the project, but avoid or substantially lessen significant environmental effects, or further reduce impacts that are considered less than significant with the incorporation of mitigation. A summary of project alternatives is provided below. A full analysis of the project alternatives is provided in **Section 7**, **Alternatives** of this EIR.

Alternative 1: No Project Alternative

The CEQA Guidelines [Section 15126(d)4] require that an EIR specifically discuss a "No Project" Alternative. The purpose of including a No Project alternative is to allow decision-makers to compare the impacts of approving the project with the impacts of not approving the project. Alternative 1 assumes that if the proposed project were not approved, the unoccupied and underutilized project site would be redeveloped with an alternative development consistent with what is allowed under the City's General Plan and Zoning Code.

The existing General Plan designated land use (General Industrial) allows for the development of heavy industrial uses including large scale manufacturing, assembly, storage, distribution, and wholesaling. While data centers are also an allowable use, and it is possible that another data center could be developed on the project site if the project were not selected to move forward, this analysis assumes

that one of the other allowable uses would be selected. As a result, Alternative 1 would not meet any of the project objectives.

Alternative 2: Reduced Development Alternative

Under Alternative 2, it is assumed that only Phase I would be constructed, which would reduce the amount of development by half. Under Alternative 2, many of the impacts of the project identified in **Section ES 1.4, Summary of Significant Impacts and Mitigation Measures**, would remain, but the magnitude of those impacts would be reduced.

Prime Farmland would still be converted to non-agricultural uses, but a portion of the project site could remain vacant and retain its status as Prime Farmland. It should be noted that the "industrial" General Plan land use designation and zoning would remain in effect. In a similar way, project impacts related to air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise and vibration, and tribal cultural resources would all remain, but the severity of the impact and extent of mitigation would be reduced compared to the project. As with the project, each of these impacts would be anticipated to be less-than-significant with mitigation.

Alternative 2 would require a maximum of 25 full-time employees split between night and day shifts. Conservatively assuming that each of the 25 data center employees under Alternative 2 would generate up to four daily trips to/from the project site (one each at the beginning and end of their work shift and one outbound and one inbound during their work shift) calculates to approximately 100 daily trips generated by project employees. Since the City of Gilroy does not currently have adopted VMT policies and impact criteria, the determination of project impacts on VMT must rely on the OPR's CEQA guidelines, which state that a project that generates fewer than 110 daily trips generally may be assumed to result in a less-than-significant impact on VMT. This threshold is based on trip generation expected to be generated by 10,000 square feet of office space.[1] Based on OPR's small project screening threshold, Alternative 2 would have a less-than-significant impact on VMT and, no mitigation would be required, eliminating **Impact TRA-1**.

Alternative 2 would achieve most of the project objectives; however, at half the size and capacity of the project, it would not be large enough to meet project customer demand long term. The objective regarding phased construction would become moot, given the reduced size of Alternative 2.

Alternative 3: Reduced Footprint Alternative

Under Alternative 3, Buildings 1 and 2 would be reconfigured as separate floors of a two-story data center building, located on the site of the proposed Building 1. The new loop road would only surround a single building instead of two, and the Phase II BP facility would be located adjacent to the Phase I BESS facility. All other improvements proposed as part of the project would remain in a similar

[1] CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, Section 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

configuration. The two-story data center building would be constructed in its entirety during Phase I. Only the Phase II BP facility would be constructed during Phase II.

With the configuration under Alternative 3, the total lot coverage of the project would be reduced by approximately 218,000 square feet. Similar to Alternative 2, Alternative 3 would still result in impacts related to agricultural land, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise and vibration, and tribal cultural resources. However, the severity of these impacts and extent of mitigation would be reduced compared to the project. As with the project, each of these impacts would be anticipated to be less-than-significant with mitigation.

Since the same number of employees and visitors would be anticipated for Alternative 3 and the project, the significant and unavoidable VMT impact (**Impact TRA-1**) would remain.

Alternative 3 would meet all of the project objectives, but would not meet the objective regarding project phasing to the same extent as the project, given that both floors of the two-story data center building would need to be constructed during Phase I.

1. INTRODUCTION

1.1 CEQA Lead Agency

City of Gilroy
Community Development Department
7351 Rosanna Street
Gilroy, CA 95020

1.2 Purpose of the Environmental Impact Report

The City of Gilroy (the City), as the Lead Agency, has prepared this Draft Environmental Impact Report (EIR) for the Gilroy Data Center (project) in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project and identifies mitigation measures and alternatives to the proposed project that could reduce or avoid adverse environmental impacts (CEQA Guidelines 15121(a)). As the CEQA Lead Agency for this project, the City is required to consider the information in the EIR along with any other available information in deciding whether to approve the project. The basic requirements for an EIR include discussions of the environmental setting, significant environmental impacts including growth-inducing impacts, cumulative impacts, mitigation measures, and alternatives. It is not the intent of an EIR to recommend either approval or denial of a project.

1.3 Environmental Review Process

1.3.1 Notice of Preparation and Scoping

In accordance with Section 15082 of the CEQA Guidelines, the City prepared a Notice of Preparation (NOP) for this EIR. The NOP was circulated to local, state, and federal agencies on November 11, 2022. The standard 30-day comment period concluded on December 10, 2022. The NOP provided a general description of the project and identified possible environmental impacts that could result from implementation of the project. The City also held a virtual public scoping meeting on December 6, 2022 to discuss the project and solicit public input as to the scope and contents of this EIR. **Appendix A** of this EIR includes the full text of the NOP and comments received on the NOP. **Table 1-1** provides a summary of the comments received. All comments received during the scoping period were considered during preparation of this Draft EIR. The last column of **Table 1-1** indicates the section of this Draft EIR in which each comment is addressed.

Table 1-1 Summary of Public Scoping Comments

Date	Commenter	Summary of Comments	How This Document Addresses the Comments
December 6, 2022	Monique Wilber (California Department of Conservation Division of Land Resource Protection)	Commenter expressed concerns regarding impacts to California's agricultural land resources as a result of permanent conversion of	Each of these concerns and recommendations are discussed and evaluated further under **Section 3.2.3, Impacts and Mitigation**

Date	Commenter	Summary of Comments	How This Document Addresses the Comments
		agricultural lands to non-agricultural uses. The commenter recommended mitigation measures in the form of agricultural conservation easements, and compensation for permanent impacts to agricultural lands. Commenter also recommended further discussion in the EIR concerning the following issues: Type, amount, and location of farmland conversion resulting directly and indirectly from implementation of the project Impacts on any current and future agricultural operations in the vicinity. Incremental impacts leading to cumulative impacts on agricultural land. Proposed mitigation measures for all impacted agricultural lands within the project area.	**Measures.** As described in the section, the project will require the implementation of **AG MM-1** to ensure compliance with the City of Gilroy's Agricultural Mitigation Policy, to offset both project and cumulative effects from the project's conversion of agricultural land to non-agricultural use. The Agricultural Mitigation Policy would require the purchase of land or development rights within the City's "Preferred Preservation Areas" at a 1:1 ratio of converted agricultural land, and transfer the ownership of the land or development rights to the Silicon Valley Land Conservancy or other City-approved agency. Furthermore, the project would include 50 feet of agricultural transition zone and 100 feet of agricultural buffer zone between the project site and the agricultural lands to the south and to the east. This distance is consistent with the 150 feet buffer zone set forth by the Agricultural Mitigation Policy for non-agricultural use adjacent to agricultural land.
December 7, 2022	Sean Reedy (Gilroy Bicycle Pedestrian Advisory Committee)	Commenter provided recommendations to be incorporated into the project's traffic demand management program including: • Installation of electric car charging stations • Onsite shower, locker, and dressing facilities • Provide updated bike maps to all employees/contractors	Suggested traffic demand management measures are incorporated in **TRA MM-1** and discussed further in **Section 3.17.3, Impacts and Mitigation Measures**.

Date	Commenter	Summary of Comments	How This Document Addresses the Comments
		• Annual presentation to Amazon Gilroy Data Center employees by the City highlighting current bike, walking, and transit options and incentive programs offered by the City.	
December 8, 2022	Santa Clara Valley Water District	Commenter requested the EIR include the hydraulic analysis for the Conditional Letter of Map Revision-Fill. Commenter also requested evaluation of the project site's existing hydrology. Additionally, the commenter requested the EIR discuss mitigation measures that will be implemented to ensure that stormwater runoff under post-project conditions does not exceed pre-project conditions. Commenter also requested that the EIR note that flood 'Zone AE' areas are subject to riverine flooding, stillwater flooding, or flooding due to ponding/poor drainage. Commenter also requested that the EIR clarify projected demands for groundwater and recycled water and evaluate potential groundwater impacts from any increased demand. Commenter requested that the EIR evaluate any potential impacts to groundwater quality resulting from the project, including those related to stormwater infiltration, or the use of recycled water for irrigation.	Each of the concerns and recommendations provided above are discussed and evaluated further under **Section 3.10.2, Environmental Setting**, and **Section 3.10.3, Impacts and Mitigation Measures**. A Stormwater Control Plan, Hydrology, and Hydraulic Report (Attachment M) was prepared by Kimley Horn in March 2022. The project's existing hydrology is discussed in **Section 3.10.2, Environmental Setting**. As discussed in **Section 3.10.3, Impacts and Mitigation Measures**, the project would comply with City's Stormwater Management Plan, Santa Clara Valley Habitat Plan requirements, and the Central Coast RWQCB's (CCRWQCB) stormwater requirements through measures such as treating run-off prior to entering the storm drainage system, in turn, minimizing project impacts to surface and groundwater quality. The project would implement **HYD MM-1** to reduce impact associated with locating in floodzone "AE".
December 12, 2022	Mark Leong (California Department of Transportation)	Commenter emphasized the requirements of Caltrans pertaining to VMT analysis in the EIR, including: • VMT analysis pursuant to the City's guidelines	A VMT analysis pursuant to City guidelines was conducted and is discussed in **Section 3.17.3, Impacts and Mitigation Measures**. This section also evaluates

Date	Commenter	Summary of Comments	How This Document Addresses the Comments
		• A schematic illustration of walking, biking and auto conditions at the project site and study area roadways. • The project's primary and secondary effects on pedestrians, bicycles, travelers with disabilities and transit performance Commenter also emphasized that any potential impacts to Caltrans' Right-of-Way (ROW) from project-related temporary access points should be analyzed in the EIR including mitigation measures. Additionally, commenter emphasized that if any Caltrans' facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion.	potential impacts to bicycle and pedestrian circulation and safety. As no Caltrans right of way would be impacted by the project, this final comment is not discussed further in this EIR.

1.4 Organization of this EIR

This EIR is organized into five sections, as described below:

- **Section 1 Introduction.** This section summarizes the project and describes the type, purpose, and function of the EIR; the environmental review process and the comments received on the NOP; and the organization of the EIR.
- **Section 2 Project Description.** This section describes the location of the project site, project boundaries, characteristics of the project, and objectives sought by the project.
- **Section 3 Environmental Setting, Impacts, and Mitigation.** This section includes the environmental setting; regulatory framework; approach to analysis; project-specific and cumulative impacts; and mitigation measures, when appropriate. The analysis evaluates the potential environmental impacts that might reasonably be anticipated to result from the construction and operation of the project, broken down into the following environmental resource topics:

    - Aesthetics
    - Agricultural and Forestry Resources
    - Air Quality
    - Biological Resources
    - Land Use and Planning
    - Mineral Resources
    - Noise
    - Population and Housing

- Cultural Resources
- Energy
- Geology, Soils and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

For each subject area, the analysis includes a description of the existing conditions and setting related to the subject area, an analysis of the project's potential environmental impacts, and a discussion of mitigation measures, if necessary, to reduce potentially significant impacts to less-than-significant levels.

In addition to impacts from the project itself, this section also considers the project's contribution to cumulative impacts (i.e., two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts). CEQA Guidelines Section 15130(b) allows an EIR to either consider cumulative impacts in the context of a list of past, present, and probable future projects or a summary of projections contained in an adopted plan, such as a general plan. Given that the project is consistent with the Gilroy 2040 General Plan (General Plan) land use designation for the project site (General Industrial), this EIR uses the General Plan EIR as the context for analyzing the project's contribution to cumulative impacts.

- **Section 4 Growth Inducing Impacts.** This chapter discusses the potential environmental consequences of foreseeable growth and development that could be induced by implementation of the project.
- **Section 5. Significant and Irreversible Impacts**. This chapter discusses any significant irreversible environmental changes that would be caused by implementation of the project. The CEQA Guidelines describe three categories of significant irreversible changes that should be considered: 1) changes in land use which would commit future generations, 2) irreversible changed from environmental action, and 3) consumption of nonrenewable resources.
- **Section 6. Significant and Unavoidable Impacts.** This chapter discusses any significant impacts from the proposed project that cannot be mitigated or would remain significant and unavoidable after mitigation.
- **Section 7. Alternatives.** This chapter analyzes a range of reasonable alternatives to the project in accordance with CEQA Guidelines Section 15126(f). The range of alternatives considered is based on their ability to feasibly attain most of the project objectives and avoid or substantially lessen any of the significant effects of the project.

1.5 Agency Contact

Gloria Sciara, Senior Planner
Community Development Department
7351 Rosanna Street, Gilroy, CA 95020
408.846.04@ci.gilroy.ca.us

2. PROJECT DESCRIPTION

2.1 Project Overview

Amazon Data Services (the applicant) proposes to build a data center campus (the project) at an undeveloped parcel (APN 841-69-044) located at the southeast end of Arroyo Circle in the City of Gilroy (the City). The project would be constructed in two phases. Implementation of the phases would be timed to meet projected demand. However, to provide a conservative analysis scenario, this EIR assumes that Phase II construction would commence immediately following completion of the first phase. This represents a conservative analysis scenario from an impact analysis perspective because construction equipment generally becomes more efficient over time as technology advances and new regulations are passed. Therefore, any delays in the construction of Phase II would likely result in reduced construction impacts compared to those disclosed in this document. For further discussion of the project construction schedule and phasing, refer to **Section 2.6, Construction Schedule**.

At completion, the project would include two data center buildings with a maximum electrical demand of 49 megawatts (MW) each, and one security building, totaling approximately 438,500 square feet. Each data center building would have an associated backup system to provide electricity in the event of a power outage. Both of the data centers would have lithium-ion battery modules connected to each server rack that provide temporary power until backup systems can start and provide long-term support until utility power is restored. Phase I would include construction of a new electrical substation and 25 Tier 4 backup generators capable of supporting the maximum demand of 49 MW required for full operation of Phase I, with up to 670 MWh discharge capacity. An emerging technology would be utilized to provide backup energy to Phase II in the event of a power failure, which is anticipated to be batteries or fuel cells (Phase II BP facility). The Phase II BP facility would be located on the south side of Building 2. Phase I would also include one 600-kW generator associated with Building 1 and one 175 kW emergency generator associated with the security building to power essential building functions such as lighting, in case of a power outage, and potentially a future BESS on the south side of Building 1 (Phase I BESS) that could store electricity during times of low energy demand and discharge to the data center during times of peak energy demand to relieve strain on the overall electrical system.

Other improvements to the project site would include ancillary utility infrastructure for connection to existing stormwater and potable water pipelines, a new overhead transmission line to connect to existing electrical infrastructure along Arroyo Circle, off-site improvements to Arroyo Circle where it becomes Camino Arroyo, general site grading for stormwater drainage, and landscaping. The entire project site would be secured with an 8-foot high security fence constructed of tubular steel.

The analysis in this document conservatively assumes that recycled water infrastructure would not be available, and only potable water would be used. In the event that the project is able to connect with recycled water infrastructure as it becomes available, this scenario would result in lesser environmental impacts as it would reduce demand for potable water. Future connections to recycled water infrastructure would be similar in design to the proposed connections to existing potable water infrastructure, and therefore the environmental impacts would be comparable.

Building 2 plans to use alternative backup generation technologies to avoid the use of diesel-powered generators, while such technologies are not yet capable of meeting the strict reliability needs of the

project, it is anticipated that one or both of the following technologies will be available prior to final design of Building 2:

- **Batteries**: It is anticipated that battery technology advancement could increase the ability to store more electricity, thereby providing longer durations of electricity discharge support. Should this advancement be realized, the Phase II BP facility described above would contribute to back up power for Building 2.
- **Fuel Cells:** A fuel cell uses the chemical energy of natural gas or other fuels to cleanly and efficiently produce electricity. Fuel cells work like batteries, but they do not run down or need recharging. They produce electricity and heat as long as fuel is supplied.[2] This analysis assumes that if fuel cells are used, they will be a zero-emission fuel source. While this technology is not yet capable of fulfilling the project's needs, given the constraints of the project site for storage and transportation of necessary fuel, it is anticipated that this technology will become more efficient both in terms of energy use and space required. If this advancement is realized, the Phase II BP facility would house fuel cells rather than batteries.

For the purpose of this analysis, the construction and operation impacts of either future technology are assumed to be equivalent. Because Phase II would use an emerging technology for backup power, and the intricacies of this technology are not yet known, the impacts of the backup power system for Phase 2 are conservatively assumed in this analysis to be the same as the impacts of the existing BESS for Phase 1.

This EIR fully analyzes the potential impacts of the Phase I BESS and Phase II BP facilities. However, the Phase I BESS is not a necessary component for the operation of Building 1, as its function is to manage energy supplies during periods of low and high energy demand. Therefore, no additional environmental review would be required if the Phase I BESS was ultimately not constructed. Conversely, the Phase II BP facility, which plans to utilize emerging battery or fuel cell technology, is a necessary component of the operation of Building 2 as it is intended to provide backup power during power outages. In the event that the future technologies described above are not available at the time building permits are requested for Phase II, or if Amazon elects to use an alternative backup power method for Phase II not captured in this EIR, the project would be required undergo subsequent environmental review pursuant to either Sections 15162, 15163, or 15164 of the CEQA Guidelines, in accordance with Section 21166 of the California Public Resources Code. For a detailed breakdown of the project components included in each Phase, refer to **Section 2.5.1, Project Phasing**.

2.2 Project Objectives

The project objectives are as follows:

- Develop a data center large enough to meet projected customer demand;
- Develop a data center on land that permits data centers as a use based on its current zoning;

[2] U.S. Office of Energy Efficiency & Renewable Energy (EERE), 2023. "Fuel Cells". Available: https://www.energy.gov/eere/fuelcells/fuel-cells

- Develop a data center that can be constructed in phases which can be timed to match projected demand;
- Minimize the use of water and electricity;
- Incorporate reliable and flexible backup power technology that meets industry standards and customer expectations, to ensure a viable project. The following evaluation criteria will ensure the project is reliable and marketable:
    - Reliability: The selected backup power technology must be reliable in the case of an emergency loss of electricity from the utility.
        - The backup power source must provide a higher reliability than 99.999 percent.
        - The selected backup power source technology must have a proven built-in resilience so if any of the backup unit fails due to external or internal failure, the system would have redundancy to continue to operate without interruption.
    - Commercial Availability and Feasibility: The selected backup electric generation technology must currently be in use and proven as an accepted industry standard in order for the project to be feasible. It must be operational within a reasonable timeframe where permits and approvals are required.
    - Technical Feasibility: The selected backup power source technology must utilize systems that are compatible with one another.

2.3 Project Location

The 56-acre project site (APN 841-69-044) is at the southeast end of Arroyo Circle, right before Arroyo Circle becomes Camino Arroyo within the City. The project site is approximately 0.2 miles east of Highway 101 and north of East 6th Street before it becomes Gilman Road. The project site is located near the border of the City of Gilroy city limits, and is designated as General Industrial by the General Plan and zoned M2-General Industrial. Other land use designations surrounding the project site include M2-General Industrial to the north, west, and southwest and General Services Commercial (zoned C-3 Shopping Center Commercial) to the west and northwest. The parcels that border the project site to the east and southeast are unincorporated and are zoned Exclusive Agriculture-Scenic Road Combining District by the Santa Clara County (the County) Zoning Ordinance. Existing development surrounding the project site includes the Gilroy Unified School District office, a dialysis center, a medical office, and a truck parts repair shop, all of which border the project site to the west. Active agricultural lands border the project site to the east and southeast. Kaiser Permanente and Valley Health Center medical offices are southwest, adjacent to the project site. The Gilroy Premium Outlets shopping center is north of the project site. The closest residences to the project site are single- and multi-family homes located approximately 0.25 mile west across Highway 101. The closest park to the project site is San Ysidro Park to the west. **Figure 2-1** provides an aerial overview of the project location, while **Figure 2-2** shows the land use context.

2.4 Site Characteristics

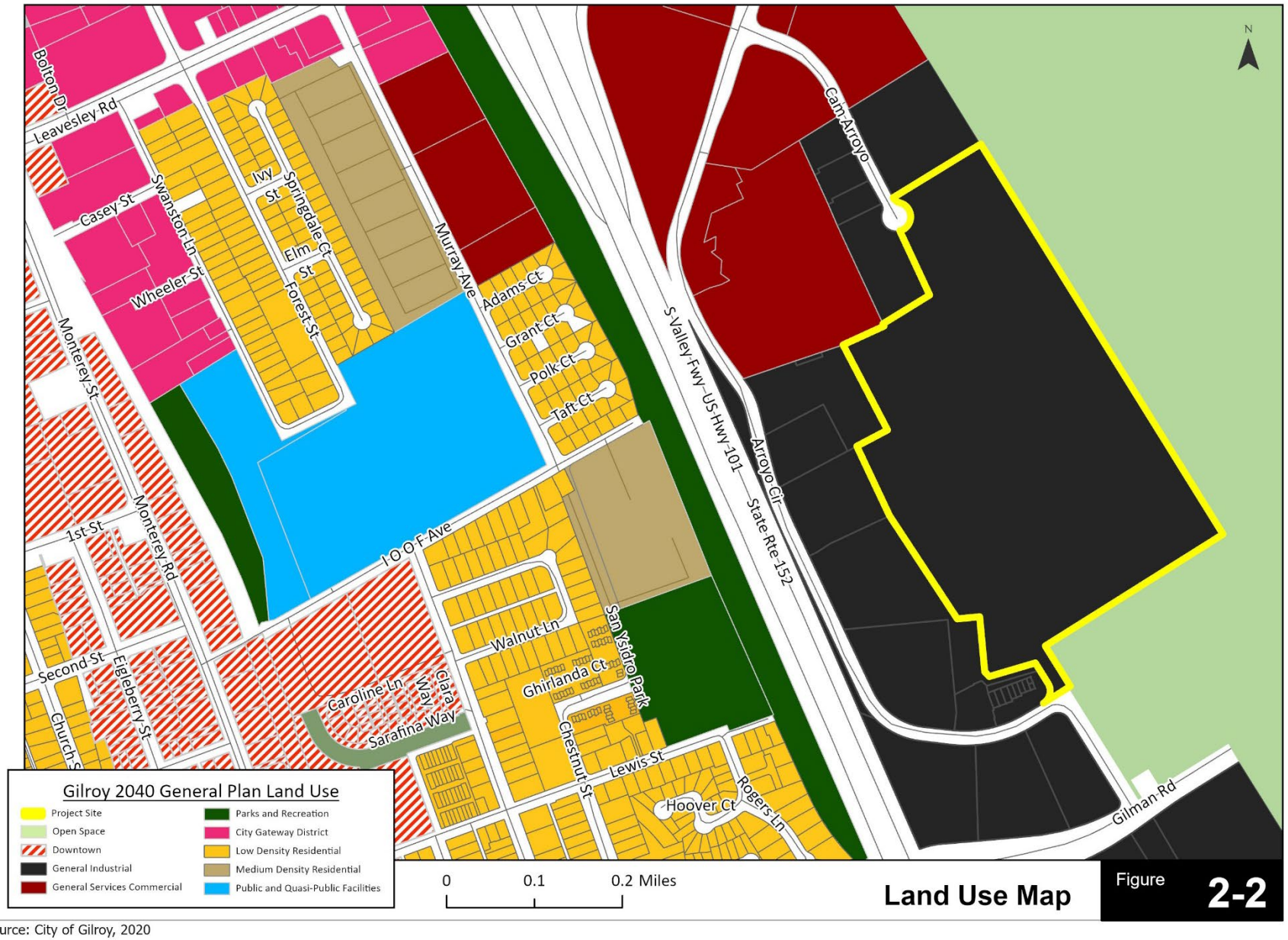
The project site is generally open and flat. It is currently vacant and is almost entirely composed of tilled land (i.e., land that has been work by plowing and sowing crops). The project site was previously used

for agricultural operations, but has been designated for General Industrial in the General Plan and zoned M2-General Industrial for over 25 years. Vegetation on the project site includes patches of grass, three trees along the south edge of the parcel, and some shrubs in the northeast corner. There is currently no paved point of access to the project site.

Project Location Map Figure **2-1**

Source: Kimley Horn, 2022

Gilroy Data Center Project



Land Use Map Figure **2-2**

Source: City of Gilroy, 2020

2.5 Project Components

2.5.1 Project Phasing

The project would be constructed in two phases. Phase I would include the first single-story, approximately 35-foot high, data center building of approximately 218,000 square feet (Building 1), a security building, a substation/switchyard, offsite transmission upgrades to the existing PG&E transmission and distribution system, and potentially a future BESS of up to 50-MW, and other utility interconnections. Building 1 would require a 49 MW connection to PG&E service and would be supported by twenty-five 2.5 MW emergency generators to power the servers in the event of an emergency, and one 600-kW generator to power other essential building functions such as lighting, in case of a power outage. During a loss of utility power, lithium-ion batteries connected to the server racks would provide several minutes of power, allowing backup generators the necessary time to start up. The security building would include a separate 175 kW emergency generator.

Phase II would include a similar single-story, 35-foot-high data center building of 218,000 square feet (Building 2) that would utilize the aforementioned electrical infrastructure (substation/switchyard, utility connections, etc.) that would be constructed in Phase I. A backup power facility would be constructed during Phase 2 (Phase 2 BP facility) that would rely on emerging battery or fuel cell technology to provide backup power during power outages.

Table 2-1 shows the improvements that would be included as part of Phase I and Phase II, respectively. The proposed site layout for both phases is shown in **Figure 2-3** and renderings of the improvements for both phases are shown in **Figure 2-4**.

Table 2-1 Project Phasing

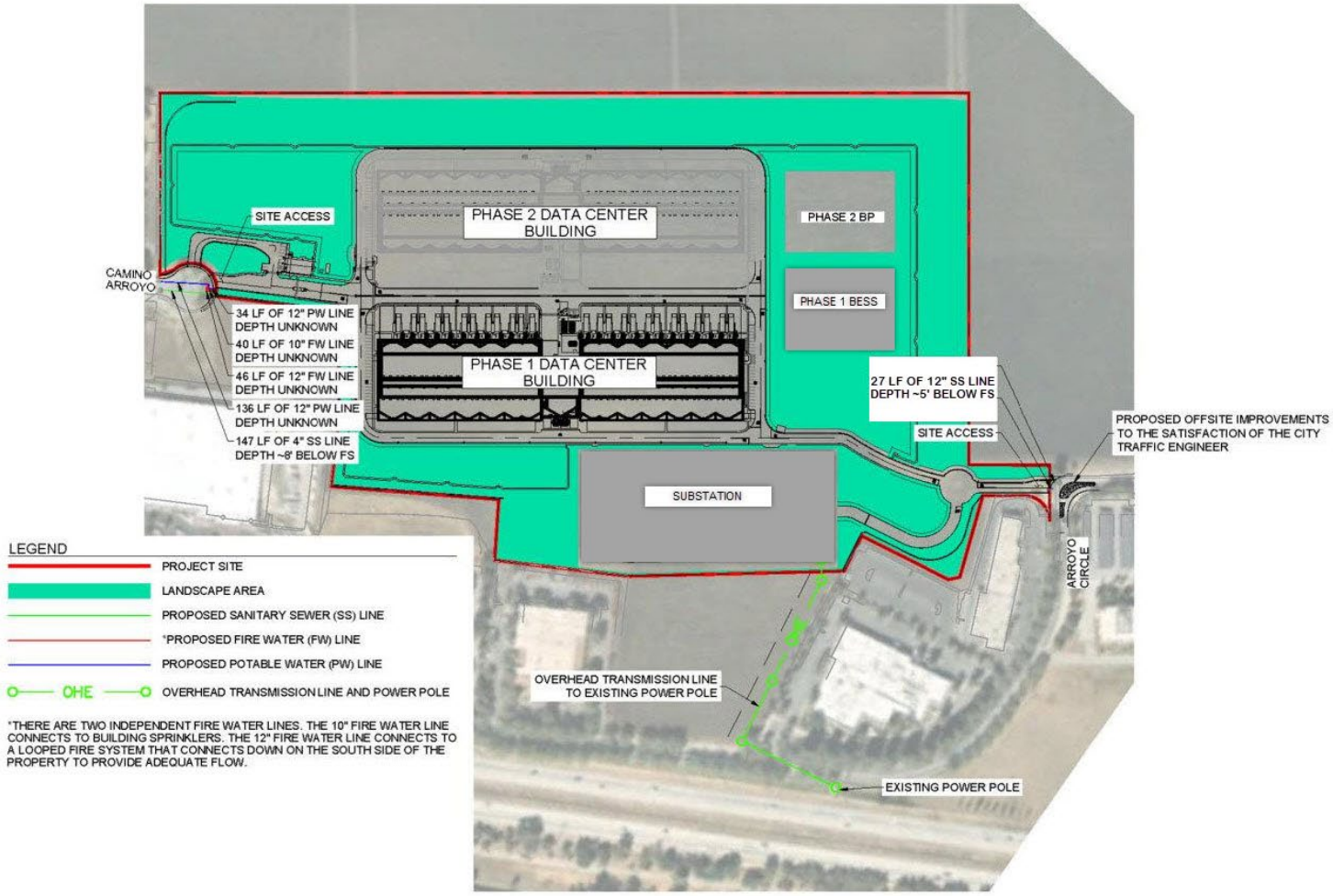
Phase	Proposed Improvements
Phase I	Phase I Data Center Building (“Building 1”; single-story, 218,000 square feet)
	50 MW BESS facility (located on the south side of Building 1)[3]
	Two 36-foot-high, 60,000 gallon water storage tanks
	Security Building (single-story, 2,500 square feet, located on the north side of the project site)
	On-site 99 MW substation and switchyard (adjacent to the south side of the Phase I BESS)
	New overhead electrical transmission line (extending from the southwest corner of the new substation to Arroyo Circle)
	Twenty-five 2.5 MW diesel emergency generators
	One 600 kW diesel house and life safety emergency generator
	One 175 kW diesel emergency generator for security building
	Stormwater management facilities capable of supporting both phases
	Asphalt loop road and supporting utilities for site access
	Perimeter security fence and sidewalk
	Landscape screening at property boundaries
	Landscaping adjacent to Building 1 and Security Building
Phase II	Phase II Data Center Building (“Building 2”; single-story, 218,000 square feet)
	Two 36-foot-high, 60,000 gallon water storage tanks

[3] Optional component of the project.

	50 MW BP facility (located on south side of Building 2)[4]
	Paved connection to loop road constructed as part of Phase I
	On-site connections to utilities
	Low landscaping adjacent to Building 2

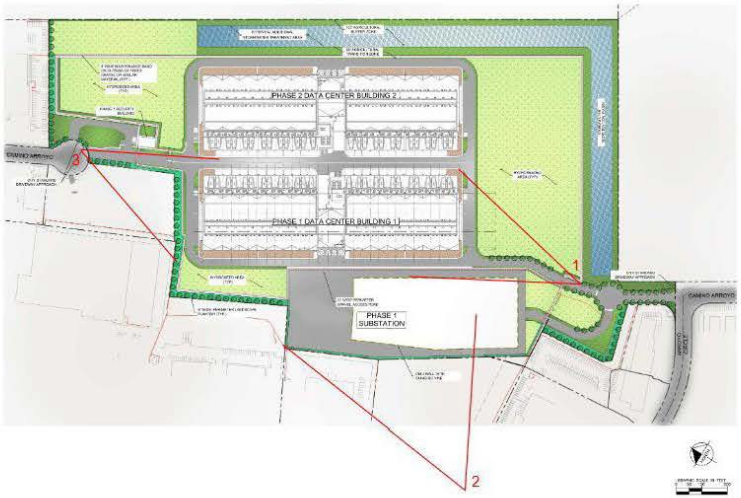
Source: ADS 2023

[4] Optional component of the project.



Gilroy Data Center Site Plan Figure **2-3**

Source: Kimley Horn, 2022



1. Southern Entry Roundabout View

2. South Valley Freeway View

3. Northern Entry Roundabout View

Project Renderings Figure **2-4**

Source: Kimley Horn, 2022

2.5.2 Site Planning

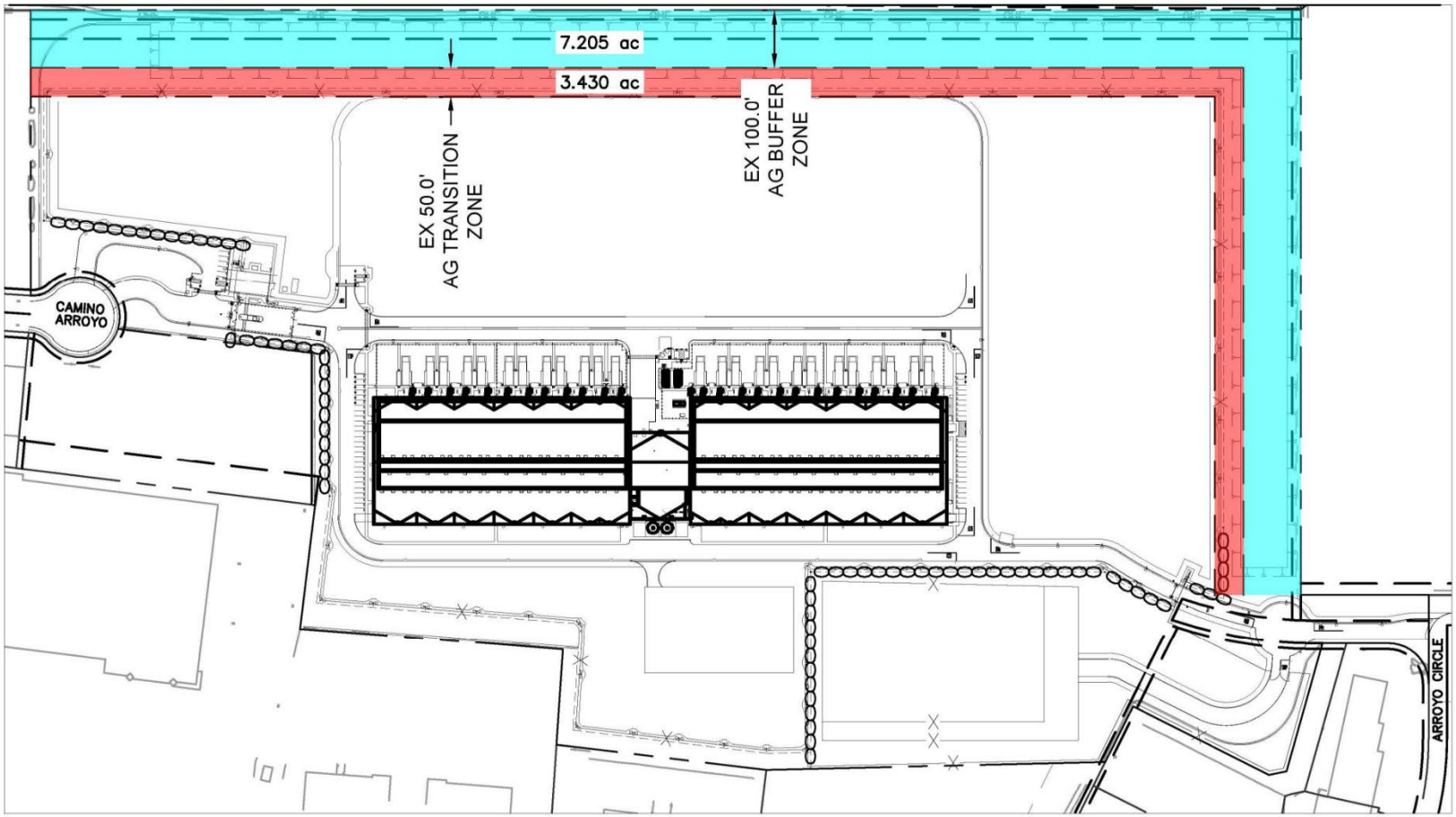
The site plan at full buildout is shown in **Figure 2-3**. The following subsections describe the arrangement of project elements for each phase.

Phase I

Building 1 would be located on the western side of the project site near the property boundaries of the existing uses along Arroyo Circle (7700-7810 Arroyo Circle). A new loop road would connect to the existing Camino Arroyo cul-de-sac on the north side of the project site, loop around Building 1, and connect to Arroyo Circle on the south side of the project site. The security building would be located across the new loop road on the north side of Building 1, near the connection to the existing Camino Arroyo cul-de-sac. The 26 generators associated with Building 1 (twenty-five 2.5 MW generators and one 600 kW generator) would be in a generation yard adjacent to the east side of Building 1, and the water tanks would be located on the west side of Building 1. The generator associated with the security building would be adjacent to the west side of that building.

If constructed, the Phase I BESS facility would be located near the southeast corner of Building 1, with the new substation located adjacent to the west side of the BESS facility. The new overhead utility line would extend from the southwest corner of the new substation along the property boundary with the Kaiser Permanente Offices located at 7520 Arroyo Circle to connect to the existing power line that runs along Arroyo Circle.

Landscaping included in Phase I would include three hydroseeded areas (i.e., grass lawns): One on the north corner of the project site, one on the west side of Building 1, north of the potential future Phase I BESS Facility, and one on the south side of Building 1. Additionally, a 100-foot-wide bioretention and stormwater treatment area would serve as an agricultural buffer zone between the project and the adjacent agricultural lands. This buffer, which would cover 7.2 acres, would extend along the eastern and southern borders of the project site. Just inside the agricultural buffer zone, a 50-foot-wide landscaped area would serve as an agricultural transition zone covering 3.4 acres. Both buffers are shown in Figure 2-5. Along the perimeter of the project site, trees and shrubs would visually screen the project from adjacent uses. The entire perimeter of the project site would be enclosed with an 8-foot-high security fence.



Agricultural Buffers Figure **2-5**

Source: Kimley Horn, 2022

Phase II

Building 2 would be located immediately to the east of Building 1, separated by the loop road constructed during Phase I. The orientation of Building 2 would mirror Building 1, with an equipment yard located on the west side of the building and two water tanks located on the east side. The loop road would be extended around the perimeter of Building 2 and low ornamental landscaping would be added. The Phase II BP facility (which would either house emerging battery or fuel cell technology) would be located on the south side of Building 2, if constructed. Both Building 2 and the potential future Phase II BP facility would connect into utility lines extended to the site as part of Phase I.

2.5.3 Data Center Buildings

The project would include two 218,000 square-foot data center buildings and one 2,500 square-foot security building totaling approximately 438,500 square feet. The data centers would house computer servers for private clients and electrical and backup battery equipment rooms. Each of the two data center buildings would also include approximately 10,000 square feet of administrative office/employee amenity space and approximately 15,000 square feet of warehouse space. Renderings of the data center buildings are presented in **Figure 2-4.**

2.5.4 Major Equipment

A data center relies upon a constant supply of power to allow servers to operate continuously, 24 hours per day, 7 days per week. The constantly-running servers generate heat as a byproduct and require cooling, especially in the summer when temperatures are higher. This section describes the major equipment that would be included to keep the project running and at the proper temperature.

Lithium-Ion Battery Backup Modules

In order to provide power to server racks during the period between the start of a power outage and the energization of the buildings via either diesel generator (Building 1) or Phase II BP facility (Building 2), each server rack would be equipped with lithium-ion battery modules. These modules are capable of providing power for approximately 3 minutes to prevent loss of server power. The battery modules stop discharging when utility power is restored, or when the backup energy systems start up.

Emergency Backup Generators

As discussed in **Section 2.5.2, Site Planning**, each of the 25 emergency backup generators intended to power the servers in case of a power outage will be located on the east side of Building 1 in an equipment yard. Each of these 25 generators will be a Tier-2 emergency diesel-powered generator equipped with diesel particulate filters (DPF) capable of removing up to 95 percent (and no less than 90 percent) of harmful particulate matter emissions. The applicant is committed to using DPF and other technologies as needed to achieve EPA Tier 4 equivalency, consistent with Bay Area Air Quality Management District requirements. The maximum peak generating capacity of each model is 2.5 MW with a steady state continuous generating capacity of 1.75 MW.

The emergency generator to support Building 1 office operation would also be a Tier-2 emergency diesel-fired generator equipped with a DPF capable of removing 90-95 percent of harmful particulate

matter emissions. The maximum peak generating capacity of this generator would be 600kW with a continuous generating capacity of 420kW.

The security building generator will be a Tier-3 emergency diesel-powered generator. The maximum peak generating capacity of this model would be 175 kW.

All 27 generators would use ultra-low sulfur diesel. The generators would each be equipped with a flapper-type rain cap, which is a hinged cap that opens to release exhaust vertically into the atmosphere when the generator is operating.

Each of the 25 2.5 MW generators would sit on top of an above-ground fuel tank with a storage capacity of 5,000 gallons. The 600 kW and 175 kW emergency generators would each sit on top of a 1,000-gallon above-ground fuel tank. The applicant would manage the loading, storage and use of diesel fuel in accordance with all state and federal regulations.

All backup generators would be run for short periods for testing and maintenance purposes, but otherwise will not operate unless there is a disturbance or interruption of the utility power supply. BAAQMD's Authority to Construct and the California Air Resources Board's Airborne Toxic Control Measures (ATCM) limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance). In addition, the applicant would limit operation to one engine at a time for routine testing activities, which would be conducted in accordance with manufacturer's recommendations.

Electrical Infrastructure and Upgrades

Phase I would require construction of a new substation capable of supplying electricity to the project at full buildout. The substation would encompass approximately four acres on the western boundary of the project site. The project would require boring during construction to facilitate connection to electrical utilities. A typical example of a PG&E substation is shown in **Figure 2-6** for informational purposes.

The substation switch yard (that is, the portion of the substation linking the power-generating plant and the transmission system that carries electricity to buildings) would ultimately be owned and operated by PG&E. The applicant would own and operate the transformer yard (that is, the portion of the substation that modifies the voltage of electricity from the City's electrical distribution grid to be appropriate for use at the project site). Components of the substation would include cabling, transformers, and circuit breakers. The substation would be enclosed per PG&E standard, with a concrete block wall.

Figure 2-6 Example Substation

Interconnection of the new substation to the existing electrical distribution grid would require PG&E to install approximately 1,000 linear feet of new overhead power line. Each power line would be installed on its own set of transmission poles and up to six new transmission poles would be required. The incoming transmission power lines would originate from PG&E's existing Morgan Hill-Llagas line located near the southwest corner of the project site and would enter the project site along a pre-negotiated easement with the adjacent property owner as shown in **Figure 2-3**.

Phase I Battery Energy Storage Systems

The project may include a BESS facility to be constructed during Phase I (Phase I BESS). If constructed, the Phase I BESS would charge from the new substation and would store electricity during time of low energy demand and discharge to the data center during times of peak energy demand to relieve strain on the overall electrical system.

Phase II Backup Power Facility

During Phase II, a backup power facility (Phase II BP) would be constructed that would rely on one of the following emerging technologies:

- **Batteries**: It is anticipated that battery technology advancement could increase the ability to store more electricity thereby providing longer durations of electricity discharge support. Should this advancement be realized, the Phase II BP facility described above would provide backup power for Building 2, without the need for diesel generators. Like the Phase I BESS facility, batteries in this scenario would be charged from the new PG&E substation.
- **Fuel Cells:** A fuel cell uses the chemical energy of natural gas or other fuels to cleanly and efficiently produce electricity. Fuel cells work like batteries, but they do not run down or need recharging. They produce electricity and heat as long as fuel is supplied.[5] This analysis assumes that if fuel cells are used, they will utilize a zero-emission fuel source. While this technology is not yet capable of fulfilling the project's needs, given the constraints of the project site for storage and transportation of necessary fuel, it is anticipated that this technology will become more efficient both in terms of energy use and space required. If this advancement is realized, the Phase II BP facility would house fuel cells rather than or in addition to batteries.

[5] U.S. Office of Energy Efficiency & Renewable Energy (EERE), 2023. "Fuel Cells". Available: https://www.energy.gov/eere/fuelcells/fuel-cells

For the purpose of this analysis, the construction and operation impacts of either future technology are assumed to be equivalent. Under either scenario, Building 2 would not rely on diesel generators for backup power.

Cooling Systems

The temperature of servers and other equipment would be regulated using air chilled by evaporative cooling units, which would be installed on the walls of each data center building. The chilling units would draw in outside air, chill the air using evaporative cooling, and then circulate the cooled air over servers. Water for the evaporative cooling system would be stored in four storage tanks: two located on the west side of Building 1 and two on the east side of Building 2. Each storage tank would be approximately 36 feet high, with a storage capacity of 60,000 gallons (for a combined total on-site water storage of 240,000 gallons). Each building would require up to 9 acre feet per year (AFY) of potable water, for a total cooling-related demand of 18 AFY.

2.5.5 Water and Sewer Connections

The existing 12-inch water main in Camino Arroyo would be extended approximately 135 linear feet to provide potable water to the project site. This connection would tee off the existing public water main as shown in **Figure 2-3**.

The project would include water connections for fire protection systems. A 10-inch fire water line would tee off the proposed 12-inch public water main extension in Camino Arroyo. The 10-inch fire line would serve as the fire sprinkler lateral for Building 1, the security building and Building 2. The second fire system would be a 12-inch fire hydrant loop. One end of the 12-inch fire hydrant loop would tee off the proposed 12-inch public water main extension in Camino Arroyo and the other end would tee off the existing 12-inch ductile iron water main in Arroyo Circle.

The on-site security building would have a sanitary sewer connection, which would connect to the existing line in Camino Arroyo. The two data center buildings would have a sanitary sewer connection that ties into the existing sanitary sewer manhole in Arroyo Circle. Water connections would be extended throughout the site during construction of Phase I. During Phase II construction, new buildings would connect to existing water lines installed during Phase I.

2.5.6 Site Access and Parking

Primary access to the project site would be provided by two new driveways at the Camino Arroyo cul-de-sac on the northern side of the project site. A third driveway entrance for emergency access would be constructed at Arroyo Circle on the southern portion of the project site. **Figure 2-3** shows proposed site and access improvements.

The project would provide approximately 115 parking spaces at full buildout. A total of 60 parking spaces would be provided during Phase I; the remaining parking spaces would be constructed during Phase II. Parking would be spaced throughout the project site with a heavy concentration of parking along the north and south sides of the data center buildings. The project would provide adequate electric vehicle, clean air, and vanpool parking spaces per Cal Green requirements. Traffic calming

measures such as a mountable curb median[6] and microsurface treatment[7] would be installed adjacent to the southern project entrance on Arroyo Circle.

2.5.7 Landscaping

There are 18 trees present at the project site, including those planted on adjacent properties whose branches extend into the project site and may therefore be affected during construction. The project would require removal of all 18 existing trees, in coordination with neighboring property owners where applicable. Trees would be replaced per the City's tree replacement ratios. Tree removal and replacement would occur during Phase I.

Proposed landscaping would consist of trees and shrubs at the perimeter of the project site (for visual screening), drought-tolerant shrubs, and groundcover at main entries and adjacent to interior drive aisles and parking stalls. Large open spaces on-site would be seeded with a non-irrigated mix that is tailored to project site conditions. A low-flow potable water irrigation system would be installed for all landscape areas planted with container plants.

In compliance with the City's Agricultural Mitigation Policy, Section 1.04, the project would also include an approximately 7.2-acre agricultural buffer zone on the eastern and southern sides, between the project and adjacent agricultural uses. The project would also include an approximately 3.4-acre agricultural transition zone between the buffer and the project. The buffer zone and transition area would comprise a combination of native plants, trees, hedges, and a stormwater bioretention basin. No public access would be allowed within the buffer and transition areas due to the potential for exposure to dust and spraying associated with agricultural activities on adjacent properties.

Most landscaping would occur during Phase I; only low landscaping adjacent to the new Building 2 would occur during Phase II.

2.5.8 Flood Protection and Stormwater

The project site is located within the 100-year Federal Emergency Management Agency (FEMA) flood plain as shown in **Figure 2-7** and would require fill to raise the project site above base flood elevation. Fill for the two data center buildings would be brought to the project site during construction of Phase I. Roughly 210,000 cubic yards of fill would be imported to the project site to raise the base elevation by approximately four feet (1.5 feet above the base flood elevation).

Under Provision C.3 of the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat stormwater runoff. LID-based treatment controls are intended to maintain or restore the project site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource

[6] Mountable curb medians are several inches lower than vertical curbs and are slanted since they are designed to be crossed when required.

[7] Microsurfacing consists of the application of a mixture of water, asphalt emulsion, aggregate (very small crushed rock), and chemical additives to an existing asphalt concrete pavement surface. Microsurfacing is applied in order to help preserve and protect the underlying pavement structure and provide a new driving surface.

(e.g., rainwater harvesting for non-potable uses). Examples of C.3 LID measures include bioretention areas, flowthrough planters, and subsurface infiltration systems.

There are no stormwater treatment facilities at the project site. Existing rainwater runoff infiltrates into the ground or is sheet-slowed toward the southern property line. The project proposes to construct one stormwater treatment (bioretention) area totaling approximately 201,000 square feet. The bioretention area would be located along the eastern and southern property boundaries. During Phase I construction, the project site would be graded to direct stormwater into the bioretention treatment area via multiple storm drain inlet and pipe networks that would be installed throughout the project site. The treatment area would include perforated underdrains and overflow structures that would ultimately discharge into the public storm drain line in Arroyo Circle near the southern property boundary. The project would also include a 36-inch lateral to tie into the existing 60-inch storm drain main that runs in an easement through the project site.

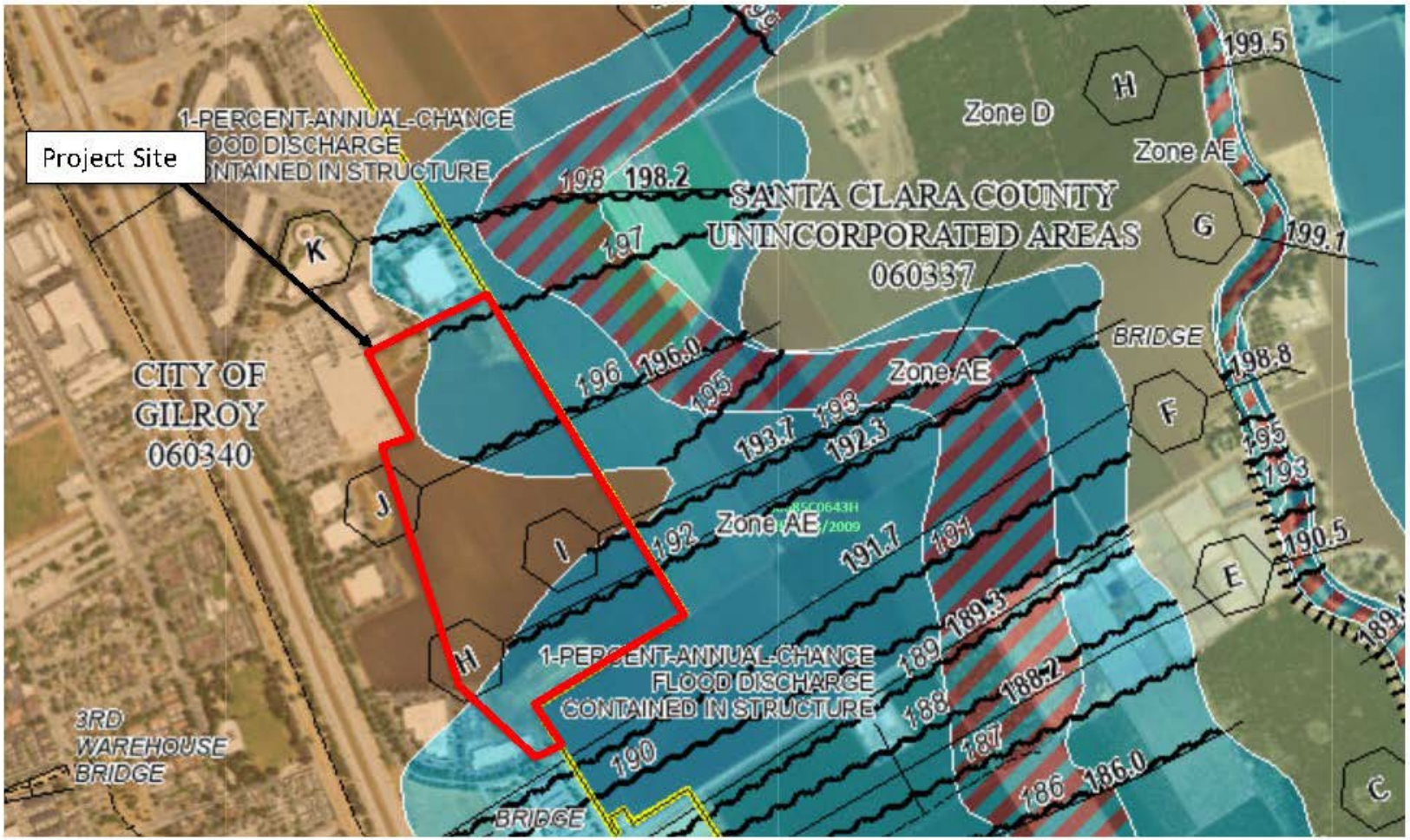
2.5.9 Energy Use

The project would begin operating prior to completion of the proposed electrical substation. To provide electricity to the project during this interim period, the project would receive interim service from PG&E capable of supporting 15 MW of electrical load. Once operational, all electricity for the project would be provided by the new substation. At full operation, each data center building would have a maximum electrical demand of 49 MW.

The data center industry utilizes a factor called the Power Utilization Efficiency Factor (PUE) to estimate the efficiency of its data centers. The PUE is calculated by dividing the total demand of the data center by the Critical IT load. A lower PUE signifies a more energy efficient design than a higher PUE. The average PUE for the project at full buildout of both buildings would be 1.18. This is lower than the data center industry average PUE of approximately 1.6.

2.5.10 Employees

During operation of Phase I, prior to completion of Phase II, up to 25 full-time employees would be needed. Once Phase II of the project is complete, operational employment may grow to 50 full-time employees. The project would operate 24 hours a day and employees would be onsite for day and night shifts. At project buildout, up to 125 employees could be onsite at one time.



FEMA Floodplains Map Figure **2-7**

Source: FEMA Flood Map Services Center, 2009

2.6 Construction Schedule

As discussed in **Section 2.5.1, Project Phasing**, construction of the project would take place in two phases. For the purposes of this analysis, a conservative Phase I construction start date of April 2024 was used as the baseline condition. Although construction would ultimately start later, assumption of an April 2024 start date represents a conservative analysis scenario because new regulations and more efficient technology generally make construction less impactful as time goes on. Construction of the power generation yard and substation would take approximately two months. Phase I exterior construction would follow and take approximately 11 months. Additional Phase I interior construction activities, including construction of the potential future Phase I BESS, would take approximately 25 months following exterior construction.

Although Phase II may be delayed based on consumer demand, for the purposes of this EIR, it is assumed that Phase II exterior construction would commence immediately following completion of the Phase I generation yard and substation. Again, this is a conservative assumption because new regulations and more efficient technology generally make construction less impactful as time goes on. Exterior construction of Phase II would take approximately 10 months. Additional Phase II interior construction activities would take approximately 30 months following exterior construction. Construction phasing for Phase I and Phase II is summarized in **Table 2-2**.

Table 2-2 Construction Phasing

Construction Phase / Subphase	Duration
Phase I	
Power Generation Yard / Substation	2 months
Exterior Construction	11 months
Interior Construction / Phase I BESS	25 months
Total Phase I	*38 months (3 years, 2 months)*
Phase II	
Exterior Construction	10 months
Interior Construction	30 months
Total Phase II	*40 months (3 years, 4 months)*
Total Phases I and II	***78 months (6.5 years)***

Source: ADS 2023.

Ground-disturbing construction activities would include removal of vegetation, scarification of existing soils and placing roughly 210,000 cubic yards of engineered and compacted fill material to raise the project site for flood control purposes. Excavation for utilities would extend to depths of up to 15 feet. The project site would be graded to direct stormwater flows towards the proposed biotreatment area along the northern and southern boundaries of the project site. Although not known at this time, this EIR conservatively assumes that pile driving would be required.

During construction, the average construction workforce would be 75 personnel with an estimated maximum of 110 personnel for each phase. Since the project would be constructed in phases, laydown areas are anticipated to be on-site.

2.7 Permits and Approvals

The project would be subject to the City's Architectural and Site review processes prior to issuance of grading and building permits. Additionally, the Bay Area Air Quality Management District (BAAQMD) has authority to issue permits to construct and operate facilities that emit certain quantities and types of air emissions. The diesel-fired emergency generators proposed as part of Phase I would each require a permit to construct and a permit to operate from the BAAQMD.

The California Energy Commission (CEC) does not have jurisdiction over the project. The CEC has jurisdiction over thermal power plants with generating capacities in excess of 50 MW. This excludes BESS, fuel cells, solar photovoltaic, wind and hydrogeneration technologies. While diesel-powered emergency generators are considered a thermal power plant, the CEC measures generating capacity of such backup power plants by the amount of electricity the building for which it serves can demand. In the case of Building 1, the maximum electrical demand would be 49 MW, which is less than the CEC threshold. Building 2 would not rely on backup diesel generators. Therefore, the CEC does not have jurisdiction over the project, and no CEC license would be required unless the final design of the project would have a maximum electrical demand of 50 MW or greater.

3. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

3.1	Aesthetics	3.11	Land Use and Planning
3.2	Agricultural and Forestry Resources	3.12	Mineral Resources
3.3	Air Quality	3.13	Noise
3.4	Biological Resources	3.14	Population and Housing
3.5	Cultural Resources	3.15	Public Services
3.6	Energy	3.16	Recreation
3.7	Geology, Soils and Seismicity	3.17	Transportation
3.8	Greenhouse Gas Emissions	3.18	Tribal Cultural Resources
3.9	Hazards and Hazardous Materials	3.19	Utilities and Service Systems
3.10	Hydrology and Water Quality	3.20	Wildfire

The discussion for each environmental topic area includes the following subsections:

- **Regulatory Framework** – This section provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project.
- **Environmental Setting** – This section describes the existing physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impacts and Mitigation Measures** – This section discusses the project's impact on the environmental subject as related to the CEQA Appendix G checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Mitigation measures are numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.
- **Cumulative Impacts –** This is a subsection to Impacts and Mitigation Measures and discusses the project's cumulative impact within a defined geographic area. Cumulative impacts, as defined by CEQA, refer to two or more individual effects, which when combined, compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant effects taking place over a period of time. CEQA Guidelines Section 15130 states that an EIR should discuss cumulative impacts "when the project's incremental effect is cumulatively considerable." The discussion does not need to be in as great of detail as is necessary for project impacts but is to be "guided by the standards of practicality and reasonableness." The purpose of the cumulative analysis is to allow decision makers to better understand the impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the project addressed in this EIR.

  The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence (CEQA Guidelines Section 15130(b)). To accomplish these two objectives, the analysis should include either a list of past, present,

and probable future projects or a summary of projections from an adopted general plan or similar document (CEQA Guidelines Section 15130(b)(1)). This EIR uses the General Plan EIR as the context for analyzing the project's contribution to cumulative impacts.

The analysis must determine whether the project's contribution to any cumulatively significant impact is cumulatively considerable, as defined by CEQA Guidelines Section 15065(a)(3). The cumulative impacts discussion for each environmental issue accordingly addresses the following issues: 1) would the effects of all of past, present, and probable future (pending) development result in a significant cumulative impact on the resource in question; and, if that cumulative impact is likely to be significant, 2) would the contribution from the project to that significant cumulative impact be cumulatively considerable?

3.1 Aesthetics

This section evaluates impacts associated with aesthetics and visual quality that could occur as a result of the project.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding aesthetics were received during the 30-day NOP circulation period.

3.1.1 Regulatory Framework

State

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment.

There are no State-designated scenic highways in the City (Caltrans, 2022). In the County, the one State-designated scenic highway is State Route (SR) 9 from the Santa Cruz County line to the Los Gatos City Limit. This highway is over 25 miles from the project site at its closest point. Eligible State Scenic Highways (not officially designated) include: SR 17 from the Santa Cruz County line to SR 9, SR 35 from Santa Cruz County line to SR 9, Interstate 280 from the San Mateo County line to SR 17, and the entire length of SR 152 within the County. Of these, SR 152 is closest (approximately 1 mile south of the project site); however, the project site is not visible from the highway, nor is the highway visible from the project site.

Local

Gilroy 2040 General Plan

The Land Use Element, Natural and Cultural Resource Element, Mobility Element, and Public Facilities and Services Element of the General Plan address the City's goals, policies, and implementing actions regarding aesthetics. The following policies in the General Plan related to aesthetics are applicable to the project:

- **LU 5.1. Industrial Design Standards**. Ensure that new commercial and industrial developments contribute to the overall attractiveness of the community through appropriate site design, architectural design, and landscaping.
- **M 5.9. Highway 101 Landscaping and View Protection**. Coordinate with Caltrans and the County to provide additional landscaping along the U.S. 101 right-of-way to enhance its attractiveness, recognizing that it is the primary "visitor-serving" traffic artery in the Planning Area. Also, encourage new developments facing U.S. 101 to provide landscape screening and to protect and enhance existing views of farmland and surrounding hills.

- **PFS 8.10. Outdoor Lighting and Energy Efficiency**. Select outdoor lamps and light fixtures that maximize energy efficiency, provide effective lighting, and are compatible with the neighborhood context.
- **PFS 8.11. Light Pollution and Glare**. Require that light sources and fixtures be selected, designed, and located to minimize light pollution and glare.

Hecker Pass Specific Plan

The Hecker Pass Specific Plan provides the framework for future growth and development within approximately 423 acres at the western gateway to the City of Gilroy, commonly referred to as the "Hecker Pass Area" (City of Gilroy, 2015). Pursuant to the City's adopted CEQA thresholds, impacts related to aesthetics would be considered significant if the project would substantially degrade the existing visual character in the Hecker Pass Specific Plan Area. The project is not located in the Hecker Pass Specific Plan area.

3.1.2 Environmental Setting

The project site is currently vacant, comprising tilled land that was previously used for agricultural operations. The northern corner of the project site is currently used as a vehicle staging area. The project site is surrounded by agricultural fields to the south and east. The project site is adjacent to one- and two-story commercial and office buildings to the north and west. U.S. Highway 101 is located approximately 100 feet west of the project site. Views from the project site include neighboring buildings and fields, ornamental trees, and distant hills to the east and west as shown in **Figure 3-1**.

As established in the Regulatory Framework discussion (refer to **Section 3.1.1, Regulatory Framework**) there are no State-designated scenic highways in the City. The General Plan does not designate scenic vistas within the City; however, it does identify scenic resources that include views of the surrounding hillsides provided by open spaces such as agricultural lands. As shown in **Figure 3-2**, Photos 1 and 2, existing development and the relatively flat topography of the project site generally preclude unimpeded views of such scenic resources.

3.1.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, impacts related to aesthetics are considered significant if the project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of public views of the project site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Additionally, the City of Gilroy has its own locally adopted CEQA thresholds, described below. Impacts related to aesthetics would also be considered significant if the project would:

- Have a substantial adverse effect on a scenic vista or degrade the existing visual character in the Hecker Pass Specific Plan Area or the hillside areas;
- Substantially damage scenic resources viewed from Hecker Pass Highway or Pacheco Pass Highway;
- Substantially damage scenic resources (farmland and surrounding hills) viewed from Highway 101;
- Except as provided in Public Resources Code Section 21099, result in unattractive entrances (including lack of sufficiently landscaped entrances with landscaped medians, indicating civic pride and a concern for civic beauty) at the principal gateways to the City (north and south Monterey Street, Highway 152/ Pacheco Pass, north and south Santa Teresa Boulevard, and at the Highway 101 interchanges at Masten, Buena Vista, Leavesley, and Tenth Street); or
- Except as provided in Public Resources Code Section 21099, include or require a wall or fence higher than seven feet measured from the finished grade on the higher side of the fence at the property line, or as allowed by the Gilroy Zoning Ordinance, Section 30.34.

Discussion of No Impacts

The project would have no impact on scenic resources under the following thresholds:

Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The closest officially-designated State Scenic Highway is SR 9, approximately 25 miles west of the project site, and the closest eligible State Scenic Highway is SR 152, located approximately 1 mile south of the project site (Caltrans 2022). The project site would not be visible from SR 9, SR 152, or any other State Scenic Highways. There are no other established scenic resources such as rock outcroppings or trees at the project site which would be damaged by implementation of the project. Therefore, the project would not substantially damage scenic resources within a state scenic highway. No impact would occur.

Would the project have a substantial adverse effect on a scenic vista or degrade the existing visual character in the Hecker Pass Specific Plan Area or the hillside areas?

No Impact. The project is not located in the Hecker Pass Specific Plan area or in a hillside area. Therefore, development of the project would not result in substantial adverse effects on scenic vistas or visual character in these areas. No impact would occur.

Would the project substantially damage scenic resources viewed from Hecker Pass Highway or Pacheco Pass Highway?

No Impact. The project site is located approximately 1.5 miles east of the Hecker Pass Highway and one mile north of Pacheco Pass Highway. The project would not be visible from the Hecker Pass Highway or the Pacheco Pass Highway and thus, would not have an impact on scenic resources viewed from them. No impact would occur.

Except as provided in Public Resources Code Section 21099, would the project result in unattractive entrances (including lack of sufficiently landscaped entrances with landscaped medians, indicating civic pride and a concern for civic beauty) at the principal gateways to the City (north and south Monterey Street, Highway 152/ Pacheco Pass, north and south Santa Teresa Boulevard, and at the Highway 101 interchanges at Masten, Buena Vista, Leavesley, and Tenth Street)?

No Impact. The nearest principal gateway is the Highway 101 interchange at Leavesley Road, approximately 0.4 miles northwest of the project site. The project site is not visible from this interchange due to existing development. Therefore, the project would not result in an unattractive entrance at a principal gateway. No impact would occur.

Discussion of Less than Significant Impacts

The project would not significantly impact scenic resources under the following thresholds:

Would the project have a substantial adverse effect on a scenic vista?

Less than Significant. The General Plan does not designate scenic vistas within the City; however, it does identify scenic resources that include views of the surrounding hillsides provided by open spaces such as agricultural lands. Under existing conditions, views of the project site and the hillside areas to the east are available from publicly accessible vantage points, such as the cul-de-sac of Camino Arroyo on the north edge of the project site, as demonstrated in **Figure 3-2**. However, such views are partially obscured by existing trees and development. Views toward the project site from Highway 101 are partially obscured by mature trees that line Highway 101.

The project would develop a property that was previously used for agriculture, replacing vacant fields with an industrial data center, thereby introducing prominent new visual elements on a site that is currently undeveloped. The data center facility would be approximately 35 feet at the roof's high point with parapets extending to a height of 45 feet at the high point. The future Phase I BESS and Phase II BP facilities would be less than 35 feet high. Therefore, the data center buildings would obstruct some surrounding views.

Because the project would not substantially block views of agricultural lands and hillsides that are currently unimpeded, the project would not have a substantial adverse effect on a scenic vista and this impact would be less than significant.

Would the project substantially degrade the existing visual character or quality of public views of the project site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality)?

Less than Significant. As described in **Section 3.1.2, Environmental Setting**, the project is in an area mixed with urban and non-urban land uses. The project would replace existing agricultural fields but would not substantially block public views of the distant hills or surrounding agricultural fields as these views are generally impeded by existing development. Publicly accessible viewpoints of the project site are primarily available from Camino Arroyo on the north and south sides of the project site, and from Gilman Road on the south site of the project site. As shown in **Figure 3-2**, such views include vacant, unplanted farmland with no vegetation or existing structures. Development of the vacant project site

with uses that are consistent with the existing zoning would not substantially degrade the existing visual character or quantity of public views of the site and its surroundings.

The project site is zoned M2 General Industrial District. According to Table 30.23.10 of the City Code, data processing establishments are permitted within the General Industrial District zoning. Therefore, the project would not conflict with the applicable zoning and this impact would be less than significant.

Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant. Although the project site is currently undeveloped, it is within a developed area of Gilroy which already experiences some levels of light and/or glare from the surrounding development and vehicle traffic. The project would introduce new development to the site which would include outdoor security lighting.

The General Plan includes goals and policies to address increases in lighting and glare that have the potential to substantially impact day or nighttime views. Policy NCR 1.10 addresses light pollution by encouraging the use of measures to limit exterior light pollution and requires that outdoor lighting is directed downward. Policy LU 8.12 and PFS 8.10 require efficient exterior lighting fixtures that maximize energy efficiency while providing effective lighting. PFS 8.10 further requires compatibility with the neighborhood context. The General Plan EIR concluded that implementation of these policies, in addition to compliance with Gilroy Municipal Code regarding exterior lighting and with the City's Architectural and Site Review process, would reduce the light and glare impacts from new development to a less-than-significant level.

Consistent with relevant General Plan policies, the design of the exterior lighting for the project incorporates measures that would minimize or reduce any significant impacts from light or glare (i.e., directing light downward, etc.). The project would also be subject to the City's Architectural and Site Review process and would be required to comply with the Gilroy Municipal Code regarding exterior lighting. While new lighting would be introduced as part of the development, the additional lighting would not adversely affect day or nighttime views. As a result, the impact would be less than significant.

Would the project substantially damage scenic resources (farmland and surrounding hills) viewed from Highway 101?

Less than Significant. The project site is adjacent to Highway 101. The project would replace land that was previously used for agriculture with a data center and backup generating facility. However, the project site is no longer in active agricultural production and views of the project site from Highway 101 are obscured by existing development and roadside tree screenings, as shown in **Figure 3-1**.

The project would include agricultural buffer zones, hydroseed areas, and lines of trees around the project site perimeter totaling approximately 10.6 acres that would help soften the project's appearance (see **Figure 2-5**). Because the project would not substantially block views of agricultural lands and hillsides that are currently unimpeded, the project would not substantially damage scenic resources viewed from Highway 101 and this impact would be less than significant.

Figure 3-1 Existing View from U.S. 101, Looking East Toward Project Site

Except as provided in Public Resources Code Section 21099, would the project include or require a wall or fence higher than seven feet measured from the finished grade on the higher side of the fence at the property line, or as allowed by the Gilroy Zoning Ordinance, Section 30.34?

Less than Significant. The project would include an eight-foot-tall tubular steel security fence around the perimeter of the proposed data center, which is one foot taller than the city standard maximum of seven feet. As stated in the City's Zoning Ordinance, it is the intent of the City's fence regulations to control the location, height and materials of fences and other visual or physical obstructions so that they do not adversely affect adjacent properties or obstruct vision along public streets. The security fence would not be a solid wall, instead consisting of thin tubular steel slats that would not obstruct vision. Because the proposed fence would not conflict with the intent of the Zoning Ordinance fence regulations, the project would not result in a significant impact. Additionally, the City could require the fence to be lowered to seven feet during the Architectural and Site Review process, further reducing the impact. As a result, the impact would be less than significant.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not result in aesthetic impacts that would require mitigation.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant and unavoidable impacts related to aesthetics.

Cumulative Impacts

Would the project result in a cumulatively considerable contribution to a cumulatively significant aesthetics impact?

No Cumulative Impact. The General Plan EIR did not identify any significant aesthetic impacts requiring mitigation, nor did it identify any significant and unavoidable aesthetic impacts. The project site is not located along or visible from a designated State Scenic Highway and would not result in an impact on a scenic vista. Although the project would alter the visual character of the project area, the project would be consistent with the existing land uses in the area (i.e., general industrial). Additionally, the project would comply with the City's Industrial Design Guidelines and the City's Outdoor Lighting on Private Development Policy to reduce light and glare. Given that the project is consistent with the General Plan land use designation for the site and would not result in significant project-level impacts, no cumulative impact would occur.

Photo 1: View of project site facing southeast.

Photo 2: View of surrounding area facing northwest.

Photos of Existing Conditions Figure **3-2**

Source: Google Earth, 2022

3.2 Agricultural and Forestry Resources

This section evaluates impacts associated with agricultural and forestry resources that could occur as a result of the project.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR.

During the public comment period, a commenter expressed concern regarding impacts to California's agricultural land resources as a result of permanent conversion of agricultural lands to non-agricultural and recommends mitigation measures in the form of agricultural conservation easements, and compensation for permanent impacts to agricultural lands.

The commenter also recommended further discussion in the EIR concerning the following issues:

- The type, amount, and location of farmland conversion resulting directly and indirectly from implementation of the project;
- The impacts from the project on any current and future agricultural operations in the vicinity;
- Incremental impacts leading to cumulative impacts on agricultural land; and
- Proposed mitigation measures for all impacted agricultural lands within the project area.

Each of the concerns and recommendations provided above are discussed and evaluated further under **Section 3.2.3, Impacts and Mitigation Measures**. As described in the section, the project will require the implementation of **AG MM-1** to ensure compliance with the City of Gilroy's Agricultural Mitigation Policy, to offset both project and cumulative effects from the project's conversion of agricultural land to non-agricultural use. The Agricultural Mitigation Policy would require the purchase of land or development rights within the City's "Preferred Preservation Areas" at a 1:1 ratio of converted agricultural land, and transfer the ownership of the land or development rights to the Silicon Valley Land Conservancy or other City-approved agency. Furthermore, the project would include 50 feet of agricultural transition zone and 100 feet of agricultural buffer zone between the project site and the agricultural lands to the south and to the east. This distance is consistent with the 150 feet buffer zone set forth by the Agricultural Mitigation Policy for non-agricultural use adjacent to agricultural land.

3.2.1 Regulatory Framework

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.

According to the FMMP, the project site is located on lands classified as both Prime Farmland and Farmland of Statewide Importance (DOC, 2022a).

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources (CAL FIRE, 2022c). Programs such as CAL FIRE's Fire and Resource Assessment Program, and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.

Regional

Santa Clara Valley Agricultural Plan

Adopted in January 2018 by the County Board of Supervisors, the Santa Clara Valley Agricultural Plan is a regional effort led by the County and the Santa Clara Valley Open Space Authority to conserve Santa Clara Valley's farmland and ranchland as an innovative climate change mitigation and economic development strategy (Santa Clara County, 2018). Funded in part by cap and trade revenues through the state's Sustainable Agricultural Lands Conservation Program, the Santa Clara Valley Agricultural Plan will help avoid future greenhouse gas emissions (GHG) by reducing conversion of working farmlands and focusing development in existing urban areas.

Local

City of Gilroy Agricultural Mitigation Policy

To protect agricultural production and related industries, the City adopted its Agricultural Mitigation Policy in 2004 to identify methods to enable the continued viability of agriculture and agritourism in the Gilroy vicinity (City of Gilroy 2016b). The City Council adopted an update to the policy on January 4, 2016. If a project site meets either of the following two criteria, the project is subject to the Agricultural Mitigation Policy:

- Conversion to urban uses of lands designated as Prime Farmland or Farmland of Statewide Importance; or
- The project site scores as significant based on the California Department of Conservation Agricultural Land Evaluation and Site Assessment.

Per Section 1.02 Agricultural Mitigation Requirements of the Agricultural Mitigation Policy, mitigation of significant agricultural impacts can be accomplished with one of two options:

- **Mitigation Option 1**: Purchase an equal amount of land (1:1 ratio) of agricultural land within the "Preferred Areas" and the transfer of ownership of this land to the Silicon Valley Land Conservancy or other city approved agency.
- **Mitigation Option 2**: Purchase of development rights to a 1:1 ratio on agricultural land within the "Preferred Areas" and the transfer of ownership of these rights to the Silicon Valley Land Conservancy or other City-approved agency.

The Agricultural Mitigation Policy also requires the establishment of buffers to minimize conflicts between agricultural and non-agricultural land uses. The buffer must consist of a 100-foot buffer area and 50-foot transition area for a total depth of 150 feet, measured from the edge of the County-designated agricultural, agricultural preserve, or greenbelt area. All new developments adjacent to County-designated agricultural, agricultural preserve, agricultural open space, greenbelt/agricultural buffer areas shall be required to provide the buffer.

3.2.2 Environmental Setting

The Santa Clara Valley has historically grown a variety of crops, including vegetables, fruits, nuts, grain, floral, and nursery crops. About 75 percent of land within the Gilroy 2040 Planning Area/Sphere of Influence, but outside the Urban Growth Boundary, is designated as Agriculture under the Santa Clara County General Plan.

The project site is currently vacant and is almost entirely composed of tilled land. The 56-acre project site was previously used for agriculture, but has been designated for industrial uses by the General Plan and Zoning Ordinance for over 25 years. The project site is bounded by active agricultural lands to the east, active agricultural land and existing urban development to the south, existing urban development and Arroyo Circle to the west and existing urban development to the north.

According to the FMMP, the project site is classified as both Prime Farmland and Farmland of Statewide Importance (DOC, 2022a). The project site is not under an active Williamson Act contract (DOC, 2022b). According to the General Plan EIR, there are no lands within the City zoned for forest land, timberland, or timberland production.

3.2.3 Impacts and Mitigation Measures

Significance Criteria

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the CAL FIRE regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

For the purposes of this EIR, impacts to agricultural and forestry resources are considered significant if the project would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g));
- Result in the loss of forest land or conversion of forest land to non-forest use; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

Discussion of No Impacts

The project would result in no impact on agricultural and forestry resources according to the following thresholds:

Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. As described in **Section 3.2.2, Existing Conditions**, the project site is not under an active Williamson Act contract. The 56-acre vacant project site was previously used for agriculture but has been designated for industrial uses by the General Plan and Zoning Ordinance for over 25 years. As a result, the project would not conflict with existing zoning for agricultural use, or Williamson Act Contract, and no impact would occur.

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

No Impact. As described in existing conditions, there are no lands within the City zoned for forest land, timberland, or timberland production. Therefore, the project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)), and no impact would occur.

Discussion of Less-than-Significant Impacts

The project would have less than significant impact on agricultural and forestry resources under the following threshold:

Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less than Significant. As described in **Section 3.2.2, Existing Conditions**, the project site is bounded by active agricultural lands to the east and to the south. The project could result in incompatibility between uses that leads to nuisances involving noise, dust, chemical use/drift, and traffic hazards. Nuisance issues can in turn pressure farm operators to alter practices that can result in reduced agricultural productivity/profitability and conversion of Farmland to non-agricultural uses. However, the project

would include 50 feet of agricultural transition zone and 100 feet of agricultural buffer zone between the project site and the agricultural lands to the south and to the east. This distance is consistent with the 150 feet buffer zone set forth by the City's Agricultural Mitigation Policy for non-agricultural use adjacent to agricultural land. With the agricultural buffer zone incorporated into the project design, the project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. Therefore, the impact would be less than significant.

Discussion of Less-than-Significant Impacts with Mitigation

Discussion of Significant and Unavoidable Impacts

The project would result in a significant and unavoidable impact on agricultural and forestry resources under the following threshold.

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

Impact AG-1: The project would convert Prime Farmland and Farmland of Statewide Importance to non-agricultural uses.

Significant and Unavoidable. As described in **Section 3.2.2, Environmental Setting**, the project site is classified as Prime Farmland and Farmland of Statewide Importance. Although the project would convert Prime Farmland and Farmland of Statewide Importance to non-agricultural uses, the use of the project site is consistent with the General Plan and Zoning Ordinance where the project site has been designated for industrial uses for over 25 years. The 2040 General Plan EIR identified a significant unavoidable impact related to the conversion of farmland to non-agricultural uses. Although these impacts cannot be avoided, the City has adopted an Agricultural Mitigation Policy associated with the loss of farmlands. Therefore, the project will incorporate **AG MM-1,** described below. **AG MM-1** would reduce the severity of the impact by preventing a net-loss in agricultural land through the purchase of other agricultural lands. However, because Important Farmland would still be converted to non-agricultural uses, the impact would remain significant and unavoidable. While the project would contribute to this existing significant unavoidable impact, it would not result in any new or substantially more severe impacts than those disclosed in the 2040 General Plan EIR.

AG MM-1: Compliance with the City of Gilroy's Agricultural Mitigation Policy

Under the City of Gilroy Agricultural Mitigation Policy, the project applicant shall carry out one of the following measures:

- **Mitigation Option 1**: Purchase an equal amount of land (1:1 ratio) of agricultural land within the "Preferred Preservation Areas"[8] and the transfer of ownership of this land to the Silicon Valley Land Conservancy or other city approved agency, or

[8] The City of Gilroy's Agricultural Mitigation Policy defines "Preferred Preservation Areas" as the agricultural lands located in the Santa Clara County agricultural preserve, specifically, the agricultural lands located outside of the City's General Plan boundary and within the City's Sphere of Influence (City of Gilroy 2016b).

- **Mitigation Option 2**: Purchase of development rights to a 1:1 ratio on agricultural land within the "Preferred Areas" and the transfer of ownership of these rights to the Silicon Valley Land Conservancy or other city-approved agency.

The options shall include all costs to cover program administration, monitoring, and management of established easements.

Cumulative Impacts

Would the project result in a cumulatively considerable contribution to a significant agricultural and forestry resources impact?

Significant Unavoidable. The General Plan EIR determined that buildout of the General Plan could result in the conversion of up to 1,119 acres of important farmland. The City's general plan policies and agricultural land mitigation policy that include purchase of replacement agricultural lands or permanent conservation easement requirements would provide some relief to the significant loss of important farmland. However, the loss of important farmland is still considered significant.

The project would not convert Prime Farmland and Farmland of Statewide Importance to non-agricultural uses beyond what was planned for and analyzed in the General Plan EIR. Implementation of **AG MM-1** would offset the impacts that result from direct conversion of Farmlands and reduce cumulative impacts to a less-than-significant level. However, despite implementation of **AG MM-1**, the project contributes to a cumulative, citywide loss of Important Farmland.

3.3 Air Quality

This section evaluates air quality impacts that could occur as a result of the project. This evaluation is based on **Appendix B**, Air Quality Impact Assessment, which was prepared by Trinity Consultants in October 2023.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding air quality were received during the 30-day NOP circulation period.

3.3.1 Background Information

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead (Pb). Criteria pollutants are regulated because they cause negative health effects in humans. An overview of the sources of criteria pollutants and their associated health effects are summarized in **Table 3-1**. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 3-1 Summary of Health and Environmental Effects of Key Criteria Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	Burning fuel (as in exhaust from cars or household heaters) and tobacco products.	• Prevents red blood cells from carrying enough oxygen for cells and tissues to live. • Fatigue, dizziness, headaches, nausea, impaired vision
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions.	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$)	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions.	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions.	• Increased asthma prevalence and morbidity. • Chronic obstructive pulmonary disease • Wheezing, chest tightness or difficulty breathing

Pollutants	Sources	Primary Effects
Lead (Pb)	Lead can be found in various products including motor vehicle gasoline, corrosive pipes, exhaust from cars, water, soil, and dust.	• A rise in blood pressure • Kidney damage • Miscarriages • Disruption of nervous systems • Brain damage • Declined fertility of men • Diminished learning abilities of children • Behavioral disruptions of children, such as aggression, impulsive behavior and hyperactivity
Sulfur Dioxide (SO_2)	Burning of fossil fuels by power plants and other industrial facilities. Vehicles and heavy equipment that burn fuel with a high sulfur content.	• Harm to human respiratory system making breathing difficult
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products.	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

Source: CDC, 2021; U.S. EPA 2020

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O_3 levels.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter (PM_{10}) or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter ($PM_{2.5}$) where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are regulated under both state and federal laws. Federal laws use the term Hazardous Air Pollutants (HAPs) to refer to similar types of compounds that are referred to as TACs under state law; however, both terms encompass essentially the same compounds. Since 1990, the U.S. EPA has modified the list through rulemaking to include 187 HAPs.

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants, and are found in ambient air, especially in urban areas. TAC emissions are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are

subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury) (CARB 2022). Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by CARB.

Sensitive Receptors

Some groups of people are more affected by air pollution than others, and are thus considered to be sensitive receptors to air quality effects. CARB has identified sensitive receptors to include children under 16, the elderly over 65, and people with cardiovascular and chronic respiratory diseases. Since these populations are most likely to be affected by air pollution, they are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

Odors

Common sources of odors and odor complaints include wastewater treatment plants, transfer stations, coffee roasters, painting/coating operations, and landfills. Significant sources of offending odors are typically identified based on complaint histories received and compiled by BAAQMD. Typical large sources of odors that result in complaints are wastewater treatment facilities, landfills including composting operations, food processing facilities, and chemical plants. Other sources, such as restaurants, paint or body shops, and coffee roasters typically result in localized sources of odors.

3.3.2 Regulatory Framework

Established federal, state, and regional regulations provide the framework for analyzing and controlling air pollutant emissions and thus general air quality. Pollutants in the air can cause health problems, especially for children, the elderly, and people with heart or lung problems. Healthy adults may experience symptoms during periods of intense exercise. Pollutants can also cause damage to vegetation, animals, and property. Federal, state, and regional agencies regulate air quality in the San Francisco Bay Area Air Basin (SFBAAB).

Federal

The U.S. EPA is responsible for implementing the programs established under the federal Clean Air Act (CAA), such as establishing and reviewing the federal ambient air quality standards and judging the adequacy of State Implementation Plans (SIPs). However, the U.S. EPA has delegated the authority to implement many of the federal programs to the states while retaining an oversight role to ensure that the programs continue to be implemented.

As required by the federal CAA, national ambient air quality standards (NAAQS) have been established for criteria pollutants. Criteria pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter with aerodynamic diameter less than or equal to 10 microns (PM_{10}), and particulate matter with aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$).

In addition to requiring the establishment of NAAQS and the development and maintenance of SIPs, the CAA authorizes the U.S. EPA to establish regulations on certain categories of stationary sources of air pollution. Specifically, Section 111 of the CAA authorizes the U.S. EPA to establish standards of performance for new and existing sources, commonly referred to as New Source Performance Standards

(NSPS). NSPS Subpart IV establishes emission standards, fuel requirements, testing requirements, and other compliance requirements for manufacturers, owners, and operators of stationary compression-ignition internal combustion engines. Generators for the project are subject to Subpart IV.

State

In California, CARB is responsible for establishing and reviewing the state ambient air quality standards, developing and managing the California SIP, securing approval of this plan from the U.S. EPA, and identifying TACs. CARB also regulates mobile emissions sources in California, such as construction equipment, trucks, and automobiles, and oversees the activities of air quality management districts, which are organized at the county or regional level. The California Clean Air Act mandates the achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain California Ambient Air Quality Standards (CAAQS) by the earliest practical date. CARB established the CAAQS for all pollutants for which the federal government has NAAQS. Additional standards for sulfates, visibility-reducing particles, hydrogen sulfide (H_2S), and vinyl chloride have been established. Generally, the CAAQS are equal to or more stringent than the NAAQS.

CARB also implements Airborne Toxic Control Measures (ATCM) for Stationary Compression Ignition Engines (Stationary CI Engine ATCM) under Title 17 of the California Code of Regulations (CCR) Section 93115.

Assembly Bill 2588

In 1983 the California legislature adopted AB 1807, which establishes a process for identifying TACs and provides the authority for developing retrofit air toxics control measures on a statewide basis. Air toxics in California also may be regulated under the Air Toxics "Hot Spots" Information and Assessment Act of 1987, or Assembly Bill (AB) 2588. Under AB 2588, TACs from individual facilities must be quantified and reported to the local air pollution control agency or air quality management district. BAAQMD administers the state regulations AB 1807 and AB 2588.

Assembly Bill 617

AB 617, approved by the state of California in July 2017, aims to reduce criteria pollutant and TACs emissions within the state of California. The bill presents four main elements in order to achieve this goal: (1) Monitoring, (2) Community Emission Reduction Plans, (3) Best Available Retrofit Control Technology (BARCT), and (4) Emission Reporting. BAAQMD is responsible for administering federal and state regulations related to TACs in the Bay Area Air Basin. Under federal law, these regulations include NESHAPs and Maximum Achievable Control Technology for affected sources. Sources must use the TBACT (Best Available Control Technology [BACT] for Toxics) if health risk modeling identifies an individual source cancer risk of greater than 1 in a million or a chronic hazard index greater than 0.20.

Diesel Risk Reduction Plan

In August 1998, CARB identified particulate emissions from diesel-fueled engines as TACs. CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines (CARB, 2000a and 2000b). The goal of these programs is to reduce DPM emissions and the associated health risk by 75 percent in 2010 and by 85 percent in 2020 and to implement regulations

that include increasingly stringent emissions standards for on-road diesel trucks and buses, off-road diesel vehicles and equipment, and stationary diesel engines.

Regional

The federal CAA requires that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of pollutants can be controlled in order to achieve all standards specified in the Clean Air Act. The California Clean Air Act also requires the development of air quality plans and strategies to meet state air quality standards in areas designated as nonattainment (with the exception of areas designated as nonattainment for the state PM standards). Maintenance plans are required for attainment areas that had previously been designated as nonattainment in order to ensure continued attainment of the standards.

For air quality planning purposes, the Bay Area Air Basin is classified as a nonattainment area for O_3 and $PM_{2.5}$. The BAAQMD is required to update its Clean Air Plan to reflect progress in meeting the air quality standards and to incorporate new information regarding the feasibility of control measures and new emission inventory data. The Bay Area's record of progress in implementing previous measures must also be reviewed. Bay Area plans are prepared with the cooperation of the Metropolitan Transportation Commission (MTC), and the Association of Bay Area Governments (ABAG). On April 19, 2017, the BAAQMD adopted the most recent revision to the Clean Air Plan – the BAAQMD 2017 Clean Air Plan: Spare the Air, Cool the Climate (2017 Clean Air Plan) (BAAQMD, 2017). The 2017 Clean Air Plan serves to:

- Describe a comprehensive control strategy to protect public health and the climate;
- Update the Bay Area 2010 Clean Air Plan in accordance with the requirements of the California Clean Air Act to implement "all feasible measures" to reduce emissions of O_3 precursors and to reduce transport of O_3 and its precursors to neighboring air basins;
- Enhance efforts to reduce emissions of PM and TACS; and
- Lay the groundwork for a long-term effort to reduce GHG emissions in the Bay Area Air Basin.

BAAQMD Rules and Regulations

BAAQMD is the regional agency responsible for rulemaking, permitting, and enforcement activities affecting stationary sources of air pollutant emissions in the Bay Area Air Basin. Specific rules and regulations adopted by BAAQMD limit the emissions that can be generated by various activities and identify specific pollution reduction measures that must be implemented in association with these activities. These rules regulate not only emissions of the six criteria air pollutants, but also toxic emissions and acutely hazardous non-radioactive materials emissions. Emissions sources subject to these rules are regulated through the BAAQMD's permitting process and standards of operation.

- BAAQMD Rule 2-2, *New Source Review* applies to all new or modified sources requiring a Permit to Operate for any new source with actual or potential emissions above the rule trigger limit. The rule also specifies when best available control technology (BACT) is required (BAAQMD, 2020).

- BAAQMD Rule 2-2-302, *Offset Requirements, Precursor Organic Compounds and Nitrogen Oxides*, and Rule 2-2-303, *Offset Requirements, $PM_{2.5}$, PM_{10}, and Sulfur Dioxide*, require offsets of emissions from new or modified sources of precursor organic compounds (POC), NO_x, $PM_{2.5}$, PM_{10}, and SO_2. Offsets are required for facilities that have a Potential to Emit of more than 10 tons per year of POC or NO_x, or more than 100 tons per year of $PM_{2.5}$, PM_{10}, or SO_2.
- BAAQMD Rule 2-5, *New Source Review of Toxic Air Contaminants* applies to new or modified sources of TACs for which an application is submitted on or after July 1, 2005. All TAC emissions from new and modified sources are subject to a health risk assessment (HRA) if emissions of any individual TAC exceed the trigger thresholds specified in Table 2-5-1 of Rule 2-5. Rule 2-5's latest amendment adopted December 2021 and effective July 1, 2022, requires that the project risk for projects in Overburdened Communities do not exceed a cancer risk of 6.0 in one million, a chronic hazard index of 1.0, or an acute hazard index of 1.0. The generators are located within an Overburdened Community.
- BAAQMD Rule 2-6, *Major Facility Review*, implements permitting requirements of Title V of the Clean Air Act, and is applicable to major facilities and other facilities designated as requiring a Title V permit. Per Section 2-6-212, a major facility has the potential to emit 100 tons per year or more of any regulated air pollutant, 10 tons per year or more of a single hazardous air pollutant, or 25 tons per year or more of a combination of HAPs.
- BAAQMD Rule 9-8, *Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines*, limits emissions and operating hours and outlines recordkeeping requirements for emergency engines rated greater than 50 bhp.

BAAQMD Air Quality Significance Thresholds

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Gilroy has considered the air quality thresholds updated by BAAQMD in April 2022 and regards these thresholds to be based on the best information available for the SFBAAB and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$.

The BAAQMD CEQA Air Quality thresholds used in this analysis are presented in **Table 3-2**. The degree to which a region's air quality is healthy or unhealthy is determined by comparing pollutant concentrations in ambient air samples to the state and federal standards presented in **Table 3-4**. California standards for ambient background O_3, CO, SO_2, NO_2, PM_{10}, $PM_{2.5}$, and visibility reducing particles are values that are not to be exceeded, though there can be averaging involved for certain annual limits. Attainment with the federal short-term standards is generally achieved if the standards are not exceeded more than once per year, though each pollutant has a specified averaging methodology. Nonattainment areas are subject to additional restrictions and standards, as required by the U.S. EPA. The air quality data collected at local monitoring stations described in **Table 3-3** are also used to monitor progress in attaining air quality standards.

Table 3-2 BAAQMD Air Quality Significance Thresholds

Pollutant	Construction Thresholds	Operation Thresholds	
	Average Daily Emissions (lbs/day)	Annual Daily Emissions (lbs/year)	Maximum Annual Emissions (tpy)
Criteria Air Pollutants			
ROG, NOx	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	Single Source	Combined Cumulative Sources	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual $PM_{2.5}$	0.3 µg/m^3	0.8 µg/m^3 (average)	

Source: BAAQMD, 2022
Note: µg/m3 stands for micrograms (one-millionth of a gram) per cubic meter of air.

Local

Gilroy 2040 General Plan

The Natural and Cultural Resources chapter of the General Plan addresses the City's goals, policies, and implementing actions regarding air quality. The following policies in the General Plan related to air quality are applicable to the project:

- **NCR 3.15. Reduce Construction Emissions** – Require the use of low emissions construction equipment for public and private projects, consistent with the Air District 2017 Clean Air Plan. Where construction-related public and private projects, consistent with the Air District 2017 Clean Air Plan. Where construction-related emissions would exceed the applicable Thresholds of Significance, the City will consider, on a case-by-case basis, implementing Additional Construction Mitigation Measures (Table 8-3 in BAAQMD's CEQA Guidelines).
- **NCR 3.16. Implement Dust-Control Measures** – Require the implementation of the Air District's dust control measures during construction of individual projects, consistent with the Air District 2017 Clean Air Plan.
- **NCR 3.17. Sensitive Receptors within 500 feet of U.S. Highway 101** – Require modeling of TACs, and include mitigation as may be appropriate, prior to approval of new residential

development within 500 feet of U.S. Highway 101, to ensure significant health risks are mitigated.

- **NCR 3.18**. **Sensitive Receptors within 500 feet of Existing Point Sources or Existing Heavy Industrial Designated Areas.** – Require modeling of TACs, and include mitigation as may be appropriate, prior to approval of new residential development within the Downtown Specific Plan within 500 feet of existing point sources with screening factors in excess of thresholds, or within 500 feet of areas designated Heavy Industrial, to ensure significant health risks are mitigated.
- **NCR 3.19. New Industrial Uses within 500 feet of Sensitive Receptors.** – Require modeling, and include mitigation as may be appropriate, of TACs prior to approval of new industrial development within 500 feet of residential uses, Neighborhood District designations, or the Downtown Specific Plan, to ensure significant health risks are mitigated.

3.3.3 Environmental Setting

The project site is within the boundaries of the SFBAAB. According to BAAQMD, the Bay Area is considered a non-attainment zone for a for ground-level O_3 and $PM_{2.5}$ under both the federal CAA and state Clean Air Act.

Local Air Quality

Existing Air Pollutant Levels

BAAQMD operates a regional monitoring network that measures the ambient concentrations of the six criteria air pollutants within the SFBAAB. Existing levels of air pollutants in the project area can generally be inferred from ambient air quality measurements conducted by the BAAQMD at nearby monitoring stations. The nearest permanent station to the project site is the Gilroy monitoring station approximately one mile to the southwest. The Gilroy monitoring station only measures O_3 and $PM_{2.5}$. Unlike the project site, this station is not located near a major highway, and may therefore underestimate O_3 levels on the project site. The San Martin monitoring station is approximately 4.8 miles northwest of the project site and measures O_3. Because the San Martin monitoring station is close to a highway, similar to the project site, O_3 data from the San Martin monitoring station is utilized. The remaining pollutant measurements can be found from the next closest monitoring stations within the SFBAAB, which are the Knox Avenue monitoring station and the Jackson Street monitoring station, both of which are approximately 30 miles to the northwest of the project site in San José. The Knox Avenue monitoring station only measures CO and NO_2, thus the remaining pollutant measurements are from the Jackson Street monitoring station.

Table 3-3 summarizes the applicable monitoring station information. **Table 3-4** shows violations of State and federal standards at the monitoring stations nearest to the project site during the 2019-2021 period (the most recent years for which data is available).

Table 3-3 Representative Air Quality Monitoring Stations for the Project Area

Pollutants	Monitoring Site	Monitoring Site Address	Approximate Distance from Project Area
Fine Particulate Matter ($PM_{2.5}$)	Gilroy	9th and Princevalle St, Gilroy, CA 95020	1.25 mi SW
Ozone (O_3)	San Martin	13030 Murphy Avenue, San Martin CA 95046	4.8 mi NNW
Carbon Monoxide (CO), Nitrogen Dioxide (NO_2)	San Jose-Knox	1007 Knox Ave. San Jose, CA 95122	27 mi NW
Sulfur Dioxide (SO_2), Respirable Particulate Matter (PM_{10})	San Jose-Jackson	158 E. Jackson St, San Jose, CA 95112	29 mi NW

Source: Trinity 2023.

Table 3-4 Ambient Air Quality Standards Violations and Highest Concentrations

Pollutant	Standard	Days Exceeding Standard		
		2019	2020	2021
San Martin Station				
Ozone (O_3)	State 1-Hour	90	106	139
	Federal 8-Hour	64	69	71
San José (Knox)				
Carbon Monoxide (CO)	State 8-Hour	1.6	1.8	1.5
	Federal 8-Hour	1.6	1.8	1.5
Nitrogen Dioxide (NO_2)	State 1-Hour	65.1	56.5	38.8
San José (Jackson)				
Sulfur Dioxide (SO_2)	State 1-hour	14.5	2.9	1.8
	State 24-Hour	1.5	0.8	0.5
Respirable Particulate Matter (PM_{10})	State 24-Hour	77	137	41
	Federal 24-Hour	56	90	37
Gilroy				
Fine Particulate Matter ($PM_{2.5}$)	Federal 24-Hour	13.4	49.4	15.5

Sources: BAAQMD, 2017b; CARB, 2009, 2016, and 2019.

Existing Sensitive Receptors

BAAQMD considers the zone of influence to be the area extending 1,000 feet (0.19 miles) from the project site boundary. Sensitive receptors that are within this boundary are the Kaiser Permanente Gilroy Medical Offices (approximately 300 feet southwest), Satellite Healthcare Gilroy (approximately 400 feet north), and Valley Health Center Gilroy (approximately 400 feet south). Other sensitive

receptors within a 0.5-mile radius of the project site include an elementary and a middle school, two nursing homes, two healthcare facilities, and a senior living community. **Appendix B**, Air Quality Impact Assessment, provides further information on sensitive land uses within 2 miles of the project site.

3.3.4 Impacts and Mitigation Measures

Significance Criteria

The significance criteria established by BAAQMD and shown in **Table 3-2** are relied upon to make the following determinations. For the purposes of this EIR, impacts to air quality are considered significant if the project would:

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

Discussion of No Impacts

The project would not result in a "No Impact" determination for any of the air quality thresholds discussed in **Section 3.3.4, Impacts and Mitigation Measures**.

Discussion of Less-Than-Significant Impacts

The project would have less than significant impacts for the following air quality thresholds:

Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant. The project would be a source of air pollutant emissions during project construction and during operation, primarily from testing and maintenance of the 27 backup generators. The proposed generators would be diesel fueled, so they would emit DPM, which is a TAC. The generators would also be a source of $PM_{2.5}$, which has known adverse health effects. The Phase I BESS would discharge electricity and would not produce emissions, and therefore its construction or non-construction would not contribute to operational emissions. Similarly, the Phase II BP facility is a non-emitting power source and therefore would not affect the conclusions of the air quality analysis. Although the Phase I BESS is an optional component of the project, the Air Quality Impact Assessment factored the construction of this facility into the analysis of construction-period emissions.

As described further in **Appendix B**, Air Quality Impact Assessment, health risk assessments were completed for both construction and operation of the project using the U.S. EPA's AERMOD dispersion model and the Hotspots Analysis and Reporting Program Air Dispersion Modeling and Risk Tool. The results of these health risk assessments are discussed below and shown in **Table 3-5** and **Table 3-6.**

Construction and Operation

Less Than Significant. For the purposes of this analysis, the construction period was assumed to last 7 years. During that time, TACs would be generated through the operation of diesel-fueled construction

equipment. **Table 3-5** presents the increase in cancer risk for a variety of receptor types over the construction period, and compares those pollutant emissions to BAAQMD's TAC significance threshold (increased cancer risk of >10.0 in a million or a chronic hazard index of >1).

The maximally exposed individual resident (MEIR) is the residence that would be most impacted by the project. In this case the MEIR would be the private residence located approximately 1,000 feet southeast of the project site on Gilman Road. The maximally exposed individual sensitive receptor (MEISR) is the sensitive receptor that would experience the greatest impact, which may be a resident or other type of sensitive receptor (i.e., school, hospital, nursing home, etc.). For this project, the MEISR is the Gilroy Healthcare and Rehabilitation Center, located approximately 1,500 feet northwest of the project site. The maximally exposed individual worker (MEIW) is the workplace receptor (e.g., commercial office) that would experience the greatest impact. The MEIW for this project is an office building located less than 200 feet from the northernmost edge of the project site.

As shown in **Table 3-5**, none of these receptors would experience increased health risks in excess of BAAQMD's thresholds. Therefore, construction would not expose sensitive receptors to substantial pollutant concentrations and the impact would be less than significant.

Table 3-5 Construction Phase Health Risk Assessment Results

Receptor	Cancer Risk (in 1 million)		Chronic Hazard Index		Significant Impact
	Project Risk	Significance Threshold	Project Hazard Index	Significance Threshold	
MEIR	3.81	10	0.00143	1	No
MEISR	1.93	10	0.000729	1	No
MEIW	2.04	10	0.00544	1	No

Source: Appendix B, Air Quality Impact Assessment.
MEIR = Maximally Exposed Individual Resident; MEISR = Maximally Exposed Individual Sensitive Receptor; MEIW = Maximally Exposed Individual Worker.

While construction exposure was evaluated for the 7-year construction period, operational TAC exposure was evaluated based on a 30-year project lifetime for nearby receptors and 25 years for workers. During that time, TACs would primarily be generated by the routine testing of the 27 diesel-powered generators associated with Phase I of the project.

Increased cancer risk associated with these operational TACs are shown in **Table 3-6**. The MEISR and MEIW for operation are the same as those discussed for construction, above. The operational MEIR is a private residence located approximately 3,000 feet (over 0.5 mile) south of the project site on Renz Lane. As shown in **Table 3-6**, none of these receptors would experience increased health risks in excess of BAAQMD's thresholds. Therefore, operation would not expose sensitive receptors to substantial pollutant concentrations and the impact would be less than significant.

Table 3-6 Operations Phase Health Risk Assessment Results

Receptor	Cancer Risk (in 1 million)		Chronic Hazard Index		Significant Impact
	Project Risk	Significance Threshold	Project Hazard Index	Significance Threshold	
MEIR	2.56	10	0.0278	1	No
MEISR	1.29	10	0.0278	1	No
MEIW	1.25	10	0.0278	1	No

Source: Appendix B, Air Quality Impact Assessment.
MEIR = Maximally Exposed Individual Resident; MEISR = Maximally Exposed Individual Sensitive Receptor; MEIW = Maximally Exposed Individual Worker.

Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant. The project would not involve the development of the types of land uses that would result in emissions that are typically associated with odor issues, such as wastewater (sewage) treatment plants, landfills, composting facilities, refineries, or chemical plants. Additionally, the project would not locate sensitive receptors near these types of odor-producing sources. Construction activities on the project site could result in odorous emissions from diesel exhaust associated with construction equipment. Because of the temporary nature of these emissions and the highly diffusive properties of diesel exhaust, exposure of sensitive receptors to these emissions would be limited. Therefore, impacts associated with odors would be less than significant and no mitigation is required.

Discussion of Less-than-Significant Impacts with Mitigation

The project would have less than significant impacts with mitigation incorporated under the following thresholds:

Would the project conflict with or obstruct implementation of the applicable air quality plan?

Impact AQ-1 Potential to conflict with or obstruct implementation of the applicable air quality plan.

Less Than Significant with Mitigation. As discussed in **Section 3.3.2, Regulatory Framework**, the most relevant and recently adopted air quality plan is the BAAQMD 2017 Clean Air Plan. A project that would not support the 2017 Clean Air Plan's goals would not be consistent with the 2017 Clean Air Plan. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support for the clean air plan's goals. As shown above, the project would not result in exceedances of BAAQMD thresholds for criteria air pollutants with implementation of construction BMPs and **AQ MM-1**, and thus would not conflict with the 2017 Plan's goal to attain air quality standards. Therefore, with implementation of **AQ MM-1**, the project would not conflict with or obstruct the implementation of an applicable air quality plan and the project would have a less than significant impact with mitigation.

Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

Construction

Less Than Significant. Construction emissions associated with the project would result from ground preparation, grading activities, building construction, parking lot construction activities, use of onsite construction equipment, and architectural coating. Offsite project construction emissions will result primarily from material transport to and from the site, material placement in the generation yard, and worker travel. **Table 3-7** summarizes estimated daily and annual criteria pollutant emissions associated with project construction.

Table 3-7 Project Construction Criteria Pollutant Emissions

Activity	Pollutant					
	Total PM_{10}[a]	**Total $PM_{2.5}$[a]**	**CO**	**NOx**	**ROG**	**SO_2**
Pounds Per Day (lb/day)						
Construction Emissions[b]	6.35	3.37	74.9	62.2	50.74	0.16
Significance Threshold	82	54	N/A	54	54	N/A
Threshold Exceeded?	No	No	No	**Yes**	No	No
Tons per Year (tpy)						
Construction Emissions[b]	0.83	0.44	9.73	8.2	6.6	0.02
Significance Threshold[c]	N/A	N/A	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	No	No	No	No

Source: Appendix B, Air Quality Impact Assessment.

[a]. Total PM_{10} and $PM_{2.5}$ emissions include fugitive emissions, which will be controlled with best management practices, in accordance with the significance threshold.

[b]. Construction emissions represent the maximum mitigated emissions based on 260 total weekdays per year.

[c]. There are no annual construction-related thresholds of significance.

As shown in **Table 3-7**, NO_x emissions are anticipated to exceed the BAAQMD significance threshold. The project would implement **AQ MM-1** to reduce construction period NO_x emissions to ensure that levels remain below BAAQMD significance thresholds. With implementation of **AQ MM-1**, NO_x emissions would be reduced to 48.5 lbs/day and emissions would be less than significant.

AQ MM-1: The project shall include construction equipment basic measures, and exhaust controls and measures, to control dust and exhaust during construction. The contractor shall implement the following best management practices (BMPs):

- Basic Measures:
    - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
    - All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
    - All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
    - All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
    - All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
    - Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, California Code of Regulations, Section 2485). Clear signage shall be provided for construction workers at all access points.
    - All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
    - Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.
- Exhaust Control Measures
    - The Applicant shall implement the following measures such that the off-road equipment to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) shall meet the emission values as summarized in **Table 3-7** above. Acceptable methods for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. The following are examples of feasible methods:
        - The following construction equipment used at the site during Phase I and Phase II shall be electric:

        - Pressure Washer
        - Wielder
    - The following construction equipment used at the site during Phase I and Phase II shall meet U.S. EPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB Level 2 verifiable diesel emission control devices that altogether achieve a 85 percent reduction in particulate matter exhaust:
        - Air Compressors
        - Concrete/Industrial Saws
        - Forklifts
        - Generator Sets
        - Other Construction Equipment, such as Concrete Vibrators
        - Pavers
        - Pumps
        - Rollers
        - Sweeper/Scrubbers
        - Tractors/Loaders/Backhoes
    - The following construction equipment used at the site during Phase I shall meet U.S. EPA Tier 4 final emission standards according to one of the following options:
        - Option 1: Cranes, Graders, Rubber Tired Dozers, Tractors/Loaders/ Backhoes
        - Option 2: Cranes, Graders, Rubber Tired Dozers, Bore/Drill Rigs
        - Option 3: Cranes, Graders, Rubber Tired Dozers, Excavators
    - The following construction equipment used at the site during Phase II shall meet U.S. EPA Tier 4 final emission standards:
        - Cranes
        - Scrapers

Operation

Less Than Significant. The primary emission sources associated with operation of the project would be the routine non-emergency testing of the 27 generators for maintenance purposes, mobile sources such as employee vehicles, and general operation of the buildings.[9] Based on BAAQMD Rule 9-8, which limits each engine to no more than 50 hours of operation annually for testing and maintenance purposes, this

[9] The Phase I BESS and Phase II BP facilities are non-emitting power sources, and therefore would not contribute to operational emissions.

EIR assumes that each of the 27 generators would operate for 50 hours each year. A sample schedule for generator maintenance and testing is provided in Table 2-1 of **Appendix B**. As discussed in **Section 2.5.4, Major Equipment**, the applicant is committed to using DPF and other technologies as need to achieve EPA Tier 4 equivalency for all generators, consistent with BAAQMD requirements. Regarding mobile sources, this EIR conservatively assumes that the project may generate approximately 150 daily round trips to the project encompassing employee and visitor trips. Additionally, the project would generate building operational emissions from the use of consumer products, architectural coating such as interior painting, landscaping work, energy usage, solid waste disposal, and water usage.

Table 3-8 summarizes estimated daily and annual operational emissions for the project. The daily and annual emissions account for the maximum daily and annual hours of maintenance testing per generator (accounting for generator type), and then combined these amounts into a total value.

Table 3-8 Project Operational Criteria Pollutant Emissions

Activity	Pollutant					
	PM_{10}	$PM_{2.5}$	CO	NOx	ROG	SO_2
Pounds Per Day (lbs/day)						
Generator Operational Emissions	0.38	0.38	9.44	2.55	11.26	0.10
Mobile and Building Operational Emissions	5.74	1.55	18.88	2.12	11.58	0.05
Total Operation Emissions	6.12	1.93	28.32	4.67	22.84	0.15
Significance Threshold	82	54	N/A	54	54	N/A
Threshold Exceeded?	No	No	No	No	No	No
Tons Per Year (tpy)						
Generator Operational Emissions	0.07	0.07	1.72	0.46	2.06	0.02
Mobile and Building Operational Emissions	1.05	0.28	3.45	0.39	2.11	0.01
Total Mitigated Project Operational Emissions	1.12	0.35	5.17	0.85	4.17	0.03
Significance Thresholds	15	10	N/A	10	10	N/A
Threshold Exceeded?	No	No	No	No	No	No

Source: Appendix B, Air Quality Impact Assessment; BAAQMD, 2017b

As shown in **Table 3-8**, operations emissions associated with the project would be below all significance thresholds. Therefore, the project would not conflict with or have any adverse impact on implementation of the 2017 Plan, nor other air quality plan control measures. This impact would be less than significant, and no mitigation is required.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant and unavoidable environmental impacts related to air quality.

Cumulative Impacts

Would the project result in a cumulatively considerable contribution to a cumulatively significant air quality impact?

By its very nature, air pollution is largely a cumulative impact. The geographic area for cumulative air quality impacts is the SFBAAB. Past, present, and future development projects contribute to the region's adverse air quality impacts. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts.

Additionally, cumulative health risk impacts were assessed for all sources within 1,000 feet of the project boundary (per BAAQMD CEQA Air Quality Guidelines) and are below the BAAQMD CEQA threshold of significance for cumulative health risk impacts. Further, the project would result in an ambient $PM_{2.5}$ increase of 0.025 µg/m^3 which is well below the significance threshold of 0.3 µg/m^3 and is therefore considered to be a less than significant impact.

As shown in **Table 3-8**, total cumulative air pollutant sources from project operations and other sources surrounding the project site would not exceed BAAQMD significance thresholds. Thus, cumulative air quality impacts would be less than significant.

Table 3-9 Impacts from Cumulative Sources

Source	Maximum Cancer Risk (in 1 million)			Maximum Hazard Index			Maximum Annual $PM_{2.5}$ Contribution (µg/m^3) [b]		
	MEIW	MEIR	MEISR	MEIW	MEIR	MEISR	MEIW	MEIR	MEISR
Plant No. 14520, Kaiser Permanente	6.56			0.01			0.01		
Plant No. 15334, Target Store T1851	0.01			0			0		
Plant No. 15772, City of Gilroy	1.54			0			0		
Plant No. 18259, County of Santa Clara – VHC Gilroy	1.64			0			0		
Plant No. 19648, City of Gilroy	6.23			0			0.01		
Highway	12.07	5.90	34.43	N/A			0.197	0.095	0.576
Railways	0.97	0.81	1.38	N/A			0.001	0.001	0.002
Major Streets	0.08	0.04	0.07	N/A			0.002	0.001	0.002
Total Cumulative Sources	29.10	22.72	51.86	0.01	0.01	0.01	0.22	0.12	0.60
Project Operation of Generators	1.49	3.00	1.53	0.00182	0.00049	0.00023	0.02476		
Total Cumulative Sources +	*30.59*	25.72	53.39	0.012	0.010	0.010	0.25	0.14	0.62

Source	Maximum Cancer Risk (in 1 million)			Maximum Hazard Index			Maximum Annual $PM_{2.5}$ Contribution ($\mu g/m^3$) [b]		
	MEIW	**MEIR**	**MEISR**	**MEIW**	**MEIR**	**MEISR**	**MEIW**	**MEIR**	**MEISR**
Project Operation									
Significance Threshold	100			10			0.8		
Significant Impact?	No			No			No		

Source: Appendix B, Air Quality Impact Assessment.

[a]. Sources within 1,000 feet of the Facility are determined using BAAQMD's Permitted Stationary Sources Risk and Hazards tool (BAAQMD, 2022). As of 2020, BAAQMD has updated its procedures to only provide maximum values for each stationary source/facility. As such, only the maximum values are represented for each source/facility.

[b]. Maximum Annual $PM_{2.5}$ reflects the project impact determined for the annual $PM_{2.5}$ CAAQS. Annual $PM_{2.5}$ CAAQS is conservatively used to represent the MEIW, MEIR, MEISR.

c. Hazard index is not provided for highways, major streets and railways.

3.4 Biological Resources

This section evaluates impacts associated with biological resources that could occur as a result of the project. This evaluation is based on **Appendix C**, Natural Resources Memorandum, prepared for the project by Environmental Resources Management, Inc. in October 2019, and **Appendix D**, Arborist Report, prepared for the project in October 2021.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding biological resources were received during the 30-day NOP circulation period.

3.4.1 Regulatory Framework

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a project would result in the take of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds. Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB),

CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) covers approximately 520,000 acres, or approximately 62 percent of the County. It was developed and adopted through a partnership between the County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (Valley Water), Santa Clara Valley Transportation Authority (VTA), USFWS, and CDFW. The Habitat Plan is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in the southern portion of the County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan. The primary conservation strategy of the Habitat Plan is to establish a Reserve System that protects and maintains priority habitat areas that are large enough to support sustainable populations of covered species. The western and southern portions of the Urban Growth Boundary form a border with, and in a few small areas overlap with the Habitat Plan Urban Reserve System Interface Zone.

Site-specific future development projects are evaluated for their potential impacts on the proposed Reserve System during the Habitat Plan permitting process. This Reserve System is intended to provide linkages that sustain wildlife movement between habitat areas per the Habitat Plan Chapter 5, Conservation Strategy. **Figure 3-3** shows the Santa Clara Valley Habitat Agency Reserve System.

Local

Gilroy 2040 General Plan

The Natural and Cultural Resource Element and the Land Use Element of the General Plan address the City's goals, policies, and implementing actions regarding biological resources. The following policies in the General Plan related to biological resources are applicable to the project:

> **NCR 1.1.** Habitat Plan Compliance. For all covered activities throughout the city, comply fully with permit conditions of the Santa Clara Valley Habitat Plan. This will protect natural resources by minimizing impacts on sensitive natural communities and 18 covered species, facilitating wildlife movement, and establishing stream setbacks and buffers. Associated permit fees will be used for reserve system preservation, habitat enhancement and restoration, and adaptive management and monitoring.
>
> **NCR 1.2.** Stream Protection. In concert with the Habitat Plan, protect the ecological, aesthetic, and recreational value of the streams that flow through the Gilroy Planning Area. Areas required for riparian setbacks shall be dedicated to Valley Water in fee or easement, or incorporated into private open space to be preserved and maintained by future development projects. Access to

streams should be of sufficient width to accommodate trails, flood control access, and protection of riparian habitat.

NCR 1.4. Plant and Wildlife Habitats. In concert with Habitat Plan requirements, preserve important plant and wildlife habitats, including streams and riparian habitats, wildlife movement corridors, heavily vegetated hillside areas, unique ecosystems (such as oak woodlands and serpentine substrates), and significant nesting/denning sites for native wildlife.

NCR 1.7. Special Status Species. Special-status species are those listed as Endangered, Threatened, or Rare, or as Candidates for listing by the U.S. Fish and Wildlife Service (USFW)and/or CDFW, or Rare Plant Rank 1B or 2B species by the California Native Plant Society. This designation also includes CDFW Species of Special Concern and Fully Protected Species. For special-status species that are not among the 18 covered species in the Habitat Plan, minimize future development in areas that support such species. Conduct focused surveys per applicable regulatory agency protocols as appropriate to determine if such species occur on a given project site, as determined necessary by a qualified biologist. If development of occupied habitat must occur, species impacts shall be avoided or minimized, and if required by a regulatory agency or the CEQA process, loss of wildlife habitat or individual plants should be fully compensated on the project site. If off-site mitigation is necessary, it should occur within the Gilroy Planning Area whenever possible with a priority given to existing habitat mitigation banks. Habitat mitigation shall be accompanied by a long-term management plan and monitoring program prepared by a qualified biologist and include provisions for protection of mitigation lands in perpetuity through the establishment of easements and adequate funding for maintenance and monitoring.

LU 6.9. Greenbelts. Designate protected open space areas in conjunction with agricultural lands to create significant natural buffers, or "greenbelts," between Gilroy and surrounding communities, helping to retain the City's semi-rural, small town quality. Land uses within a greenbelt should be determined by joint planning activities of the South County cities and the County, but might include very low density residential development; public parks and recreation areas; privately operated recreation areas; and agriculture. Of special concern is the area separating the northern part of the Gilroy Planning Area from the community of San Martin.

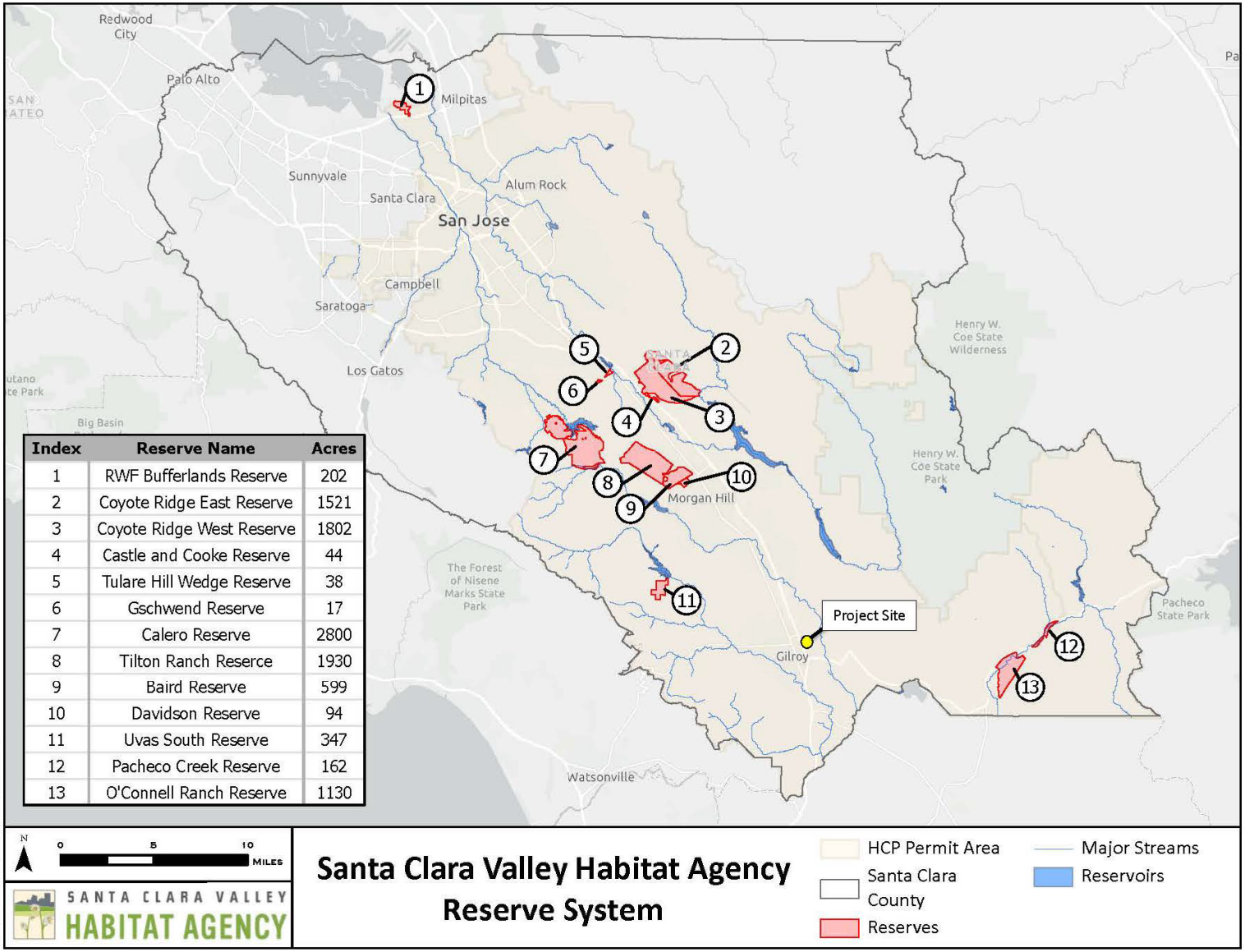
Gilroy Tree Ordinance

The City maintains the urban landscape by controlling the removal of heritage trees and protected trees on private property. A separate tree removal permit shall not be required for projects which have been approved through a discretionary process by the planning division, planning commission or city council and the removal of protected trees or community of trees were reviewed to ensure compliance with all requirements of this section and authorized by that approval. Trimming, removal and other activities related to trees in the public right-of-way are regulated by Chapter 26.

Heritage trees are defined as trees of any species with a single trunk of 90 inches in circumference or more at a point of 4.5 feet above the ground or with multiple trunks, two of which collectively measure 72 inches in circumference or more at a point 4.5 feet above the ground.

Protected trees are defined as trees having a single trunk of 38 inches in circumference or more at a point of 4.5 feet above the ground. Nonindigenous tree species and orchards (including individual fruit and nut trees) are exempt from this definition. Indigenous trees are defined as trees that are native to the Gilroy region, including oaks (all types), California bay (*Umbellularia californica*), big leaf maple (*Acer*

macrophyllum), madrone (*Arbutus menziesii*), California Sycamore (*Platanus acemose*), California buckeye (*Aesculus californica*), and alder (*Alnus glutinosa*).



Santa Clara Valley Habitat Plan Reserve System Figure **3-3**

Source: Santa Clara Valley Habitat Agency, 2023

3.4.2 Environmental Setting

Wildlife and Habitat

The project site is currently vacant and is almost entirely composed of tilled land that was previously used for agriculture. There are no wetlands present on the project site. Nearby surface water bodies include Miller Slough approximately 900 feet west of the project site, and Llagas Creek approximately 4,000 feet east of the project site. No USFWS Critical Habitat is listed at the project site. The following species were mapped with California Natural Diversity Database occurrences within two miles of the project site:

Pallid bat (*Antrozous pallidus*): The pallid bat is listed as a CDFW Species of Special Concern. Bat roosts are most commonly found in rock crevices, although bridges, live trees, and snags can also be used. ERM's biologists did not identify any suitable habitat for this species during their site visit.

Hoary bat (*Lasiurus cinereus*): The hoary bat is listed as a Western Bat Working Group Medium Priority species. The species habitat includes forested habitats in which roosts can be developed in the dense foliage of trees. Habitat can also include suburbs with large older trees. During migration, males are found in foothills, deserts, and mountains while females are found in lowlands and coastal valleys. ERM's biologists did not identify suitable habitat for this species during their site visit.

Additionally, no burrowing owl habitats or burrows were observed at the project site or listed on the natural resources mapper for the Habitat Plan.

The project site is located within the boundaries of the Habitat Plan and is designated as Grain, Row-crop, Hay and Pasture, Disked / Short-term Fallowed land cover and is located in Fee Zone B (Agricultural and Valley Floor Lands).

Trees

There are 18 trees present at the project site and 38 trees located within the route proposed for the transmission line upgrade. Trees on or near the project site include five private non-protected trees on-site, six street trees adjacent to this property, one street tree adjacent to a neighboring property, and six trees overhanging from adjacent properties. Trees within the proposed transmission line upgrade route include: two private protected trees and 24 non-protected trees on private property as well as 12 street trees.

3.4.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, impacts on biological resources are considered significant if the project would:

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

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

Discussion of No Impacts

The project would have no impact on biological resources under the following thresholds:

Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The project site does not contain and is not adjacent to any wetlands. For this reason no impact would occur.

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

No Impact. Based on the Habitat Plan land cover map of the General Plan shown in **Figure 3-4**, the project site does not contain any riparian habitat or other sensitive communities identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or USFW. The nearest riparian habitat is Miller Slough, located approximately 900 feet west of the project site. The project is separated from the Miller Slough by commercial and industrial uses to the south, as well as U.S. 101, and would not have substantial adverse impacts on the habitat. Due to the lack of riparian habitat on and adjacent to the project site, no impact would occur.

Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. A Habitat Plan application would be submitted, and applicable fees would be paid by the project applicant prior to the issuance of a grading permit. With the application and fee submittal approval, the project would comply with the Santa Clara Valley Habitat Plan. As a result, no impact would occur.

Discussion of Less-than-Significant Impacts

The project would have less than significant impacts on biological resources under the following thresholds:

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Less than Significant. The project proposes to remove 18 existing trees on site and 38 trees present within and adjacent to the proposed transmission line upgrade route. The project would include new trees and shrubs as part of the proposed landscaping. The project would be required to comply with the City's Tree Ordinance, including the requirement to plant two replacement trees for every protected tree removed. The required size of replacement trees, pursuant to City Code as summarized below:

- 24-inch boxes shall be used for every protected tree removed that is 38 to 75 inches in circumference.
- 36-inch boxes shall be used for every protected tree removed that is greater than 75 inches in circumference.

The project would adhere to the City's Tree Ordinance and City Code. Therefore, the impact would be less than significant.

Habitat Plan Land Cover Map Figure **3-4**

Source: Santa Clara County Planning Office, 2023

Discussion of Less-than-Significant Impacts with Mitigation

The project would result in impacts that are less than significant with mitigation under the following thresholds:

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

Impact BIO-1: The project could impact nesting birds due to the removal of trees.

Less than Significant with Mitigation. As discussed in **Section 3.4.2, Environmental Setting**, desktop surveys concluded that the project does not contain habitat conducive to special-status species, and therefore it is not anticipated that special-status species are present on-site. However, project construction would involve removal of trees on and adjacent to the project site and within the offsite proposed transmission line upgrade. Trees could provide habitat for nesting birds. Nesting birds are protected under provisions of the MBTA and CDFW code. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise could lead to nest abandonment. Disturbance that causes abandonment or destruction of nests on-site or immediately adjacent to the construction zone would constitute a significant impact. Therefore, the project will incorporate **BIO MM-1**, described below, to reduce the potential for effects to nesting bird habitat to a less than significant level by ensuring nesting birds and their young are not disturbed by project construction.

> **BIO MM-1: Nesting Bird Survey**
>
> If removal of the trees on-site or along the transmission line route would take place between January and September, a pre-construction survey for nesting raptors will be conducted by a qualified ornithologist to identify active nesting raptor nests that may be disturbed during project implementation. Between January and April (inclusive) pre-construction surveys will be conducted no more than 14 days prior to the initiation of construction activities or tree relocation or removal. Between May and August (inclusive), pre-construction surveys will be conducted no more than thirty (30) days prior to the initiation of these activities. The surveying ornithologist shall inspect all trees in and immediately adjacent to the construction area to be disturbed by these activities, and the ornithologist shall, in consultation with the State of California, Department of Fish and Wildlife (CDFW), designate a construction-free buffer zone (typically 250 feet) around the nest until the end of the nesting activity. The applicant shall submit a report indicating the result of the survey and any designated buffer zones to the satisfaction of the Director of Community Development prior to the issuance of a tree removal permit by the City Arborist.

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

Impact BIO-2: The project could impact migratory nesting birds due to the removal of trees.

Less than Significant with Mitigation. In general, the project site is located within a developed area, which is less likely to serve as a wildlife corridor compared to undeveloped lands with natural habitats

that contain essential characteristics for the range of species known to occur within the City. As shown in **Figure 3-3**, the Habitat Plan establishes a Reserve System that protects and maintains priority habitat areas that are large enough to support sustainable populations of protected species and provide linkages that sustain wildlife movement between habitat areas. The project site is not located on or adjacent to priority habitat areas or linkages under the Reserve System. Furthermore, the project would comply with conditions outlined in the Habitat Plan. The applicant will submit the Santa Clara Valley Habitat Plan Coverage Screening form and Application for Private Projects to the City of Gilroy Planning Division for approval and will pay all applicable fees prior to the issuance of a grading permit. Compliance with Santa Clara Valley Habitat Plan requirements would also ensure consistency with General Plan policies that protect wildlife movement corridors, given that these policies were developed to ensure adherence to the Santa Clara Valley Habitat Plan (refer to **Section 3.4.1, Regulatory Framework**).

Although the project does not contain habitats conducive to special-status species, trees on site could provide habitat for migratory bird species. Nesting birds are protected under provisions of the MBTA and CDFW codes. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise could lead to nest abandonment. Implementation of **BIO MM-1**, Nesting Bird Survey, would reduce the impact on migratory birds to a less than significant level by ensuring nesting birds and their young are not disturbed by project construction.

With compliance with General Plan Policies and Habitat Plan conditions and implementation of **BIO MM-1**, the project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of any native wildlife nursery. Therefore, the impact is less than significant with mitigation.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant and unavoidable impacts related to biological resources.

Cumulative Impacts

Would the project result in a cumulatively considerable contribution to a significant biological resources impact?

Less than Significant with Mitigation Cumulative Impact. The General Plan EIR concluded that the buildout of the General Plan would not result in cumulatively considerable impacts to special-status species, sensitive serpentine habitats, riparian habitats and wildlife, or special-status fish species. While special-status species have the potential to occur within the City, the General Plan EIR found that adherence to the Municipal Code, Habitat Plan measures, the General Plan, and existing City policies, such as the Riparian Corridor and Bird-Safe Design Policy (Policy 6-34), would ensure the protection of these species within the Urban Growth Boundary.

The project would not result in new or substantially worse impacts to biological resources than those identified in the General Plan EIR because the project is consistent with the existing General Plan land use designation. The project site does not contain any riparian habitat or other sensitive communities. The project is also not located on or adjacent to any wetlands. Although removal of trees could have impact on nesting birds, implementation of **BIO MM-1** (nesting bird surveys) would ensure the

protection of special-status species. Therefore, the project would not contribute to a cumulatively considerable impact to special-status species, sensitive serpentine habitats, impacts to riparian habitats and wildlife, or special-status fish species.

3.5 Cultural Resources

The discussion in this section is based on **Appendix E**, Cultural Resources Literature Search, prepared for the project by Holman & Associates, Inc. in December 2020. A copy of the report has been submitted to the City separately to maintain confidentiality pursuant to Government Code Sections 6254(I) and 6254(k).

Cultural resources are evidence of past human occupation and activity and include both historical and archaeological resources. These resources may be located above ground or underground and have significance in the history, prehistory, architecture, culture of the nation, State of California, or local or tribal communities.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding cultural resources were received during the 30-day NOP circulation period.

3.5.1 Regulatory Framework

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

The NRHP is the nation's master inventory of historic resources that are considered significant at the national, state, or local level. The minimum criteria for determining NRHP eligibility include:

- The property is at least 50 years old (properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
- It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
- It possesses at least one of the following characteristics:
    - Association with events that have made a significant contribution to the broad patterns of history;
    - Association with the lives of persons significant in the past;
    - Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction; or
    - Has yielded, or may yield, information important to prehistory or history.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria (OHP, 2001; OHP, 2011).

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

California Native American Historical, Cultural, and Sacred Sites Act

Section 5097.9 – 5097.991 of the Public Resource Code (he California Native American Historical, Cultural, and Sacred Sites Act) applies to both state and private lands, providing protection to Native American historical and cultural resources, and sacred sites, and identifies the powers and duties of the NAHC. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Local

Gilroy 2040 General Plan

The Natural and Cultural Resources Element of the General Plan addresses the City's goals, policies, and implementing actions regarding cultural resources. The following policies in the General Plan have been adopted for the purpose of reducing or avoiding impacts related to cultural resources and are applicable to the project:

> **NCR 5.1.** Historic and Pre-historic Archaeological Resources and CEQA. Discretionary projects subject to CEQA review which include disturbance of the existing ground surface of the project site will require an archaeological survey and records search if the project site is located in a moderate to high archaeological sensitivity zone, or if other evidence suggests the project site to be archaeologically sensitive.
>
> **NCR 5.2.** Archaeological Resources Protection. Ensure that all projects involving ground-disturbing activities include procedures to protect archaeological resources if discovered during excavation. Projects shall follow CEQA and other applicable State laws.

3.5.2 Environmental Setting

Historic-Era Development

Historic-era maps for the project site were examined to identify the potential for historic resources on the project site and vicinity. In 1876, all of the current project area was part of a 1,222-acre property owned by Julius and Mrs. E. Martin (Thompson & West 1876). Their house once stood just beyond the southwestern portion of the current property boundary. However, by 1917 no development was shown within the current property boundary. In 1940, no improvements were shown within the current project area (US Army 1940).

Aerial photographs are available from 1993 to the present (Google Earth 2020). In 1993, the berm in the northern corner was present. The northern edge was unplanted with the remainder productive agricultural lands planted in rows. Very minor changes were shown in the last few decades. Therefore, there is a low potential for historic-era resources within the current project area.

Prehistoric and Native American Archaeological Resources

A records search was completed at the Northwest Information Center of the California Historical Resources Information System (CHRIS) in November 2020. All records of identified archaeological resources within a quarter of a mile, and all other cultural resources and archaeological resources reports for projects within 50 meters of the project area were reviewed. Studies on file at Holman & Associates' library were also used.

According to these sources, no recorded cultural resources have been identified on the project site, nor have any been recorded within a quarter mile. No resources are listed on federal, state, or local inventories within or abutting the project site (CA-DPR 1976; CA-OHP 2012, 2020; NPS 2020).

In this part of the central Santa Clara Valley, prehistoric archaeological resources have been recorded on terraces adjacent to major creeks, at the margins of former marshes, and often at the confluences of two creeks. Several buried archaeological sites have been recorded near major waterways. The project

area is part of the gently sloping alluvial valley floor 0.66 miles west of the channelized Llagas Creek, 0.3 miles north of channelized West Branch of Llagas Creek, and 0.9 miles from the created confluence of the West Branch and the larger creek, a point created by flood control efforts after 1955.

The project site was first studied for the proposed Las Animas Technology Park (Harversat and Breschini 1981). That 190-acre project was south of Leavesley Road, east of US-101, and north of Gilman, which included all of the current project area. In August 1980, a field inspection was attempted, but the cultivated plants afforded little surface soil visibility and the land had been heavily irrigated. In January 1981, the lead author returned to examine the land after the crops had been harvested. Field conditions were dry soils with no crops. A few pieces of naturally occurring cherts[10] were noted. Several structures within the 190-acre site were still extant but on closer inspection none appeared historically significant. It was noted that the project site periodically flooded and there was a potential for buried archaeological resources.

One archaeological study has been conducted on nearby lands (Doane and Haversat 2003). Prior to the healthcare facility construction on lands to the south, 11.7 acres of land were surveyed just south of the current project site. The light- to medium-brown silt contained gravel to cobble-size sedimentary stone that was naturally occurring.

In December 2020, Holman & Associates, completed an archaeological survey of the lands comprising the project area. Based on the survey conducted for this project, the project site has a low potential for buried Native American resources or historic-era archaeological features.

3.5.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, the project would have a significant impact on cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5; or
- Disturb any human remains, including those interred outside of formal cemeteries.

Discussion of No Impacts

The project would have no impact on cultural resources related to the following thresholds:

The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.

No Impact. The project site is undeveloped and was previously tilled and utilized for agriculture. There are no NRHP-eligible, NRHP-listed, or state or local historic resources on or adjacent to the project site. Implementation of the project would have no impact on any historic resources.

[10] Chert is a sedimentary rock composed of microcrystalline or cryptocrystalline quartz, the mineral form of silicon dioxide (SiO2). It occurs as nodules, concretionary masses, and as layered deposits.

Discussion of Less-than-Significant Impacts

The project would not have impacts determined to be Less Than Significant for cultural resources.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

Impact CUL-1: The project could adversely impact the significance of an archaeological resource.

Less Than Significant with Mitigation. The project site has a low potential for containing prehistoric archaeological resources near the surface. Based on the CHRIS search result provided on November 20, 2020, and other cultural resources and archaeological resources reports for projects within 50 meters, no cultural resources have been identified within the project site. The property was previously surveyed in 1981 under ideal conditions and was inspected again for this project. The previous agriculture practices on the site afforded excellent survey conditions and represents not only the surface soils but to a depth of four to at least six feet deep. No archaeological resources were found during these surveys. Although unlikely, trenching and excavation of the project site could damage unrecorded subsurface resources, resulting in a significant impact. Therefore, the project will incorporate **CUL MM-1** and **CUL MM-2**, described below, to reduce the potential of adverse changes to unanticipated archaeological resources to a less than significant level.

CUL MM-1: Archaeological Monitoring

A Secretary of the Interior-qualified archaeologist and a Native American cultural resources monitor shall be on site to monitor grading of native soil. The project applicant shall submit the name and qualifications of the selected archaeologist and Native American Monitor to the Director of Community Development prior to the issuance of a grading permit. Preference in selecting Native American monitors shall be given to Native Americans with:

- Traditional ties to the area being monitored.
- Knowledge of local historic and prehistoric Native American village sites.
- Knowledge and understanding of Health and Safety Code, Section 7050.5 and Public Resources Code, Section 5097.9 et seq.
- Ability to effectively communicate the requirements of Health and Safety Code, Section 7050.5 and Public Resources Code, Section 5097.9 et seq.
- Ability to work with law enforcement officials and the NAHC to ensure the return of all associated grave goods taken from a Native American grave during excavation.
- Ability to travel to project sites within traditional tribal territory.
- Knowledge and understanding of Title 14, California Code of Regulations, Section 15064.5.
- Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding CEQA mitigation provisions.

- Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the NAHC's Sacred Lands Inventory.
- Knowledge and understanding of archaeological practices, including the phases of archaeological investigation.
- The Native American monitor shall provide written approval of the selected qualified archaeologist.

CUL MM-2: Unanticipated Discovery of Archaeological Resources

In the event archaeological resources are encountered during construction, work shall be halted within 100 feet of the discovered materials and workers shall avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations.

If an archaeological resource is encountered in any stage of development, a qualified archaeologist will be consulted to determine whether the resources qualify as historical resources or unique archaeological resources. In the event that the encountered resources qualify, the archaeologist will prepare a research design and archaeological data recovery plan to be implemented prior to resuming construction at the affected area. The archaeologist shall also prepare a written report of the finding, file it with the appropriate agency, and arrange for curation of recovered materials, subject to consultation with the Native American monitor and/or most likely descendant affiliated with the recovered resources.

The project would not disturb any human remains, including those interred outside of formal cemeteries.

Impact CUL-2: The project could disturb human remains.

Less than Significant Impact with Mitigation. Although unlikely, trenching and excavation of the project site could disturb human remains, should they be encountered on the project site, and would result in a significant impact. Therefore, the project will incorporate **CUL MM-3**, described below, to reduce the potential of disturbance of human remains during construction to a less than significant level.

CUL MM-3: Protocol for Human Remains Discovery

In the event that human remains are discovered during presence/absence testing or excavation and/or grading of the project site, all activity within a 50-foot radius of the find will be stopped. The County Coroner will be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the NAHC immediately. Once NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines. All actions taken under this mitigation measure shall comply with Health and Human Safety Code § 7050.5(b).

Discussion of Significant and Unavoidable Impacts

As discussed above, with implementation of **CUL MM-1** and **CUL MM-2**, the project would not result in Significant Impacts to cultural resources.

Discussion of Cumulative Impacts

Would the project result in a cumulatively considerable contribution to a significant cultural resources impact?

Less than Significant Cumulative Impact with Mitigation. The General Plan EIR concluded that buildout of the Gilroy 2040 General Plan would have a less than significant impact with mitigation on cultural resources, because future development within the Gilroy Urban Growth Boundary, as well as within other jurisdictions in the County of Santa Clara would be conditioned to avoid or lessen its impacts on cultural resources. In addition, consistency with Federal and state regulations designed to avoid or reduce the potential for significant impacts on unique cultural resources from site preparation (i.e. grading and trenching), construction and other activities would also reduce impacts to less than cumulatively considerable.

There are no eligible or listed CHRIS or local historic resources on or adjacent to the project site, therefore, the project would not constitute a cumulatively considerable impact to historical resources in the City. The project site has a low potential for containing prehistoric archaeological resources near the surface. Although unlikely, in the event that trenching and excavation of the project site discover unrecorded archaeological resources or human remains, the potential impacts to subsurface cultural resources would be minimized and/or avoided with implementation of **CUL MM-1** Archaeological Monitoring, **CUL MM-2** Unanticipated Discovery pf Archaeological Resources, and **CUL MM-3** Protocol for Human Remains Discovery. As such, the project would not contribute to cumulative impact beyond what was identified in the General Plan EIR.

3.6 Energy

This section evaluates impacts associated with energy consumption that could occur as a result of the project.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding energy concerns were received during the 30-day NOP circulation period.

3.6.1 Regulatory Framework

Federal

Energy Independence and Security Act of 2007

The Energy Independence and Security Act, enacted by Congress in 2007, is designed to improve vehicle fuel economy and help reduce the United States' dependence on foreign oil. It expands the production of renewable fuels, reducing dependence on oil, and confronting climate change. Specifically, it does the following:

- Increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard, requiring fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly five-fold increase over current levels.
- Reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon (mpg) by 2020 – an increase in fuel economy standards of 40 percent.

The Energy Independence and Security Act of 2007 also set energy efficiency standards for lighting (specifically light bulbs) and appliances. Development would also be required to install photosensors and energy-efficient lighting fixtures consistent with the requirements of 42 USC Section 17001 et seq.

Energy Policy and Conservation Act

Enacted in 1975, the Energy Policy and Conservation Act established fuel economy standards for new light-duty vehicles sold in the United States. The law placed responsibility on the National Highway Traffic and Safety Administration, a part of the United States Department of Transportation (U.S. DOT), for establishing and regularly updating vehicle standards. The U.S. EPA administers the Corporate Average Fuel Economy program, which determines vehicle manufacturers' compliance with existing fuel economy standards.

Construction Equipment Fuel Efficiency Standards

The U.S. EPA sets emission standards for construction equipment. The first federal standards (Tier 1) were adopted in 1994 for all off-road engines over 50 horsepower (hp) and were phased in by 2000. A new standard was adopted in 1998 that introduced Tier 1 for all equipment below 50 hp and established the Tier 2 and Tier 3 standards. The Tier 2 and Tier 3 standards were phased in by 2008 for all equipment. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements are contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068 (originally adopted in 69 Federal Register 38958 [June 29, 2004], and most recently updated in 2014 [79

Federal Register 46356]). Emissions requirements for new off-road Tier 4 vehicles were to be completely phased in by the end of 2015.

Energy Star Program

In 1992, the U.S. EPA introduced Energy Star as a voluntary labeling program designed to identify and promote energy-efficient products to reduce GHG emissions. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, and heating and cooling systems. Under this program, appliances that meet specification for maximum energy use established under the program are certified to display the Energy Star label. In 1996, the USEPA joined with the U.S. Department of Energy (DOE) to expand the program, which now also includes qualifying commercial and industrial buildings as well as homes.

State

Executive Order B-55-18 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued an executive order, EO-B-55-18 To Achieve Carbon Neutrality, setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires CARB to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO2 from the atmosphere through sequestration.

California Energy Plan

The CEC is responsible for preparing the California Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The 2008 California Energy Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs, as well as encouragement of urban designs that reduce vehicle miles travelled and accommodate pedestrian and bicycle access.

Reducing California's Petroleum Dependence (Assembly Bill 2076)

Pursuant to AB 2076 (Chapter 936, Statutes of 2000), the CEC and CARB prepared and adopted a joint-agency report, Reducing California's Petroleum Dependence, in 2003. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita vehicle miles travelled. One of the performance-based goals of AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC's 2003 and 2005 Integrated Energy Policy Reports, the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

Integrated Energy Policy Report

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The CEC uses these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. The most recent assessment, the 2018 Integrated Energy Policy Report, contains two volumes. Volume one highlights the implementation of California's innovative policies and the role they have played in establishing a clean energy economy. Volume two, adopted February 20, 2019, provides more detail on several key energy policies, including decarbonizing buildings, increasing energy efficiency savings, and integrating more renewable energy into the electricity system.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. Governor Schwarzenegger issued Executive Order (EO) S-3-05, requiring statewide emissions reductions to 80 percent below 1990 levels by 2050. In 2008, EO S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

California Renewable Portfolio Standard and Senate Bill 100

Established in 2002 under SB 1078, and accelerated by SB 107 (2006), SB X 1-2 (2011), and SB 100 (2018), California's Renewable Portfolio Standard obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent total retail sales of electricity from renewable energy sources by 2020, 60 percent by 2030, and 100 percent by 2045. SB 100 also states "that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045." The California Public Utilities Commission and the CEC are jointly responsible for implementing the program.

Energy Action Plan

In October 2005, the CEC and California Public Utilities Commission updated their energy policy vision by adding some important dimensions to the policy areas included in the original Energy Action Plan, such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the Energy Action Plan II in February 2008 that supplements the earlier energy action plans and examines the state's ongoing actions in the context of global climate change.

State Alternative Fuels Plan (Assembly Bill 1007)

AB 1007 (Chapter 371, Statutes of 2005) required the CEC to prepare a plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other federal, state, and local agencies. The Alternative Fuels Plan

presents strategies and actions California must take to increase the use of alternative nonpetroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan (Executive Order S-06-06)

EO S-06-06 establishes targets for the use and production of biofuels and biopower and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO establishes the following targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050. EO S-06-06 also calls for the state to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so that the state can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updated the 2011 Plan and provided a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications
- Create jobs and stimulate economic development, especially in rural regions of the state
- Reduce fire danger, improve air and water quality, and reduce waste

Title 24, California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years (CBSC, 2022). Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments (CEC, 2019).

Title 24 contains numerous subparts, including Part 1 (Administrative Code), Part 2 (Building Code), Part 3 (Electrical Code), Part 4 (Mechanical Code), Part 5 (Plumbing Code), Part 6 (Energy Code), Part 8 (Historical Building Code), Part 9 (Fire Code), Part 10 (Existing Building Code), Part 11 (Green Building Standards Code), Part 12 (Referenced Standards Code).

Part 6 (Building Energy Efficiency Standards)

Part 6 of Title 24 contains the 2019 Building Energy Efficiency Standards for new residential and non-residential buildings, which went into effect on January 1, 2020. Part 6 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential

and nonresidential ventilation requirements; 4) and nonresidential lighting requirements. Under the 2019 Standards, nonresidential buildings will be 30 percent more energy-efficient compared to the 2016 Standards.

Part 11 (CALGreen)

On July 17, 2008, the California Building Standards Commission (CBSC) adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code (CBC), and is updated every 3 years. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The mandatory provisions of the CALGreen became effective January 1, 2011 and were updated in 2016. The 2016 Standards, which became effective on January 1, 2017, establish green building criteria for residential and nonresidential projects. The CEC adopted updates to the 2016 Standards in 2019 and 2022, the latter of which came into effect on January 1, 2023.

Local

Gilroy 2040 General Plan

The Land Use Element and Public Facilities and Services Element of the General Plan address the City's goals, policies, and implementing actions regarding energy. The following policies in the General Plan have been adopted for the purpose of managing energy consumption and are applicable to the project:

> **LU 8.12**. Outdoor Lighting Energy Efficiency. Select outdoor lighting fixtures to provide maximum energy efficiency as well as effective lighting.
>
> **PFS 2.3.** Sustainable Practices. Minimize the generation of waste and maximize recycling programs, energy efficiency and conservation, and environmental practices that reduce water, electricity and natural gas use, and vehicle fuel consumption.
>
> **PFS 2.5.** Energy Efficient Buildings and Infrastructure. Continue to improve energy efficiency of existing City buildings and infrastructure through efficiency improvements, equipment upgrades, and installation of clean, renewable energy systems.
>
> **PFS 8.4** Energy Conservation. Reduce energy consumption by encouraging the use of green building technologies, supporting the use of alternative energy sources, and disseminating public information regarding energy conservation techniques.
>
> **PFS 8.10.** Outdoor Lighting and Energy Efficiency. Select outdoor lamps and light fixtures that maximize energy efficiency, provide effective lighting, and are compatible with the neighborhood context.
>
> **NCR 3.1** Energy Use Data and Analysis. Increase building owner, tenant, and operator knowledge about how, when, and where building energy is used.

3.6.2 Environmental Setting

Data centers are a highly energy-intensive land use that consume approximately two percent of total electricity usage in the U.S. due to the substantial amount of energy required to power computer

servers and operate the associated cooling/chilling equipment to prevent servers from overheating. On average, data centers consume approximately 10 to 50 times more energy per square foot than typical commercial office buildings (DOE 2022). As a result, energy efficiency is often a key concern in the design and operation of data centers.

Energy use relates directly to environmental quality, because energy use can adversely affect air quality and can generate GHG emissions that contribute to climate change. Fossil fuels may be burned to create electricity that powers residences, heats and cools buildings, and powers vehicles. Transportation energy use corresponds to the fuel efficiency of cars, trucks, and public transportation; the different travel modes such as single-passenger automobile, carpool, and public transit; and the miles traveled using these modes.

Energy Supply

Electricity

In 2020, California's in-state electricity generation totaled 190,913 Gigawatt Hours (GWh). Primary sources for the state's electricity generation in 2020 included natural gas (48 percent), followed by solar photovoltaic (27 percent), Hydroelectric (11 percent), and nuclear (8 percent). Together these sources comprised approximately 87 percent of electricity production in the state. The remaining 18 percent of electricity was generated through a combination of wind, geothermal, biomass, and other sources (CEC, 2022b).

Energy Demand

Total energy usage in California was approximately 5,472.6 trillion British thermal units (Btu) in the year 2020, the most recent year for which this data was available (United States Energy Information Administration, 2021). Out of the 50 states, California is ranked second in total energy consumption but 48th in energy consumption per capita. The breakdown by sector was approximately 34 percent (2356.1 trillion Btu) 21 percent (1507.8trillion Btu) for residential uses, 19 percent (1358.4 trillion Btu) for commercial uses, 24 percent (1701.3 trillion Btu) for industrial uses. This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

PG&E provides electricity services within the City. In 2021 electricity consumption in the City was approximately 583 million kWh (PG&E 2022). In 2021, total electricity consumption in the County was 16,900 million kWh (CEC 2022a). Thus, electricity consumption in the City represented approximately 3.2 percent of total electricity consumption in the County in 2021. Appendix E of the General Plan EIR shows that the increase in electricity demand associated with buildout of the General Plan land use designations would be about 238 million kWh. This represents an approximately 68 percent increase relative to the 2022 electricity demand.

Fuel for Motor Vehicles

In 2021, 13.8 billion gallons of gasoline were sold in California (CDTFA, 2022). The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 mpg in the mid-1970s to 24.9 mpg in 2019 (USEPA, 2020). Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was

passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 mpg by the year 2020, was updated in March 2020 to require all cars and light duty trucks achieve an overall industry average fuel economy of 40.4 mpg by model year 2026 (DOE, 2022; GPO, 2007).

3.6.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, the project would result in a significant impact on energy demand and conservation if it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Discussion of No Impacts

The project would not result in a "No Impacts" determination related to energy usage.

Discussion of Less-than-Significant Impacts

The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Construction and Operation

Less than Significant Impact. Project construction would require energy resources primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary power may also be provided for construction trailers and electric construction equipment.

Energy use during construction would be temporary in nature, and the construction phase is not anticipated to last longer than 7 years. Construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the U.S. EPA Construction Equipment Fuel Efficiency Standard (i.e., Tier 4 efficiency requirements, detailed in **Appendix B**, Air Quality Impact Assessment), which would also minimize inefficient, wasteful, or unnecessary fuel consumption.

Electrical power would be consumed to construct the project, and the demand, to the extent required, would be supplied from existing electrical infrastructure in the area. However, construction activities would require minimal electricity consumption and would not be expected to have any adverse impact on available electricity supplies or infrastructure. In addition, per applicable regulatory requirements such as 2022 CALGreen, the project would comply with construction waste management practices to divert a minimum of 65 percent of construction and demolition debris. These practices would result in efficient use of energy necessary to construct the project.

Furthermore, in the interest of cost-efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary, such as scheduling unnecessary deliveries of materials or

operating diesel-fueled equipment while not in use. Therefore, project construction would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and construction impacts would be less than significant, and no mitigation would be required.

As mentioned in **Section 3.6.2, Environmental Setting**, data centers are a highly energy-intensive land use. Energy demand from project operation would include electricity consumed by computer servers, chillers, and building operations as well as gasoline fuel consumed by employee vehicle trips and diesel fuel intermittently consumed by backup generators and diesel delivery tank trucks. Although operation of the project would be energy intensive, the project would comply with the General Plan policies outlined in **Section 3.6.1**, which present a suite of measures and best practices that reflect the growing expectations of local agencies to manage development for reduced energy consumption.

As discussed in **Section 2.5.4, Major Equipment**, Phase I of the project may include a BESS facility (Phase I BESS), and Phase II of the project would include a backup power system that utilizes emerging battery or fuel cell technology (Phase II BP). The purpose of the Phase I BESS facility would be to regulate power supply and demand by storing electricity during time of low energy demand, and discharging to the data center during times of peak energy demand to relieve strain on the overall electrical system. However, the overall energy consumption of the project would be unchanged under either scenario (construction or non-construction of the Phase I BESS).

Similarly, the Phase II BP would store electricity, which would only be discharged to the data center facilities (i.e., Buildings 1 and 2) in the event of a power outage when grid power is unavailable. The Phase I diesel generators would also only discharge during emergency situations when grid power is unavailable. Accordingly, consumption of energy by the proposed Phase I diesel generators and Phase II BP facility would only occur during emergency situations, and therefore does not reflect the typical operation of the project and associated energy demand.

In April 2023, Silicon Valley Clean Energy (SVCE) confirmed that the project would be eligible to receive electricity under SVCE's GreenPrime Direct tariff. The project applicant has committed to use 100 percent carbon-free electricity for the life of the project. Therefore, SVCE will serve the project with 100 percent carbon-free electricity sourced from carbon-free renewable electricity and/or other carbon-free resources such as hydropower or nuclear power. As a condition of approval, the applicant will be required to use this carbon-free renewable electricity for the life of the project.

> **Condition of Approval**: The applicant shall use 100-percent carbon-free energy supplied by SVCE for the life of the project to power data center operations and all other routine operational energy use.

With adherence to this condition of approval, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

<u>The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.</u>

Less Than Significant Impact. A project is considered consistent with the provisions of state and local plans for renewable energy and energy efficiency if it meets the general intent in advancing energy efficiency and increasing renewable energy in order to facilitate the achievement of City- and state-

adopted goals and does not impede attainment of those goals. The following regulations and plans for renewable energy and energy efficiency would be applicable to the project:

- SB 100, which mandates 100 percent renewable energy for California by 2045.
- Title 24 California Code of Regulations, which contains the state's Building Energy Efficiency Standards and CALGreen requirements.
- Gilroy 2040 General Plan, which includes goals and policies relevant to maximizing the use of renewable sources and implementing energy conservation measures.

SB 100 mandates 100 percent clean electricity for California by 2045. Because the project would be powered by 100 percent carbon-free electricity, the project would be consistent with this statewide plan. Furthermore, the project would be required to comply with all applicable Title 24 standards and requirements pertaining to energy efficiency and renewable energy, including Building Energy Efficiency Standards and CALGreen requirements. Adherence to Title 24 requirements will further ensure the project would comply with energy conservation policies listed in the General Plan, including the use of energy efficient outdoor lighting, and the use sustainable practices to minimize electricity use during construction and operation. Additionally, the Phase I BESS (if constructed) would reduce strain on the electrical grid during period of peak electricity demand, which would ease peak power demand. Further, the proposed Phase II BESS would replace the need for diesel generators to support Building 2 during power outages, and would be powered by 100 percent carbon-free electricity, reducing the use of non-renewable energy.

As such, the project would not conflict with or obstruct implementation of state plans for renewable energy or energy efficiency.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not result in impacts that are less than significant with mitigation related to energy.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant and unavoidable impacts related to energy.

Cumulative Impacts

Less than Significant Cumulative Impact. The General Plan EIR concluded that because of the State-required energy conservation measures and the general plan policies described in **Section 3.6.1**, **Regulatory Framework**, the City's contribution to a cumulative energy impact is not considerable. Under General Plan buildout conditions, transportation fuel demand will be reduced through General Plan land use and mobility policies and programs that result in reduced VMT relative to buildout conditions without these measures. Examples include Policies LU 1.4 and LU 3.5 that encourages diverse mix of land use and infill development as well as M 2.2, M 3.4, M 3.6, M 4.1, and M 5.4 that encourages alternative mode of transportation such as bicycle and pedestrian. Similarly, electricity consumption would be reduced through policies and programs that include, but are not limited to: improved building energy efficiency, use of alternative/renewable energy sources such as solar power, and reduced energy demand for water pumping through water conservation measures. Examples include Policies LU 8.12, PFS 2.4, PFS 2.5, PFS 2.6, PFS 8.10, NCR 3.1, and NCR 3.4. Natural gas consumption would also be

reduced through improved building energy efficiency as promoted in policies PFS 2.5, PFS 2.6, PFS 8.4, NCR 3.1, and NCR 3.4. With conformance to applicable State regulations and legislation and implementation of the General Plan goals, policies, and programs, the General Plan would not result in significant impacts on energy.

The project would not result in significant energy impacts, conflict, or obstruct with a State or local plan for energy efficiency, or result in a substantial increase in demand upon energy resources in relation to projected supplies. Therefore, the project would not contribute to cumulative impact beyond what was identified and analyzed under the General Plan EIR. As such, the project would not have a cumulatively considerable contribution to a significant cumulative energy impact.

3.7 Geology, Soils, and Seismicity

This section evaluates impacts associated with geology soils and seismicity that could occur as a result of the project. This evaluation is based on **Appendix F**, Geotechnical Engineering Report, prepared for the project by Terracon Consultants, Inc. on September 16, 2020.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding geology, soils, and seismicity were received during the 30-day NOP circulation period.

3.7.1 Regulatory Framework

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The California Geological Survey has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The California Building Code (CBC) prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years and was last updated in 2022, with an effective date of January 1, 2023.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules.

These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These materials are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Gilroy 2040 General Plan

The Potential Hazards Element of the General Plan addresses the City's goals, policies, and implementing actions regarding geology, soils, and seismicity. The following policies in the General Plan related to geology, soils, and seismicity are applicable to the project:

> **PH 1.1.** Location of Future Development. Allow development only in those areas where potential danger to the health, safety, and welfare of residents can be adequately mitigated to an acceptable level of risk. This applies to development in areas subject to flood damage, fire damage, or geological hazard due to their location and/or design.
>
> **PH 1.10.** Hazard Maps. Maintain the most current seismic hazards maps for use in development review, in accordance with the State of California's Seismic Hazards Mapping Act.
>
> **PH 2.2.** Site Investigation and Mitigation. Ensure proper soils and geologic site investigation and appropriate mitigation for development proposals in areas of unconsolidated fill, and areas subject to seasonal high groundwater tables or other potentially unstable soils.
>
> **PH 2.5.** Geologic Hazards Reports. Require geologic hazards reports for all new development applications to assess potential geologic hazards and to determine if these hazards can be adequately mitigated.
>
> **PH 2.6.** Erosion and Deposition Control. Require all new development proposals to include a site plan detailing appropriate methods of erosion and deposition control during site development and subsequent use.

3.7.2 Environmental Setting

The project site is located in the Santa Clara Valley, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the southwest and west, the Diablo Mountain Range to the east, and the San Francisco Bay to the north as described in **Appendix F**.

Soil Conditions

The project site is underlain by Pleistocene-age alluvial soil. This alluvium consists of irregularly mixed clay, silt, sand, and gravel. The topsoil contains agricultural organics primarily consisting of roots and

hay. The subsurface soil conditions consist of an upper layer of lean clay, a granular layer, and a lower layer of lean clay. The upper layer of lean clay is brown in color, generally medium stiff to very stiff, with varying amounts of sand and gravel present. The thickness of this layer varies across the project site, ranging from five to 20 feet thick. The granular layer is generally dense, primarily consists of gravel, and contains varying amounts of sand and clay. The depth and extent of this layer varies across the project site but was generally encountered between the depths of ten to 20 feet below the ground surface (bgs). The lower layer of lean clay had similar characteristics as the upper layer of lean clay. The extent of this layer is unknown.

Expansion Potential

The upper clay layer at the project site may have moderate expansion potential and therefore could experience some degree of volume change when subjected to changes in moisture content. An existing mound of stockpiled fill in the northeast corner of the project site appears to have a similar or greater expansion potential than that of the upper clay layer.

Groundwater

The City is in the Llagas Subbasin of the Gilroy-Hollister Groundwater Basin. The Llagas Subbasin has a surface area of about 87 square miles, and is about 15 miles long, three miles wide at its northern boundary, and six miles wide at its southern boundary. The groundwater level was measured at 25 feet bgs. Historical geotechnical information near the project site indicates that the groundwater level may vary between 17 to 39 feet bgs.

Seismicity and Seismic Hazards

The San Francisco Bay Area is one of the most seismically active areas in the United States. While seismologists cannot predict earthquake events, the U.S. Geological Survey's Working Group on California Earthquake Probabilities estimates there is a 72 percent chance of at least one magnitude 6.7 earthquake occurring in the Bay Area region between 2002 and 2032. Higher levels of shaking and damage would be expected for earthquakes occurring at closer distances. The faults considered capable of generating significant earthquakes in the area are generally associated with the well-defined areas of crustal movement, which trend northwesterly.

The five major faults in the region are the Coyote Creek Fault (approximately 2.9 miles east of the site), Calaveras Fault (approximately 3.3 miles east of the project site), the Carnadero Fault (approximately three miles west of the project site), the Sargent Fault (approximately 4.25 miles west of the project site), and the San Andreas Fault (approximately 8.4 miles west of the project site) (USGS, 2022b). The project site is not located within a fault rupture zone (Santa Clara County 2020).

Liquefaction

Liquefaction occurs when loose, saturated sandy or silty soils are subjected to strong and rapid shaking from a seismic event. During a seismic event, loose soils tend to contract and a portion, if not all, of the soil shear strength is lost. The estimated liquefaction risk level for the project site is negligible to low.

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open face, such as the steep bank of a stream

channel. There are no stream channels on or adjacent to the project site, therefore the project site would not be subject to lateral spreading.

Landslides

The project site and surrounding vicinity is flat. The project site is not within a landslide hazard zone (USGS, 2022a).

Geology and Paleontological Resources

Paleontological resources are the remains or traces of prehistoric life preserved in the geological record and contribute to knowledge of the history of life on earth. Paleontological resources include fossilized remains of vertebrate organisms, fossil tracks and trackways, and plant fossils, as well as casts or impressions of ancient animals and plants, their trace remains.

Gilroy is mostly characterized as being underlain by Quaternary period sedimentary rocks. Quaternary sedimentary rocks are marine gravel, sand, silt, and clay deposited mostly in valleys and lowlands and are related to the most recent Pleistocene (1.8 million to about 10,000 years ago) and Holocene (last 10,000 years). According to the General Plan EIR, no known paleontological resources have been discovered in Gilroy, likely due to the presence of relatively recent Holocene (10,000 years) deposits. The likelihood of paleontological resources being discovered at the project site is therefore low.

3.7.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, a geology, soils, or seismicity impact is considered significant if the project would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42;
    ii. Strong seismic ground shaking;
    iii. Seismic-related ground failure, including liquefaction;
    iv. Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal where sewers are not available for the disposal of wastewater; or

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Discussion of No Impacts

Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The project would connect to existing sewer lines and would not use septic tanks. There would be no impact, and no mitigation is required.

Discussion of Less-than-Significant Impacts

The project would not result in substantial soil erosion or the loss of topsoil.

Construction and Operation

Less Than Significant Impact. Construction of the project could result in soil erosion or the loss of topsoil during excavation and grading. The project would be required to comply with General Plan Policy PH 2.6, which requires an erosion and sediment control plan to establish which control measures are intended to prevent erosion and offsite sedimentation. The plan will serve as a blueprint for the location, installation, and maintenance of practices to control all anticipated erosion and prevent sediment from leaving the site. The plan would cover all new development detailing appropriate methods of erosion and deposition control for site development during project construction, and subsequent use during project operations. In addition, the project would be required to comply with Gilroy Municipal Code Chapter 6 which requires a grading permit prior to ground-disturbing activities and calls for protection of slopes and the use of erosion and sediment controls on construction sites as necessary to protect water quality. Erosion control plans are subject to review and approval by the City of Gilroy Engineering Division prior to issuance of building permits.

Furthermore, the General Plan EIR concluded that with the regulatory programs currently in place, the possible impact of accelerated erosion during construction and operations would be less than significant. Because the project would comply with the regulations identified in the General Plan EIR, impacts to soil erosion would be less than significant.

Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Less Than Significant Impact. As previously stated in **Section 3.7.2, Environmental Setting**, the project site and area are not subject to landslides and have a low potential for liquefaction and lateral spreading. Soils and geologic conditions at the project site are generally suitable for the type of development proposed. Because the project would add new light industrial buildings to the project site and would include agricultural buffers/setbacks, parking, and landscaping, none of the project elements would have the potential to create geologic instability. Additionally, with the implementation of the standard engineering and seismic safety design techniques outlined in the California Building Code, the project would not be located on an unstable geologic unit that would result in subsidence or collapse. The project would not exacerbate the existing geologic conditions or soils on site. Therefore, the project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a

result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. This impact would be less than significant.

Discussion of Less-than-Significant Impacts with Mitigation

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42;

ii. Strong seismic ground shaking;

iii. Seismic-related ground failure, including liquefaction;

iv. Landslides;

Impact GEO-1: Potential damage from seismic shaking.

Less Than Significant with Mitigation. The estimated liquefaction risk level for the project site is negligible to low. The project site is not subject to lateral spreading due to its distance from stream channels. The project site and vicinity are relatively flat, the project site is not within a landslide hazard zone.

As discussed in **Section 3.7.2, Environmental Setting**, there are no known active or potentially active faults crossing the project site. The project site is not located within an Earthquake Fault Zone as defined by the State of California Alquist-Priolo Earthquake Fault Zoning Act. The project site is not located within a fault rupture zone.

However, the project site is in a seismically active region. The project would be required to be designed and constructed in accordance with standard engineering techniques and current California Building Code requirements, to avoid or minimize potential damage from seismic shaking and liquefaction on the project site. The project would include the following mitigation measure to address seismic hazards due to strong ground shaking:

GEO MM-1: Geotechnical Investigation

In order to ensure the project design conforms to the requirements of a final geotechnical engineering investigation and California and local building standards and codes, the following mitigation shall be completed to ensure seismic hazards are reduced to less than significant levels:

- To avoid or minimize potential damage from seismic shaking, the project shall be built using standard engineering and seismic safety design techniques appropriate for the region and site-specific conditions.
- Building design and construction at the project site shall be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be included in a report to the City. The report shall be

reviewed and approved by the City of Gilroy's Building & Safety Division as part of the building permit review and issuance process.

- The building shall meet the requirements of applicable Building and Fire Codes, including the 2022 California Building Code and 2022 California Fire Code, as adopted or updated by the City.
- The project shall be designed to withstand potential geologic hazards identified on the project site including expansive soils, and the project shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.

Would the project be located on expansive soils, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?

Less than Significant with Mitigation. The upper clay layer at the project site may have moderate expansion potential and therefore could experience some degree of volume change when subjected to changes in moisture content. An existing mound of stockpiled fill in the northeast corner of the site appears to have a similar or greater expansion potential than that of the upper clay layer. Use of this fill soil could potentially exacerbate the risk of expansive soil on the project site. Standard engineering practices, and the geotechnical investigation required by **GEO MM-1**, would ensure that the future site development is designed properly to account for soils-related hazards on the site. With implementation of **GEO MM-1**, this impact would be less than significant.

Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Impact GEO-2: The project could adversely impact the significance of an undiscovered paleontological resource.

Less than Significant with Mitigation. As discussed in **Section 3.7.2, Environmental Setting**, there are no known paleontological resources within the project site, and the probability of their presence is low. However, there is a possibility that the project may uncover previously undiscovered paleontological resources during the grading and excavation phase of project construction. If undiscovered paleontological resources are encountered during project construction, the following mitigation measure shall be incorporated to ensure that potential impacts to paleontological resources are avoided or reduced to a less than significant level.

GEO MM-2: Unrecorded Paleontological Resources

The applicant shell implement the following best management practices to ensure the proper handling of any unrecorded paleontological resources on the project site, including but not limited to:

- Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology, who is experienced in teaching non- specialists, to ensure they can recognize fossil materials and shall follow proper notification procedures in the event any are uncovered during construction. Procedures to be

conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who shall evaluate its significance.

- If a fossil is found and determined by the qualified paleontologist to be significant and avoidance is not feasible, the paleontologist shall develop and implement an excavation and salvage plan in accordance with Society of Vertebrate Paleontology standards. Construction work in these areas shall be halted or diverted to allow recovery of fossil remains in a timely manner. Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and cataloged. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall then be deposited in a scientific institution with paleontological collections. A final Paleontological Mitigation Plan Report shall be prepared that outlines the results of the mitigation program. The Community Development Director shall be responsible for ensuring that the paleontologist's recommendations regarding treatment and reporting are implemented.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant and unavoidable impacts related to geology, soils and seismicity.

Cumulative Impacts

Less than Significant with Mitigation. Individual projects under the General Plan are required to complete design-level geotechnical investigations and conform to current building codes, consistent with General Plan policies. Such measures would also apply to other projects planned throughout the City. Therefore, the General Plan EIR determined that planned infrastructure and development projects and their occupants would not be exposed to a cumulative impact related to geologic and seismic hazards.

As discussed above, the project would comply with General Plan Action 25.E which requires an erosion and deposition control plan for all new development. The project would also comply with Gilroy Municipal Code Chapter six which requires a grading permit prior to ground-disturbing activities and calls for protection of slopes and the use of erosion and sediment controls on construction sites as necessary to protect water quality. Furthermore, implementation of **GEO MM-1** would ensure that the project complies with standard engineering techniques and current California Building Code requirements. For these reasons, the project would not result in a cumulatively considerable contribution to a significant geology and soils impact.

3.8 Greenhouse Gas Emissions

This section evaluates impacts associated with GHG emissions that could occur as a result of the project. This evaluation is based on **Appendix B**, Air Quality Impact Assessment, prepared for the project by Trinity Consultants in October 2023.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding GHG emissions were received during the 30-day NOP circulation period.

3.8.1 Background Information

Gases that trap heat in the atmosphere are known as GHGs and regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential and is measured in units of CO_2 equivalents (CO_2e). The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO_2 and N_2O are byproducts of fossil fuel combustion.
- N_2O is associated with agricultural operations such as fertilization of crops.
- CH_4 is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and SF_6 emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

3.8.2 Regulatory Framework

Federal

The Federal Clean Air Act

In April 2007, the U.S. Supreme Court held that GHG emissions are pollutants within the meaning of the CAA. In reaching its decision, the Supreme Court also acknowledged that climate change results, in part, from anthropogenic causes (Massachusetts et al. v. Environmental Protection Agency 549 U.S. 497, 2007). The Supreme Court's ruling paved the way for the regulation of GHG emissions by the U.S. EPA under the CAA.

In response to this Supreme Court decision, on December 7, 2009, the U.S. EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- Endangerment Finding: That the current and projected concentrations of GHGs in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: That the combined emissions of GHGs from new motor vehicles and new motor vehicle engines contribute to GHG pollution, which threatens public health and welfare.

In 2009, the U.S. EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which requires reporting of GHG emissions from large sources and suppliers in the U.S. This rule requires the following entities to submit annual reports to the U.S. EPA:

- Suppliers of fossil fuels and industrial GHGs
- Manufacturers of vehicles and engines outside of the light-duty sector, and
- Facilities that emit more than 25,000 metric tons of carbon dioxide equivalent (CO_2e) per year

The rule is intended to collect accurate and timely emissions data to guide future policy decisions on climate change.

Historically, the U.S. EPA has mandated that Prevention of Significant Deterioration (PSD) and Title V requirements apply to facilities whose stationary-source CO_2e emissions exceed 100,000 tons per year. However, the Supreme Court decision in Utility Air Regulatory Group v. U.S. EPA, et al. (Supreme Court Case 12-1146) found that U.S. EPA does not have the authority to require PSD and Title V permitting for facilities based solely on GHG emissions. Additionally, the Supreme Court found that U.S. EPA can regulate GHG emissions from sources that are already subject to PSD and Title V requirements due to emissions of other pollutants.

State

Executive Order S-3-05

EO S-3-05 was signed by the Governor in 2005 proclaiming California is vulnerable to the impacts of climate change. It states that increased temperatures could reduce the Sierra Nevada's snowpack, worsen California's air quality problems, and potentially cause a rise in sea levels. The Executive Order establishes total GHG emission targets that require reducing GHG emissions to the 2000 level by 2010,

the 1990 level by 2020, and to 80% below the 1990 level by 2050. The 2050 reduction goal represents what scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be an aggressive, but achievable, midterm target.

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources. In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO_2e. Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 million metric tons of CO_2e.

Executive Order B-30-15.

The 2020 GHG emission reduction goal was achieved ahead of schedule leading to the issuance of EO B-30-15 in 2015 which establishes a GHG "reduction target of 40 percent below 1990 levels by 2030 – the most aggressive benchmark enacted by any government in North America to reduce dangerous carbon emissions over the next decade and a half" (State of California, 2015). EO B-30-15 was issued in support of the goals outlined in Executive Order S-3-05. The 2022 Scoping Plan, assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

2022 Scoping Plan

CARB adopted the initial Climate Change Scoping Plan (Scoping Plan) in 2008, which outlines actions recommended to obtain the AB 32 goals. The Scoping Plan called for an "ambitious but achievable" reduction in California's GHG emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. AB 32 requires that CARB update the scoping plan at least every five years. The first update to the Climate Change Scoping Plan was released on May 15, 2014, and built upon the initial Scoping Plan with new recommendations. Shortly after California met the 2020 GHG reduction target, the 2017 Scoping Plan was developed to identify new policies and actions to meet the 2030 GHG reduction goals (outlined in EO B-30-15), and to address international goals. The 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279. The actions and outcomes in the plan are intended to achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per-capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035. Consistent with the requirements of SB 375, the MTC partnered with the ABAG, BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2040. Plan Bay Area 2040 establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas.

Regional

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

BAAQMD CEQA GHG Guidelines

BAAQMD has adopted thresholds of significance to assist in the review of operational GHGs under CEQA. BAAQMD has not adopted a threshold for construction-period GHG emissions, as GHG emission impacts reflect the long-term and cumulative effect of GHG on a global scale, while construction-period emissions are intermittent and temporary. These thresholds are designed to establish the level at which GHG emissions would cause significant environmental impacts.

Construction-Related GHG Emissions

Because construction emissions are temporary and variable, the Air District has not developed a quantitative threshold of significance for construction-related GHG emissions. However, the lead agency should quantify and disclose GHG emissions that would occur during construction. In its *Discussion Draft Climate Change Advisory* document, OPR encourages lead agencies to quantify a project's construction (as well as its operational) GHG emissions, using available data and tools, to determine the amount, types, and sources of GHG emissions resulting from the project. Even though the significance of construction-related GHG emissions is not determined, in order to minimize GHG emissions and emissions of other air quality pollutants, projects should incorporate the best management practices for reducing GHG emissions listed in the 2022 BAAQMD CEQA Guidelines to reduce emissions from construction-related activities. These are repeated in **Table 3-10** below.

Table 3-10 BAAQMD Best Management Practices for Construction GHG Emissions

Use zero-emission and hybrid-powered equipment to the greatest extent possible, particularly if emissions are occurring near sensitive receptors.
Require all diesel-fueled off-road construction equipment be equipped with EPA Tier 4 Final compliant engines or better as a condition of contract.

Require all on-road heavy-duty trucks to be zero emissions or meet the most stringent emissions standard, such as model year (MY) 2024 to 2026, as a condition of contract.
Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 2 minutes (A 5-minute limit is required by the state airborne toxics control measure [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and develop an enforceable mechanism to monitor idling time to ensure compliance with this measure.
Prohibit off-road diesel-powered equipment from being in the “on” position for more than 10 hours per day.
Use California Air Resources Board–approved renewable diesel fuel in off-road construction equipment and onroad trucks.
Use U.S. Environmental Protection Agency SmartWay certified trucks for deliveries and equipment transport.
Require all construction equipment is maintained and properly tuned in accordance with manufacturer’s specifications. Equipment should be checked by a certified mechanic and determined to be running in proper condition prior to operation.
Where grid power is available, prohibit portable diesel engines and provide electrical hook ups for electric construction tools, such as saws, drills and compressors, and using electric tools whenever feasible.
Where grid power is not available, use alternative fuels, such as propane or solar electrical power, for generators at construction sites.
Encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking to construction workers and offer meal options onsite or shuttles to nearby meal destinations for construction employees.
Reduce electricity use in the construction office by using LED bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.
Minimize energy used during site preparation by deconstructing existing structures to the greatest extent feasible.
Recycle or salvage nonhazardous construction and demolition debris, with a goal of recycling at least 15% more by weight than the diversion requirement in Title 24.
Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials and based on volume for roadway, parking lot, sidewalk and curb materials). Wood products used should be certified through a sustainable forestry program.
Use low-carbon concrete, minimize the amount of concrete used and produce concrete on-site if it is more efficient and lower emitting than transporting ready-mix.
Develop a plan to efficiently use water for adequate dust control since substantial amounts of energy can be consumed during the pumping of water.
Include all requirements in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant on- or off-road construction equipment for use prior to any ground-disturbing and construction activities.

BBAQMD, 2022.

Operational GHG Emissions

The land use project threshold of significance developed by BAAQMD should be applied to all GHG emissions of a project that do not require an Air District permit. For example, where a project has GHG emissions associated with natural gas appliances or vehicle miles traveled (VMT), the land use threshold would apply. However, if the project has GHG emissions from sources permitted by the Air District, such as generators, boilers, or other relevant equipment, the GHG emissions from permitted sources would not be subject to the land use threshold of significance but instead would be subject to the stationary source threshold. Many projects will require the use of both land use and stationary source thresholds. Both thresholds are presented below:

Thresholds of Significance for Land Use Projects and/or Elements of Land Use projects not subject to an Air District Permit:

A. Projects must include, at a minimum, the following project design elements:

    1. Buildings

        a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development)

        b. The project will not result in any wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

    2. Transportation

        a. The project will achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target that reflects the recommendations provided in the Governor's Office of Planning and Research's *Technical Advisory: Evaluating Transportation Impacts in CEQA*:

            i. Residential projects: 15 percent below the existing VMT per capita

            ii. Office projects: 15 percent below the existing VMT per employee

            iii. Retail projects: no net increase in existing VMT

        b. The project will achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

OR

B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

As described further below, the City of Gilroy does not have a local GHG reduction strategy that meets the required criteria. Therefore, Threshold (A) is appropriate for non-permitted aspects of the project.

Threshold for Stationary Sources (Air Permit Required):

For a project to have a less-than-significant impact related to stationary source GHG emissions, it must fall below the bright-line threshold of producing 10,000 metric tons of carbon dioxide equivalent (MTCO2e) per year.

Local

Gilroy 2040 General Plan

The Mobility Element of the General Plan addresses the City's goals, policies, and implementing actions regarding GHG emissions. The following policies in the General Plan related to GHG emissions from automobile travel are relevant or applicable to the project:

> **M 1.7:** Reduce Vehicle Miles Traveled (VMT). Reduce VMT and GHG emissions by developing a transportation network that makes it convenient to use transit, ride a bicycle, walk, or use other non-automobile modes of transportation.
>
> **M 5.3:** Promote Non-Auto Modes of Transportation. Consider offering incentives as part of a multimodal system approach, for projects that incorporate travel demand management techniques and promote transit ridership, biking, and walking in order to reduce air pollution, energy consumption, and GHG emissions.
>
> **NCR 3.14**: Prepare a Qualified GHG Reduction Plan. Pursue funding through grants and any other appropriate funding mechanisms, including California Air Resources Board's list of programs and projects, California State Coastal Conservancy's Climate Ready Grant Program, Climate Corps, and CivicSpark. The plan may be prepared by amending the Gilroy 2040 General Plan or by preparing a separate GHG reduction plan. In either case, requirements for a qualified GHG reduction plan as identified in CEQA Guidelines, § 15183.5 (b)(1) must be met. Accordingly, definition and implementation of GHG reduction measures in addition to those identified in Gilroy 2040 General Plan policies and programs may be required to show progress towards meeting the reduction targets established in the GHG reduction plan.

At the time this EIR was prepared, the City did not have an adopted GHG emission reduction plan in place. Therefore, project impacts cannot be compared against a local GHG reduction plan as a threshold of significance, and BAAQMD thresholds are therefore used in this analysis.

3.8.3 Environmental Setting

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, GHG emissions have a broader, global impact. Global warming is a process whereby GHGs accumulating in the upper atmosphere contribute to an increase in the temperature of the earth and changes in weather patterns.

CARB is responsible for developing and maintaining the California GHG emissions inventory. This inventory estimates the amount of GHGs emitted into and removed from the atmosphere by human activities within the state of California and supports the Assembly Bill (AB) 32 Climate Change Program. CARB's current GHG emission inventory covers the years 2000 through 2020 and is based on fuel use, equipment activity, industrial processes, and other relevant data (e.g., housing, landfill activity, and agricultural lands).

The project site is undeveloped, totaling 56 acres. Given that there are no active uses on the project site, existing GHG emissions are negligible.

3.8.4 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, the project would result in a significant impact on the climate if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Discussion of No Impacts

The project would not result in any "no impact" determinations regarding GHG emissions.

Discussion of Less-than-Significant Impacts

The project would not result in any "less than significant" determinations regarding GHG emissions.

Discussion of Less-than-Significant Impacts with Mitigation

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

Construction and Operation

Less than Significant with Mitigation Incorporated. The project would result in GHG emissions from both construction (primarily from the operation of gas and diesel-powered construction equipment) and operation (from employee travel, building operation and maintenance, and testing of emergency generators). The Phase I BESS would discharge electricity and would not produce emissions, and therefore its construction or non-construction would not contribute to operational GHG emissions. Similarly, the Phase II BP facility is a non-emitting power source and therefore would not affect the conclusions of the greenhouse gas analysis. Although the Phase I BESS is an optional component of the project, the Air Quality Impact Assessment factored the construction of this facility into the analysis of construction-period GHG emissions.

Similar to criteria pollutant emissions, GHGs were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 based on inputs such as estimated worker trips per day, vendor trips per day, hauling trips per day, and the length of different construction phases such as grading and paving. For a full discussion of the methodology and inputs used to calculate construction emissions, refer to Section 4.2.1 of **Appendix B**. Based on these calculations, the project would generate approximately 1,930 Metric Tons (MT) of CO_2e during the construction period. The BAAQMD CEQA Guidelines don't establish a quantitative threshold for construction emissions, but do recommend incorporation of measures to minimize construction GHG emissions. **GHG MM-1** requires the project applicant to implement the BAAQMD-recommended measures. Therefore, impacts from construction emissions would be less than significant with mitigation.

Impact GHG-1: The project would generate construction-related GHG emissions.

Construction emissions are temporary and variable. The Air District has not developed a quantitative threshold of significance for construction-related GHG emissions. In order to minimize GHG emissions and emissions of other air quality pollutants, the applicant shall implement **GHG MM-1**, which includes the BMPs from the BAAQMD CEQA Guidelines (BAAQMD 2022). With implementation of **GHG MM-1**, this impact would be less than significant.

GHG MM-1: Best Management Practices for Construction-Related GHG Emissions

The applicant shall incorporate the following BMPs, to the extent feasible, to reduce project GHG emissions, as listed in Table 6-1 of BAAQMD CEQA Guidelines (BAAQMD 2022).

- Use zero-emission and hybrid-powered equipment to the greatest extent possible, particularly if emissions are occurring near sensitive receptors.
- Require all diesel-fueled off-road construction equipment be equipped with EPA Tier 4 Final compliant engines or better as a condition of contract.
- Require all on-road heavy-duty trucks to be zero emissions or meet the most stringent emissions standard, such as model year (MY) 2024 to 2026, as a condition of contract.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 2 minutes (A 5-minute limit is required by the state airborne toxics control measure [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and develop an enforceable mechanism to monitor idling time to ensure compliance with this measure. The developer shall prepare all site signage identified in the MMRP for review and approval by the Community Development Director prior to installation and prior to commencement of on-site site disturbance or construction activity.
- Prohibit off-road diesel-powered equipment from being in the “on” position for more than 10 hours per day.
- Use California Air Resources Board–approved renewable diesel fuel in off-road construction equipment and on-road trucks
- Use U.S. Environmental Protection Agency SmartWay certified trucks for deliveries and equipment transport.
- Require all construction equipment is maintained and properly tuned in accordance with manufacturer’s specifications. Equipment should be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Where grid power is available, prohibit portable diesel engines and provide electrical hook ups for electric construction tools, such as saws, drills and compressors, and using electric tools whenever feasible.
- Where grid power is not available, use alternative fuels, such as propane or solar electrical power, for generators at construction sites.

- Encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking to construction workers and offer meal options onsite or shuttles to nearby meal destinations for construction employees.
- Reduce electricity use in the construction office by using LED bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.
- Minimize energy used during site preparation by deconstructing existing structures to the greatest extent feasible.
- Recycle or salvage nonhazardous construction and demolition debris, with a goal of recycling at least 15% more by weight than the diversion requirement in Title 24.
- Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials and based on volume for roadway, parking lot, sidewalk, and curb materials). Wood products used should be certified through a sustainable forestry program.
- Use low-carbon concrete, minimize the amount of concrete used and produce concrete on-site if it is more efficient and lower emitting than transporting ready-mix.
- Develop a plan to efficiently use water for adequate dust control since substantial amounts of energy can be consumed during the pumping of water.
- Include all requirements in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant on- or off-road construction equipment for use prior to any ground-disturbing and construction activities.

Impact GHG-2: Potential to conflict with an applicable plan adopted for the purpose of reducing the emissions of greenhouse gases.

Project operation emissions were also calculated using CalEEMod version 2016.3.2, using inputs such as the type, number, and testing frequency of the emergency generators and conservative estimates for employee trip generation, as well as the use of consumer products, architectural coating such as interior painting, landscaping work, energy usage, solid waste disposal, and water usage. A full discussion of the methodology and inputs used to make these calculations is included in Section 4.2 of Appendix B.

The results of these calculations are summarized in **Table 3-11**, which compares project emissions to BAAQMD's thresholds of significance. As discussed in **Section 3.6, Energy**, the project would be required to use 100-percent carbon-free energy for data center operation and all other routine operational energy use as a condition of approval from the City. Operational GHG emissions would therefore primarily result from mobile sources (vehicle trips associated with the project), minor building operation and maintenance, and diesel generator exhaust from routine testing.

However, operation of the project would not meet BAAQMD's significance criteria related to VMT. As discussed in **Section 3.17, Transportation**, A VMT Analysis was prepared and is included as **Appendix K**. The VTA's VMT Evaluation Tool indicates that the existing citywide average VMT per job employee is currently 18.79. Therefore, the OPR recommended impact threshold of 15 percent below the existing

average VMT per job employee equates to 15.97 VMT per employee. This is reflected in the BAAQMD threshold of the project needing to achieve a VMT per employee (nonresidential projects) of at least 15 percent below existing development.

The results of the VMT evaluation indicate that at project buildout, the project would generate an average daily per employee VMT equal to 19.13, which would exceed the identified impact threshold of 15.97 VMT per employee. Therefore, the proposed project would result in an impact on the transportation system based on OPR's 15 percent below existing average VMT impact threshold. The project would need to implement VMT reduction measures to reduce employee VMT. Therefore, the project will incorporate **TRA MM-1** described in **Section 3.17, Transportation**.

It is anticipated implementation of **TRA MM-1** would achieve up to a 4 percent reduction in site employee commute VMT (CAPCOA, 2021). However, since the project would need to reduce its VMT by approximately 16.5 percent to meet the established significance threshold, an additional 12.5 percent reduction would be required for the impact to be less-than-significant.

CalEEMod was used to calculate the total emissions associated with project-related VMT. To provide a worst-case scenario, the anticipated 4 percent reduction in VMT anticipated from **TRA MM-1** was not applied. Assuming that 25 full-time employees would be required for the first 1.3 years of operation while Phase I is complete and Phase II is being constructed, and 50 full-time employees would be required for the remaining 28.66 years following completion of Phase II, it was calculated that project-related VMT would result in 3,922 MT CO_2e over the estimated 30 year lifespan.[11] **GHG MM-2** would reduce operational VMT impacts by requiring the purchase of offsets to address these emissions:

> **GHG MM-2: Purchase of Carbon Offsets**
>
> The project applicant shall purchase carbon offsets in an amount equal to 3,922 MT CO_2e, which represents estimated VMT-related CO_2e emissions for the life of the project. Such offsets shall be retired prior to the issuance of an occupancy permit for Phase I.
>
> The applicant shall demonstrate its reduction of VMT-related GHG emissions through the retirement of carbon offset credits provided that the following conditions are satisfied:
>
> - The applicant shall provide proof to the Community Development Director or his or her designee that the carbon offset credits were issued by a registry meeting the following requirements:
>   - The registry shall account for and quantify emission reductions using clear and defined standards and incorporating recognized principles of GHG emissions reduction accounting, including those set forth in the ISO 14064 and the WRI/WBCSD Greenhouse Gas Protocol for Project Accounting;
>   - The registry shall use clear information sufficient for reviewers to assess credibility of GHG emission reductions underlying the carbon offset credits. Upon request by the City's Community Development Director, or his or her designee, any governmental entity, or any stakeholder, the registry shall provide

[11] (3.16 avg daily VMT per employee) x (25 full-time employees) x (0.8462 MT CO_2e/yr-VMT-employee) x (1.33 years) + (3.16 VMT per employee) x (50 full-time employees) x (0.8462 MT CO_2e/yr-VMT-employee) x (28.67 years) = 3,922 MT CO_2e

the following information within a reasonable time period in connection with any carbon offset credit retired by the applicant: (i) the applicable quantification protocol; and (ii) all third-party confirmation or verification reports issued in connection with the carbon offset credits. Such information shall be sufficient to monitor compliance by the project applicant with this mitigation measure.

- The carbon offset credits retired by the applicant for the purpose of mitigating VMT-related GHG emissions shall represent GHG emission reductions that are real, permanent, additional, quantifiable, verifiable and enforceable.[12]
- To demonstrate compliance with the requirements listed above, the developer shall provide the following to the City's Community Development Director, or his or her designee: (i) the protocol used to quantify and issue such carbon offset credits, (ii) the third-party verification report(s) pursuant to which such carbon offset credits were issued, and (iii) the unique serial numbers of the carbon offset credits to be retired to ensure that the offset cannot be further used in any manner. The Community Development Director, or his or her designee, shall reject any carbon offset credits that do not comply with these requirements, and where reductions are not direct reductions within a confined project boundary or provide opportunities for reversal of the avoided emissions. The Community Development Director, or his or her designee shall reject any credits for a project that includes technology or GHG abatement practices that are already widely used.

Geographic Limitations: The carbon offset credits shall be from credit projects developed in the United States. Carbon offset credits resulting from international credit projects shall not be acceptable to satisfy this mitigation measure.

[12] The following terms in this mitigation are defined as follows: "Additional" means GHG emission reductions or removals underlying the carbon offset credits that exceed any GHG reduction or removals otherwise required by law, regulation or legally binding mandate, and that exceed any GHG reductions or removals that would otherwise occur in a business-as-usual scenario. To be additional, the credit shall have reduced GHG emissions below the applicable common industry practice for GHG reductions as in effect at the time the credit project was initiated. "Real" means that GHG reductions or GHG enhancements underlying the carbon offset credits result from a demonstrable action or set of actions, and are quantified using appropriate, accurate, and conservative methodologies that account for all GHG emissions sources, GHG sinks, and GHG reservoirs within the boundary of the applicable credit project and account for uncertainty and the potential for activity-shifting leakage and marketshifting leakage. "Verifiable" means that the GHG reductions or GHG enhancements underlying the carbon offset credits are well documented, transparent and set forth in a document subject to objective review by an accredited verification body. "Permanent" means that GHG reductions and GHG removal enhancements underlying the carbon offset credits are not reversible, or when GHG reductions and GHG removal enhancements may be reversible, that mechanisms are in place to replace any reversed GHG emission reductions and GHG removal enhancements to ensure that all credited reductions endure for at least 100 years. To ensure permanence, reductions from purchased credits must have already occurred. "Quantifiable" means the ability to accurately measure and calculate GHG reductions or GHG removal enhancements relative to a project baseline in a reliable and replicable manner for all GHG emission sources, GHG sinks, or GHG reservoirs included within the boundary of the credit project generating the carbon offset credits, while accounting for uncertainty and activity shifting leakage and market-shifting leakage. "Enforceable" means the authority for the City to hold the project accountable and to take appropriate action if the City determines that any carbon offset credits do not comply with the requirements set forth above.

Enforcement: The permits relating to the project shall be conditioned on achievement of GHG mitigation milestones. The purchase and retirement of carbon offset credits required to mitigate the GHG emissions resulting from the operation-related VMT shall be a condition of the issuance of a certificate of occupancy, temporary or permanent, for the project and as an issuance for continued operation. Should the City determine that the offset credits are non-compliant with the requirements of **GHG MM-2**, the City may issue a notice of non-consistency and cease permitting activities and/or stop project operations, until the City determines via an issued public notice that the offsets comply with the aforementioned standards.

Implementation of **GHG MM-2** would reduce the project's GHG emissions to a less than significant level by purchasing sufficient GHG credits to reduce project emissions to a less-than-significant level.

Table 3-11 Annual GHG Operational Emissions

Stationary Source	
Activity	**CO_2e (MT/year)**
Generator Operational Emissions	1,572
Significance Threshold	10,000
Significant Impact?	**No**
Land Use Project Operations (Non-Permitted)	
Mobile and Building Operational Emissions	1,087
Significance Threshold	Does the project exclude natural gas use?
Project compliance	Yes
Significance Threshold	Does the project result in any wasteful, inefficient, or unnecessary energy use?
Project compliance	No; see Section 3.6, Energy
Significance Threshold	Are VMT per capita (residential projects) or per employee (nonresidential projects) at least 15 percent below existing development or the lead agency's VMT targets pursuant to SB 743?
Project compliance	No; see section 3.17, Transportation – the project would result in a significant impact related to VMT.
Significant Impact?	**Yes**

Source: Trinity Consultants, 2023; Circlepoint, 2023

Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impact GHG-3: Potential to conflict with an applicable plan adopted for the purpose of reducing the

emissions of greenhouse gases.

Less Than Significant with Mitigation. The analysis of whether the project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs is closely related to the impact analysis in **Section 3.6, Energy**, because increasing renewable energy usage and improving building energy and fuel efficiencies are primary strategies for reducing GHG emissions. As discussed in that section, the project would use 100 percent carbon-free energy for routine data center operation and all other routine energy use on site. As of July 2023, the City has not adopted a Climate Action Plan for the purpose of reducing GHG emissions. Therefore, this analysis focuses on consistency with the City's General Plan, CARB 2022 Scoping Plan Update, and BAAQMD's 2017 Clean Air Plan.

Gilroy General Plan Consistency

As discussed in **Section 3.11, Land Use and Planning**, the project would be consistent with the existing General Plan land use designation and zoning for the project site. **Table 3-12** presents the project's consistency with applicable General Plan policies related to GHG emissions with implementation of **Mitigation Measure TRA MM-1**. As demonstrated in the table, the project would be consistent with the General Plan by planting a net increase of trees, implementing a TDM plan to minimize increases in VMT, installing pedestrian facilities to enhance pedestrian accessibility, and providing bicycle parking to encourage biking.

Table 3-12 Project Consistency with Applicable 2020 Gilroy General Plan Policies

Policy	Consistency Analysis
Policy M 1.7: Reduce Vehicle Miles Traveled. Reduce VMT and GHG emissions by developing a transportation network that makes it convenient to use transit, ride a bicycle, walk, or use other non-automobile modes of transportation.	**Consistent –** The project would result in a VMT impact at full build out. Mitigation would be applied to require the development and implementation of a TDM plan to reduce VMT associated with the project, however, this impact would remain. However, this General Plan Policy focuses on the development of a transportation network that encourages multimodal uses to reduce VMT. The project would have limited ability to influence or affect the public transportation network, but would include bicycle parking as discussed further below. Therefore, within the applicability of this policy to this project, the project is consistent.
Policy M 4.2. Transit and Development. Require new development to fully accommodate, enhance, and facilitate public transit, including pedestrian and bicycle access to transit.	**Consistent** – The project would add new pedestrian sidewalk facilities to connect to existing sidewalks on Camino Arroyo and Arroyo Circle, and would encourage biking by providing bicycle parking (6 short-term, and 6 long-term stalls). As part of the TDM measures discussed in **Section 3.17, Transportation**, the project would encourage transit ridership by subsidizing transit passes. Other TDM measures would include ride sharing, vanpools, guaranteed rides home, and a marketing program to promote the use of non-automobile transportation. The project's consistency with this policy would reduce GHG emissions by alternative modes of transit to automobiles.
Policy M 5.3: Promote Non-Auto Modes of Transportation. Consider offering incentives as part of a multimodal system approach, for projects that incorporate travel demand management techniques and promote transit ridership, biking, and walking in order to reduce air pollution, energy consumption, and GHG emissions.	

Policy	Consistency Analysis
Policy PFS 7.5 Street Trees. Strive to line the City's streets with trees so that they become enjoyable and beautiful spaces, creating a rich "urban forest" for the enjoyment of future generations. Tree species should be selected that will provide a canopy of shade and have root systems that will not cause sidewalk buckling and other damage, to the extent practicable.	**Consistent** – The project would remove a total of 18 trees but plant a total of 104 trees. Species would include camphor (*Cinnamomum camphora*), narrow-leaved ash (*Fraxinus angustifolia 'raywood'*), London plane tree (*platanus acerifolia*), fern pine (*podocarpus gracilior*), red oak (*quercus rubra*), and African sumac (*rhus lancea*). The project's consistency with this policy would reduce GHG emissions by cooling the site, thereby reducing energy use for air conditioning.
Policy PFS 6.4 Recycling. Reduce the volume of material sent to solid waste sites by maintaining recycling programs and encouraging the participation of all residents and businesses.	**Consistent** – As discussed in **Section 3.19, Utilities and Service Systems**, the project is required to divert at least 50 percent of debris from landfills during construction. Furthermore, during project operations, the project is required to reduce solid waste disposal consistent with state laws by participating in the City's recycling program. The project's consistency with this policy would reduce GHG emissions by diverting waste from the landfill.
Policy PFS 6.5 Source Reduction. Reduce the volume of disposed waste by encouraging efforts to decrease consumption; reduce material weight and volume; reuse products and materials; and increase the durability of products and materials.	**Consistent** – As discussed in **Section 3.19, Utilities and Service Systems**, the project is required to divert at least 50 percent of debris from landfills during construction. Furthermore, during project operations, the project is required to reduce solid waste disposal consistent with state laws by participating in the City's recycling program. The project's consistency with this policy would reduce GHG emissions by diverting waste from the landfill.

California Air Resources Board 2022 Scoping Plan Update Consistency

The project would not impede implementation of potential reduction strategies identified by CARB in the 2022 Scoping Plan Update (described in **Section 3.8.2**, above). The project would benefit from efforts by the state and utility providers to increase the portion of electricity provided by renewable resources, and from state efforts to increase vehicle fuel economy standards and reduce the carbon content of fuels. In fact, the project would use 100 percent carbon-free energy for routine data center operation and all other routine energy use on site. Furthermore, the proposed project would use energy-efficient appliances and equipment, as required by Title 24.

To demonstrate how a local jurisdiction can achieve its long-term GHG goals at the community level, the 2022 Scoping Plan Update recommends developing a geographically specific GHG reduction plan (i.e. climate action plan) consistent with CEQA Guidelines Section 15183.5(b), that demonstrates how future developments will be able to achieve carbon neutrality by 2045 or earlier. As explained at the beginning of this discussion, the City of Gilroy has not yet adopted a geographically specific reduction plan consistent with CEQA Section 151383.5(b).

Without a community wide GHG reduction plan in place that meets the current requirements of CEQA Section 15183.5(b), the City is following CARB's recommendation that "where further project design or regional investments are infeasible or not proved to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits." However, because the project would use 100 percent carbon free energy, credits would only be required for VMT-related GHG

emissions. Requirements for these credits are described in **GHG MM-2**. For the reasons described above, the project would be consistent with the 2022 Scoping Plan Update.

BAAQMD 2017 Clean Air Plan

A major goal of the 2017 Clean Air Plan is to eliminate the use of fossil fuels in buildings. To achieve this goal, the plan specifies the need to develop and deploy technologies for on-site energy storage and ensure the use of low-or zero-carbon electricity. While the project would use traditional diesel-powered emergency generators for the first phase of the project, emerging technologies would be used as a backup power supply for Phase II. Furthermore, the project would use 100 percent carbon-free energy for routine data center operation and all other routine energy use on site. By using 100 percent carbon-free energy and pioneering the use of clean energy alternatives to diesel for backup energy generation and storage, the project would be consistent with the 2017 Clean Air Plan.

Because the project would be consistent with the General Plan, CARB's 2022 Scoping Plan Update, and BAAQMD's 2017 Clean Air Plan, this impact would be less than significant, and no mitigation is required.

While the 2040 General Plan does not establish an implementation program to identify the time for or articulate specific reduction targets, it does contain several policies intended to reduce GHG emissions by reducing VMT. The most relevant policies for this project are as follows:

> **M 1.7: Reduce Vehicle Miles Traveled (VMT).** Reduce VMT and GHG emissions by developing a transportation network that makes it convenient to use transit, ride a bicycle, walk, or use other non-automobile modes of transportation.
>
> **M 5.3: Promote Non-Auto Modes of Transportation.** Consider offering incentives as part of a multimodal system approach, for projects that incorporate travel demand management techniques and promote transit ridership, biking, and walking in order to reduce air pollution, energy consumption, and GHG emissions.

Discussion of Significant and Unavoidable Impacts

The project would not result in any significant and unavoidable impacts related to GHG emissions.

Cumulative Impacts

Less than Significant Cumulative Impact. The General Plan EIR determined that the buildout of the General Plan would have a significant and unavoidable GHG impact for the interim period until the City adopts and implements a qualified GHG reduction plan. Upon adoption of a qualified GHG reduction plan, GHG emissions would be reduced to a less-than-significant level. The General Plan includes Mitigation Measures GHG-1 and GHG-2 that would ensure a qualified GHG reduction plan be prepared in a timely manner. Mitigation Measure GHG-1 set forth goals to prepare a qualified GHG reduction plan. Mitigation Measure GHG-2 requires the City to adopt a qualified GHG reduction plan within three years of the date the General Plan is adopted. Even with the implementation of mitigation measures, the project will incrementally contribute to cumulative global warming effects.

GHG impacts are cumulative by nature in that no single project is sufficient in size, by itself, to change the global average temperature. The project would not result in new or substantially worse impacts than those identified and analyzed under the General Plan EIR because the project would be consistent with

the existing General Plan land use designation. The project would also be subject to the same or stricter GHG regulations as those assumed in the General Plan. For these reasons, the project would not contribute to a new cumulative GHG impact.

3.9 Hazards and Hazardous Materials

This section evaluates impacts associated with potential hazards and hazardous materials that could occur as a result of the project. This discussion is based on **Appendix G**, Phase I Environmental Site Assessment and Phase II Environmental Site Assessment, prepared for the project by ERM in November 2019 and January 2020 respectively.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding hazards and hazardous materials were received during the 30-day NOP circulation period.

3.9.1 Regulatory Framework

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, and the Resource Conservation and Recovery Act (RCRA). In California, the U.S. EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal

Comprehensive Environmental Response, Compensation, and Liability Act

CERCLA, commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA accomplished the following objectives:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and

- Established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response;
- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life-threatening. These actions can be conducted only at sites listed on U.S. EPA's National Priorities List.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986 (USEPA, 2022b).

Resource Conservation and Recovery Act

The RCRA, enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. The RCRA gives U.S. EPA the authority to control hazardous waste from "cradle to grave" This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the U.S. EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program (USEPA, 2022a).

State

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB) (CalEPA, 2022).

California Accidental Release Prevention Program

The Gilroy Fire Prevention and Certified Unified Program Agencies (CUPA) aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CUPA Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Gilroy Fire Prevention Program reviews CUPA risk management plans as the CUPA. City codes covered by the CUPA include the Fire Code Hazardous Materials Requirements,

Hazardous Materials Storage Permit Requirements, and Industrial Wastewater Permit and Inspections for the South County Regional Wastewater Authority (Sanitary Sewer Plant).

Regional and Local

Gilroy 2040 General Plan

The Potential Hazards Element of the General Plan addresses the City's goals, policies, and implementing actions regarding hazards and hazardous materials. The following policies in the General Plan related to hazards and hazardous materials are applicable to the project:

> **PH 1.1.** Location of Future Development. Allow development only in those areas where potential danger to the health, safety, and welfare of residents can be adequately mitigated to an acceptable level of risk. This applies to development in areas subject to flood damage, fire damage, or geological hazard due to their location and/or design.
>
> **PH 1.3.** Development Review. Require appropriate studies as part of the development review process to assess potential hazards and assure that impacts are adequately mitigated.
>
> **PH 5.1.** Hazardous Materials and Waste Inspections. Provide inspections to ensure compliance with local, state, and federal regulations and to reduce the risks associated with the use, handling, and storage of hazardous materials and wastes.
>
> **PH 5.2.** Hazardous Waste Reduction. Minimize the potential hazards posed by the storage and transport of hazardous materials and waste by encouraging source reduction and waste minimization.
>
> **PH 5.6.** Hazardous Soils Conditions Cleanup. Evaluate new development sites for potential hazardous soils conditions. In cases where contamination is identified, require that all necessary mitigation measures are incorporated into the project to ensure there is no public health danger. Where appropriate, refer the project to the proper County or State agency for review.

3.9.2 Environmental Setting

Current and Historic Use of the Project Site

The project site is currently vacant but was previously used for agriculture and comprises tilled agricultural land. Two soil stockpiles are located on the northeast and southeastern portions of the project site. A former groundwater irrigation well is located on the northwest portion of the project site as well.

Historical maps indicate that the currently vacant project site had been in agricultural production since at least 1939 before it was designated for industrial uses 25 years ago. Prior to that date the topographic maps since 1917 show no development on the project site. A small structure on the northwest portion of the project site, located near the groundwater well, was visible in historical aerial photographs from 1939 to 1982. According to the site contact, the southern stock pile has been present at the project site since the mid-1980s. The origin of the southern stock pile is unknown. The northern stock pile was built up in two stages, the first possibly originating from commercial development of nearby properties in the early to mid-1980s. The second stage occurred approximately 18 months prior to ERM's site visit in

October 2019, when the site accepted approximately 70,000 cubic yards of soil from an underground parking garage in Palo Alto.

On-Site Contamination

The project site is included on the Cortese List as an Irrigated Lands Regulatory Program Site (Irrigated Lands Site);[13] there are no known, open cases of hazardous materials or spills on the project site (CalEPA, 2022).

Agricultural land uses have the potential to contain contaminated soil primarily due to the use of pesticides, fertilizers, and other chemicals used in farming. During the Phase II site analysis, 60 soil samples were collected on-site, including the stockpiles of soil, that were compiled into 15 laboratory samples. These samples were analyzed for pesticides and heavy metals. In addition, 20 percent of the samples (three locations) were analyzed for herbicides, organophosphorus pesticides, and perchlorate. The soil piles were also analyzed for petroleum hydrocarbons.

Heavy Metals

Arsenic, cobalt, and nickel were present in some samples in excess of their respective Environmental Screening Levels (ESLs). Antimony and mercury were present above their natural background concentrations, but below their respective ESLs.

Organochlorine Pesticides

Dichloroethane, dichlorodiphenyldichloroethylene, dichlorodiphenyltrichloroethane, and dieldrin were all detected on-site. Only dieldrin was above the soil leaching to groundwater ESL. All pesticides were below the commercial land use and construction worker ESLs.

Petroleum Hydrocarbons

Low levels of total petroleum hydrocarbon (TPH)-diesel and TPH-motor oil were detected in the soil piles. Both were found below the groundwater protection, commercial land use, and construction worker ESLs.

Other Contaminants

Herbicides, organophosphorous pesticides, and perchlorate were not detected on-site. ERM noted that no significant potential sources of polychlorinated biphenyls, lead-based paint, or asbestos-containing materials exist on-site.

Off-Site Contamination

ERM did not identify any significant sources of off-site contamination. Several neighboring sites are on the Cortese List. Adjacent sites included on the Cortese List are Irrigated Lands Sites. Adjacent Irrigated Lands Sites include fields south of the project site, along Gilman Road, owned by B&T Farms, Mission

[13] Under the Irrigated Lands Regulatory Program, the Central Coast Regional Water Quality Control Board regulates discharges from irrigated agricultural lands to protect surface water and groundwater using Order No. R3-2021-0040, General Waste Discharge Requirements for Discharges from Irrigated Lands (also known as the Agricultural Order), that applies to owners and operators of irrigated land used for commercial crop production (CCRWQCB 2023).

Ranches Company, and Thomas J. Obata Farms. Irrigated Lands Sites east of the project site include fields owned by C&F Farms, and B&T Farms.

Airports

The nearest public airport to the project site is the San Martin Airport, approximately 5 miles north of the project site. The project site is not located within the airport influence area or any of the safety zones for the San Martin Airport (Santa Clara County, 2006).

Wildfire

The project is not located in or near a state responsibility area or lands classified as very high fire hazard severity zones (FHSZs) (CAL FIRE, 2022b).

3.9.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, the project would have a significant impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Discussion of No Impacts

The project would have no impact on hazards and hazardous materials under the following thresholds:

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

No Impact. The nearest school to the project site is South Valley Middle School, approximately 0.30 miles west of the project site. There are no proposed schools within one-quarter mile of the project site.

The project would not have any impacts within one-quarter mile of an existing or proposed school, therefore, no impact would occur.

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

No Impact. The project site is not located within an airport land use plan and, therefore, would not result in a safety hazard for people residing or working in the project area (Santa Clara County, 2006). No impact would occur.

Discussion of Less-than-Significant Impacts

The project would result in less-than-significant impacts under the following thresholds:

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

Less than Significant. Operation of the backup generators for the Building 1 would include the use and storage of diesel fuel in aboveground tanks beneath each block of generators. The tanks would be double-walled and have leak detection systems. The diesel fueling procedures is designed to ensure spills and leaks are minimized and contained. In addition to diesel fuel for the Building 1 generators, some oils and lubricants could be stored on-site for maintenance of mechanical equipment in the equipment yards. Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the proposed fuel storage tanks.

The project potentially includes a BESS facility that would utilize existing battery technology (Phase I BESS) and a second facility that would utilize future battery or fuel cell technology (Phase II BP facility). Additionally, Buildings 1 and 2 would utilize lithium-ion battery modules; fires involving lithium-ion batteries are more difficult to put out due to their self-oxidizing properties.

The project would incorporate fire protection measures and would be subject to review and approval by the Gilroy Fire Department (GFD) prior to issuance of a building permit, and batteries would be disposed of in accordance with state and federal laws and regulations. Additionally, the proposed BESS and BP facilities would be located on the southern side of the building façade, where the prevailing northwest-to-southeast winds would blow fire and smoke particles away from developed areas.

Additionally, the generators for the Building 1 would store and use diesel exhaust fluid at each generator for reduction of emissions of oxides of nitrogen. Diesel exhaust fluid is a liquid used to reduce the amount of air pollution created by a diesel engine and is not a hazardous material.

Hazardous materials storage at the project would comply with local, state and federal regulations. A Hazardous Materials Business Plan would be completed for the safe storage and use of chemicals. Although the project would include the use of hazardous material, compliance with local, state, and federal regulation would ensure that there would be no significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, the impact would be less than significant.

Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Less than Significant. As discussed in **Section 3.9.2, Environmental Setting**, the project site is not located within a Very High Fire Hazard Severity Zone (VHFHSZ). The project vicinity is not particularly susceptible to wildfires, since the project site is relatively flat and surrounded by urban and agricultural development (see **Section 3.20, Wildfire**). Further, as described above, the project would include fire protection measures, and is oriented such that fire and smoke particles would be blown away from developed areas in the event of a fire. Therefore, the project would not create a significant risk of loss, injury, or death involving wildland fires and the impact would be less than significant.

Discussion of Less-than-Significant Impacts with Mitigation

The project would result in impacts that are less than significant with mitigation under the following thresholds:

Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Less than Significant with Mitigation. As discussed in **Section 3.9.2, Environmental Setting**, the soil on-site is known to be contaminated with heavy metals, organochlorine pesticides, and petroleum hydrocarbons. While most of the contaminants were found to be below their respective ESLs, there are levels of dieldrin that exceed the soil leaching to groundwater ESL. As discussed in **Section 3.10**, the project site is not within an important groundwater recharge zone and thus, the dieldrin on-site is not a significant hazard to public health through groundwater contamination. Nonetheless, construction workers could be exposed to contaminated soil during grading and construction activities which represents a potentially significant impact. With implementation of **HAZ MM-1**, the impact on construction workers would be reduced to a less-than-significant level.

Impact HAZ-1*: Construction workers could be exposed to contaminated soil during grading and construction activities.*

HAZ MM-1: Site Management Plan.

The applicant shall implement the following measures which would reduce potentially significant soil and or groundwater impacts to construction workers to a less than significant level:

- A Site Management Plan would be prepared to establish management practices for handling impacted groundwater and/or soil material that may be encountered during site development and soil-disturbing activities. Components of the SMP would include:
    - A detailed discussion of the site background;
    - Preparation of a Health and Safety Plan by an industrial hygienist;
    - Protocols for conducting earthwork activities in areas where impacted soil and/or groundwater are present or suspected;
    - Worker training requirements, health and safety measures and soil handing procedures shall be described;

- Protocols shall be prepared to characterize/profile soil suspected of being contaminated so that appropriate mitigation, disposal or reuse alternatives, if necessary, can be implemented;
- Notification procedures if previously undiscovered significantly impacted soil or groundwater is encountered during construction;
- Notification procedures if previously unidentified hazardous materials, hazardous waste, underground storage tanks are encountered during construction;
- On-site soil reuse guidelines;
- Sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility;
- Soil stockpiling protocols; and
- Protocols to manage groundwater that may be encountered during trenching and/or subsurface excavation activities.

- Prior to issuance of grading permits, a copy of the SMP must be approved by the Santa Clara County Department of Environmental Health, Gilroy Community Development Department, and the Gilroy Fire Department in its role as part of the City's Certified Unified Program Agency (CUPA).
- If contaminated soils are found in concentrations above risk-based thresholds pursuant to the terms of the SMP, remedial actions and/or mitigation measures would be taken to reduce concentrations of contaminants to levels deemed appropriate by the selected regulatory oversight agency for ongoing site uses. Any contaminated soils found in concentrations above thresholds to be determined in coordination with regulatory agencies shall be either (1) managed or treated in place, if deemed appropriate by the oversight agency or (2) removed and disposed of at an appropriate disposal facility according to California Hazardous Waste Regulations and applicable local, state, and federal laws.

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

Less than Significant with Mitigation. As discussed in **Section 3.9.2, Environmental Setting**, the project site is included on the Cortese List as an Irrigated Lands Site, but there are no known open cases of hazardous materials or spills on the project site. Potential impacts associated with the historic agricultural use of the project site would be addressed by the **HAZ MM-1,** described above. This measure would also account for any current soil contamination caused by the neighboring Irrigated Lands. Therefore, with incorporation of **HAZ MM-1**, this impact would be less than significant.

Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Less than Significant with Mitigation. The project would be constructed in accordance with current building and fire codes to ensure structural stability and safety in the event of a seismic or seismic-

related hazard. The orientation of the BESS and BP facilities, if constructed, would be such that prevailing northwest-to-southeast winds would blow fire and smoke particles away from developed areas. In addition, the GFD would review the site development plans to ensure fire protection design features are incorporated and adequate emergency access is provided. However, in order to ensure that the future BESS and BP facilities are designed to minimize potential fire hazards, HAZ MM-2 would be implemented. Therefore, the project will incorporate **HAZ MM-2** described below, to reduce the potential of fire hazards from BESS and BP facilities to a less than significant level.

Impact HAZ-2: BESS facilities could create fire hazards.

HAZ MM-2: Fire Safety

Prior to obtaining building permits for any BESS or BP facility, the project applicant shall include the following in its design, building permit application, and final plans for review and approval by the City of Gilroy:

- The BESS and BP facilities shall comply with applicable federal, state and local building codes and standards in effect at the time of the submittal of the building permit application including, but not limited to:
    - National Fire Protection Association (NFPA) 855
    - Institute of Electrical and Electronics Engineers (IEEE) 1547; and
    - Underwriters' Laboratories (UL) (9540, 9540A, 1741SA, 1973)
- A written description of the integrated fire and thermal runaway protection system for the BESS and BP facilities;
- Adequate emergency response equipment access through the security gates and internal roadways to the BESS and BP facilities; and
- Final location of fire hydrants within the facility near the BESS and BP facilities.

HAZ MM-2 would ensure that the final design of the BESS and BP facilities provide adequate fire protection engineering controls, maintenance procedures, and access. With implementation of the **HAZ MM-2**, the project would not impair implementation of or physically interfere with the City's Emergency Operations Plan. Therefore, the impact would be less than significant with mitigation.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant impacts related to hazards and hazardous materials.

Cumulative Impacts

Less than Significant Cumulative Impact. The geographic area for cumulative impacts related to hazards and hazardous materials includes the project site and surrounding area, as hazardous materials contamination is typically a localized issue. Although the project could expose construction workers to contaminated soil during grading and construction activities, the impact would be reduced to less than significant with the implementation of **HAZ MM-1**, Site Management Plan. The project would also be required to comply with local, state, and federal regulations, codes, and standards. For these reasons,

the project would not result in any hazards and hazardous materials impacts that would not contribute to cumulative hazards and hazardous materials impacts that would extend beyond the project site.

3.10 Hydrology and Water Quality

This section evaluates impacts associated with hydrological operations and water quality that could occur as a result of the project. This evaluation is based on **Appendix H**, Phase I Stormwater Control Plan, Hydrology, and Hydraulic Analysis Report, prepared for the project by Kimley Horn in March 2022.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR.

During the public comment period, a commenter recommended further discussion in the EIR concerning the following issues:

- Hydraulic analysis for the Conditional Letter of Map Revision-Fill.
- The project site's existing hydrology.
- The mitigatory measures that will be implemented to ensure that runoff under post-project conditions does not exceed pre-project conditions.
- Furthermore, the EIR should note that flood 'Zone AE' areas are subject to riverine flooding, stillwater flooding, or flooding due to ponding/poor drainage.
- Projected demands for groundwater and recycled water and potential groundwater impacts from any increased pumping.
- Potential impacts to groundwater quality resulting from the project, including those related to stormwater infiltration, or the use of recycled water for irrigation.

Each of the concerns and recommendations provided above are discussed and evaluated further under **Section 3.10.2, Environmental Setting**, and **Section 3.10.3, Impacts and Mitigation Measures**. A Stormwater Control Plan, Hydrology, and Hydraulic Report (Attachment M) was prepared by Kimley Horn in March 2022. The project's existing hydrology is discussed in **Section 3.10.2, Environmental Setting**. As discussed in **Section 3.10.3, Impacts and Mitigation Measures**, the project would comply with City's Stormwater Management Plan, Santa Clara Valley Habitat Plan requirements, and the Central Coast RWQCB's (CCRWQCB) stormwater requirements through measures such as treating run-off prior to entering the storm drainage system, in turn, minimizing project impacts to surface and groundwater quality. The project would implement **HYD MM-1** to reduce impact associated with locating in floodzone "AE".

3.10.1 Regulatory Framework

Federal

Federal Clean Water Act

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the U.S. EPA and the SWRCB have been developed to fulfill the requirements of this legislation. U.S. EPA regulations include the NPDES permit program, which controls sources that discharge pollutants into the waters of the United States

(e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of CCRWQCB.

National Flood Insurance Program

FEMA established the National Flood Insurance Program to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

State

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Sustainable Groundwater Act of 2014

This act provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention, if necessary, to protect the resource. The act requires the formation of local groundwater sustainability agencies that must assess conditions in their local water basins and adopt locally-based management plans. The act provides a 20-year timeframe for achievement of long-term groundwater sustainability. The Department of Water Resources (DWR) is currently taking the initial steps in developing implementation guidance.

Regional

Phase II Small MS4 General Permit

Gilroy, Morgan Hill, and the portion of the County that drains to the Pajaro River-Monterey Bay watershed, which includes the project site, are traditional permittees under the state's Phase II Small MS4 General Permit. Since these regions are located in RWQCB Region 3 (Central Coast Region), they are subject to the Central Coast Post-Construction Requirements per Provision E.12.k of the Phase II Permit. The Central Coast Post-Construction Requirements became effective in 2014 and are specific to the Central Coast Region. Post-construction controls are permanent features of a new development or redevelopment project designed to reduce pollutants in stormwater and/or erosive flows during the life of the project. Types of post-construction controls include LID site design, pollutant source control, stormwater treatment, and hydromodification management measures. The LID approach reduces stormwater runoff impacts by minimizing disturbed areas and impervious surfaces, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses) (City of Gilroy, City of Morgan Hill, and Santa Clara County, 2015).

Water Resources Protection Ordinance and District Well Ordinance

Valley Water operates as the flood control agency for the County. Their stewardship also includes creek restoration, pollution prevention efforts, and groundwater recharge. Permits for well construction and destruction work, most exploratory boring for groundwater exploration, and projects within Valley Water property or easements are required under Valley Water's Water Resources Protection Ordinance and District Well Ordinance.

Dam Safety

Since August 14, 1929, the State of California has regulated dams to prevent failure, safeguard life, and protect property. The California Water Code entrusts dam safety regulatory power to California Department of Water Resources, Division of Safety of Dams (DSOD). The DSOD provide oversight to the design, construction, and maintenance of over 1,200 jurisdictional sized dams in California (DWR, 2022). As part of its comprehensive dam safety program, Valley Water routinely monitors and studies the condition of each of its ten dams. Valley Water also has its own Emergency Operations Center and a response team that inspects dams after significant earthquakes. These regulatory inspection programs reduce the potential for dam failure.

Construction Dewatering Waste Discharge Requirements

Each of the RWQCBs regulate construction dewatering discharges, including domestic and industrial wastewater, to storm drains or surface waters within its Region under the NPDES program and Waste Discharge Requirements.

Valley Water Groundwater Management Plan

The Valley Water Groundwater Management Plan describes Valley Water's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management (Valley Water 2021b). The plan covers the Santa Clara and Llagas subbasins, located entirely in Santa Clara County and satisfies the objectives of the Sustainable Groundwater Management Act. The groundwater management plan includes groundwater supply management programs that replenish the groundwater basin, sustain the basin's water supplies, help to mitigate groundwater overdraft, and sustain storage reserves for use during dry periods. The plan also includes groundwater monitoring programs that provide data to assist Valley Water in evaluating and managing the groundwater basin.

Local

Gilroy 2040 General Plan

The Natural and Cultural Resources Element and the Potential Hazards Element of the General Plan address the City's goals, policies, and implementing actions regarding hydrology and water quality. The following policies in the General Plan have been adopted for the purpose of reducing or avoiding impacts related to hydrology and water quality and are applicable to the project:

> **NCR 4.3.** Drinking Water Quality. Ensure that City drinking water meets the required and recommended standard set forth by the State of California.
>
> **PH 1.1.** Location of Future Development. Allow development only in those areas where potential danger to the health, safety, and welfare of residents can be adequately mitigated to

an acceptable level of risk. This applies to development in areas subject to flood damage, fire damage, or geological hazard due to their location and/or design.

PH 1.3. Development Review. Require appropriate studies as part of the development review process to assess potential hazards and assure that impacts are adequately mitigated.

PH 3.2. Floodway Use. Discourage the construction of expensive flood prevention facilities by leaving high-risk floodways in agricultural and recreational uses.

PH 3.6. Permeable Surfaces for Runoff Reduction and Absorption. Require new development to include landscaped areas for reducing runoff and increasing runoff absorption capabilities and encourage the use of permeable paving materials.

Urban Water Management Plan

The City's 2020 Urban Water Management Plan, finalized in October 2021, addresses the requirements of the Urban Water Management Planning Act, as well as the Water Conservation Act of 2009, and includes the following elements: existing and future water demand projections, baseline and target gallon per day per capita water use factors, existing water supply facilities, groundwater basin condition, water demand management measures, and a water shortage contingency plan (City of Gilroy 2020a).

Water System Master Plan

The City's 2023 Water System Master Plan presents historical and projected water demands through 2040 General Plan buildout, identifies existing and future water system capacity deficiencies, recommends projects to correct these deficiencies, and identifies major water facilities for servicing future developments. These facilities include storage reservoirs and supply wells (City of Gilroy 2004b).

Storm Drainage System Master Plan

The City's 2023 Storm Drainage System Master Plan (Storm Water Master Plan) was prepared to recognize the importance of planning, developing, and financing storm drainage system facilities to provide reliable and enhanced service for existing customers and to serve anticipated growth (City of Gilroy 2004a).

3.10.2 Environmental Setting

Groundwater

The City relies on groundwater from the underlying Llagas Groundwater Basin. The basin consists of sedimentary material between the Santa Cruz Mountains on the west and the Diablo Range on the East. According to the City's 2020 Urban Water Management Plan, the City withdraws groundwater from underground aquifers through nine groundwater wells with an effective production capacity of approximately 15.5 million gallons per day (gpd). The project site is not within a designated groundwater recharge zone.

Hydrology and Drainage

The project site is located in the Uvas/Llagas watershed. The general topography of the project vicinity slopes southward and drains toward Miller Slough, a surface water body located approximately 900 feet

west of the project site, which is ultimately conveyed to Llagas Creek. The project site is currently utilized for agriculture and thus consists primarily of pervious surfaces.

Flooding

The project is located in Flood Zones X and AE. The northwestern corner and southern portion of the project site is located in Zone AE, while the rest is within Zone X. Flood Zone X is an area of moderate flood risk that denotes a 0.2 percent chance of flood hazards. Flood Zone AE is classified as a high-risk area within the 100-year floodplain.

Due to the location of the project site, approximately 18 miles east of the Pacific Ocean and approximately 36 miles southeast of the San Francisco Bay (the nearest waterbodies susceptible to tsunami and seiche, respectively), it would not be subject to tsunami or seiche hazards.

3.10.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, a hydrology and water quality impact is considered significant if the project would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    i. Result in substantial erosion or siltation on- or off-site;
    ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
    iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The City of Gilroy has also adopted its own CEQA thresholds. There would be a significant impact on hydrology and water quality if the project would:

- Place housing within a 100-year flood hazard area as mapped on Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures, which would impede or redirect flood flows; or

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

Discussion of No Impacts

The project would have no impact on hydrology and water quality under the following thresholds:

Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

No Impact. The project site is not located within a designated groundwater recharge zone, and therefore, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Implementation of the project would not conflict with the programs and policies as described in the Valley Water Groundwater Management Plan.

The project would be required to meet the standards specified in the City's Stormwater Management Guidance Manual for LID and Post Construction Requirements (Post Construction Requirements) (City of Gilroy, City of Morgan Hill, and Santa Clara County 2015) as well as demonstrate consistency with the City's Storm Water Master Plan. The project would meet the Post Construction Requirements and would be compliant with the Storm Water Master Plan through site design measures, including the implementation of a 201,000 square foot stormwater bioretention area in the southern and eastern portion of the project site, and site grading that will minimize water quality effects by conveying runoff to self-treating areas and limiting disturbance to natural drainage features. The implementation of the provisions of the Preliminary Storm Water Operation and Maintenance Plan (**Appendix L**) will ensure that site maintenance meets up-to-date conditions on the site consistent with the current storm water requirements.

The project would not conflict with or obstruct with the implementation of the Valley Water Groundwater Management Plan, the City's Storm Water Master Plan, or other relevant water-related plans. Therefore, no impact would occur.

Discussion of Less-than-Significant Impacts

The project would have less than significant impacts on hydrology and water quality under the following thresholds:

Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Construction and Operation

Less than Significant. Construction activities (e.g., grading and excavation) on the project site may result in temporary impacts to surface water quality. When disturbance to underlying soils occurs, the surface runoff that flows across the site may contain sediments that are ultimately discharged into the storm drainage system. The project would comply with the NPDES Construction General Permit to control the discharge of stormwater pollutants including sediments associated with construction activities to a less than significant level.

Development on-site would be required to comply with the City of Gilroy's Stormwater Management Plan, Santa Clara Valley Habitat Plan requirements, and the RWQCB's stormwater requirements, as applicable. Stormwater runoff from the proposed development would be required to drain into treatment areas prior to entering the storm drainage system consistent with the RWQCB's post-construction requirements. The project would include a 201,000 square foot bioretention stormwater treatment area along the eastern and southern boundaries of the project site. The project site would be graded to direct stormwater into the bioretention treatment area via multiple storm drain inlet and pipe networks throughout the project site. The treatment area would include perforated underdrains and overflow structures that would ultimately discharge into the public storm drain line in Arroyo Circle near the southern property boundary.

Treatment facilities would be numerically sized and would have sufficient capacity to treat the roof runoff prior to entering the storm drainage system consistent with the City's Stormwater Management Plan. The treatment facilities would also be properly maintained to prevent erosion and invasive plant species consistent with the Santa Clara Valley Habitat Plan requirements. For these reasons, the project's compliance with the City's Stormwater Management Plan, Santa Clara Valley Habitat Plan requirements, and CCRWQCB's requirements would reduce stormwater quality impacts postconstruction to a less than significant level.

The project would comply with the NPDES Construction General Permit, the City of Gilroy's Stormwater Management Plan, Santa Clara Valley Habitat Plan requirements, and the CCRWQCB's stormwater requirements. The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality; therefore, the impact is less than significant.

Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Less than significant. As noted in **Section 3.10.2, Existing Conditions**, the project site is not located within a designated groundwater recharge zone. The project is consistent with the land use designation of General Industrial assumed in the City's 2023 Water System Master Plan The project would add approximately 25 new acres of impervious surface area within the approximately 56-acre project site. Consistent with the RWQCB's stormwater requirements, the project would include a biofiltration treatment system to collect and absorb runoff from the project site which could result in some potential recharge of groundwater.

Although the project would increase impervious surface area within the project site, on-site soils have limited infiltration based on preliminary soil borings as described in the Geotechnical Engineering Report (see **Appendix F**). Additionally, the project would be consistent with the City's Water Master Plan and would not obstruct a designated groundwater recharge zone. Therefore, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, and the impact would be less than significant.

In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

Less than Significant. As noted in **Section 3.10.2**, Existing Conditions, the project site is not subject to tsunamis or seiches. The project would include raised floor elevations to reduce flooding potential

associated with the project's location within the AE Flood Zone. Therefore, the project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones, and the impact is less than significant.

Discussion of Less-than-Significant Impacts with Mitigation

The project would have less than significant impacts with mitigation under the following thresholds:

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site;

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Impact HYD-1: The project will require fill to raise the site above base flood elevation and could impede or redirect flood flows.

Less than Significant with Mitigation. The project would not result in the alteration of the course of a stream or river. The project would increase impervious surface area on-site by approximately 25 acres, or approximately 45 percent. The project would be required to meet the standards specified in the Post Construction Requirements as well as demonstrate consistency with the City's 2023 Storm Drainage System Master Plan. The project would meet the Post Construction Requirements and be compliant with the 2023 Storm Drainage System Master Plan through site design measures that would minimize runoff by conveying runoff to self-treating areas (stormwater catchment areas/biofiltration) and by limiting disturbances to natural drainage features.

The project would introduce a series of low points onsite to promote runoff conveyance on the relatively flat site. Runoff would be conveyed to a biofiltration system that would treat stormwater on-site. Additionally, the project would be required to submit a Stormwater Pollution Prevention Plan (SWPPP) to the State Water Resource Control Board prior to construction. The project would connect to the existing 72-inch stormwater drain south of the project site, which would have adequate capacity to accommodate the project. Therefore, the project would not substantially alter the existing drainage pattern of the site in a manner which would result in a substantial erosion or siltation, result in flooding, exceed the capacity of existing stormwater drainage systems, or provide substantial additional sources of polluted runoff.

As described previously, portions of the project site are within Flood Zone AE, which is within a 100-year flood hazard area, and subject to riverine flooding, stillwater flooding, or flooding due to ponding and/or poor drainage. The project will require fill to raise the site above base flood elevation. Roughly 210,000 cubic yards of fill would be imported to the site to raise the base elevation by approximately four feet (1.5 feet above the base flood elevation). As a result, site grading and construction would alter the characteristics of the existing floodplain and could impede or redirect flood flows, which could result in a significant impact. The following mitigation measure would be implemented to reduce potential

floodplain and flood flow impacts from the project to a less than significant level. Compliance with FEMA requirements to address flooding will ensure the project does not substantially increase runoff or result in flooding on- or off-site.

HYD MM-1: Conditional Letter of Map Revision - Fill Study.

Prior to issuance of a grading permit, a Conditional Letter of Map Revision-Fill (CLOMR-F) study shall be completed and submitted to FEMA for review and approval. After completing site grading or construction in the floodplain, a final LOMR-F study shall be completed and submitted to FEMA for review and approval to reflect the as-built conditions on the Flood Insurance Rate Map.

Discussion of Significant and Unavoidable Impacts

The project would not result in any significant and unavoidable impacts on hydrology and water quality.

Cumulative Impacts

Less than Significant Cumulative Impact. The General Plan EIR concluded that the proposed General Plan policies and implementation measures would ensure that impacts associated with stormwater and flooding would not be significant and that Gilroy's contribution to cumulative impact on stormwater and flooding would not be considerable.

All projects within the City are required to implement the same project conditions related to construction water quality, including preparation of a SWPPP if disturbance is greater than one acre. In addition, all cumulative projects would be required to meet NPDES Permit standards and comply with the City's 2023 Storm Drainage System Master Plan. Given that the project is consistent with the General Plan and would not result in any project-specific hydrology impacts, the project would not contribute to a new cumulative impact beyond what was identified in the General Plan.

3.11 Land Use and Planning

This section evaluates impacts associated with land use and land use planning that could occur as a result of the project.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding land use and planning were received during the 30-day NOP circulation period.

3.11.1 Regulatory Framework

Local

Gilroy 2040 General Plan

The Land Use Element and the Natural and Cultural Resources Element of the General Plan address the City's goals, policies, and implementing actions regarding land use. The follow General Plan policies related to land use are applicable to the project:

> **LU 1.5.** Uses East of U.S. 101 – Prohibit all residential uses on lands east of U.S. 101 and designate the area for industrial and agricultural uses, employment centers, compatible commercial development, and public and quasi-public facilities.
>
> **LU 5.1.** Industrial Design Standards – Ensure that new industrial developments contribute to the overall attractiveness of the community through appropriate site design, architectural design, and landscaping.
>
> **LU 5.3.** Screening in Industrial Areas – Encourage the screening of loading areas and open storage areas so that they are not visible from major roads.
>
> **NCR 1.1.** Habitat Plan Compliance – For all covered activities throughout the City, comply fully with permit conditions of the Santa Clara Valley Habitat Plan. This will protect natural resources by minimizing impacts on sensitive natural communities and 18 covered species, facilitating wildlife movement, and establishing stream setbacks and buffers. Associated permit fees will be used for reserve system preservation, habitat enhancement and restoration, and adaptive management and monitoring.

Gilroy City Code Chapter 30 Zoning Ordinance

The City's Zoning Ordinance is intended to promote and protect the public health, safety, peace, comfort, convenience and general welfare. It is adopted to (a) assist in providing a definite comprehensive plan for sound and orderly development, and to guide and regulate each development in accordance with the general plan and its objectives and standards; (b) protect and improve the established character and the social and economic stability of agricultural, residential, commercial, industrial and other areas of Gilroy; (c) provide light, air, privacy and convenience of access to property; and to promote safety from fire and other dangers; (d) prevent overcrowding of land and undue congestion of population; (e) regulate the location of buildings and the use of buildings and land so as to prevent undue interference with existing or prospective traffic movements on public thoroughfares; and

(f) prezone unincorporated territory adjoining the City for the purpose of determining the zoning that shall apply to such property in the event of subsequent annexation to the City.

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) is a conservation program intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of the southern portion of the County. As discussed in **Section 3.4, Biological Resources**, the project site is designated as Grain, Row-crop, Hay and Pasture, Disked / Short-term Fallowed land cover and is located in Fee Zone B (Agricultural and Valley Floor Lands).

3.11.2 Environmental Setting

General Plan and Zoning

The project site (APN 841-69-044) is located at the south end of Camino Arroyo. The project site is currently vacant but was previously utilized for agricultural purposes. It is now zoned M-2 General Industrial, which allows data processing establishments with an Architectural and Site Review permit and designated General Industrial under the General Plan. The purpose of this land use designation is to provide areas for heavy industrial uses. The project site is bound by Camino Arroyo to the north, agricultural uses to the south and east, and U.S. Highway 101 and commercial uses to the west.

Surrounding Land Uses

Development in the area generally consists of commercial, industrial, and agricultural land uses. Surrounding land uses include active agricultural lands to the east, active agricultural land and one-story commercial buildings to the south, and one-story commercial and industrial buildings to the west and north. The Gilroy Premium Outlets are located approximately 0.8 miles to the north and that the closest residences are located approximately 0.1 mile to the west, across U.S. 101.The General Plan land use designations and zoning of the surrounding area are summarized in **Table 3-13**

Table 3-13 Land Uses Surrounding the Project Site

Direction	General Plan Designation	Zoning District	Existing Use
North	General Industrial and General Services Commercial	C3 Shopping Center Commercial and M2 General Industrial	Commercial and industrial uses
South	General Industrial and Open Space	M2 General Industrial	Medical and open space
East	Open Space	M2 General Industrial	Open space and agricultural
West	General Industrial and General Services Commercial	C3 Shopping Center Commercial and M2 General Industrial	Commercial and industrial uses

Source: City of Gilroy, 2020

3.11.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, a land use impact is considered significant if the project would do any of the following:

- Physically divide an established community;
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan (i.e., Santa Clara Valley Habitat Plan) or natural community conservation plan.

Discussion of No Impacts

The project would have no impact on land use and planning under the following threshold:

Physically divide an established community

No Impact. A physical division of an established community typically refers to the construction of a physical feature (such as a freeway or railroad tracks) or the removal of a means of access (such as a local roadway or bridge) that would impair mobility within an existing community for between communities. The project proposes to redevelop the project site with a data center facility. The project does not propose physical structures or features that would impair mobility or divide an established community. Therefore, no impact would occur.

Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

No Impact. The project site is designated General Industrial under the City's General Plan. The purpose of this land use designation is to provide areas for heavy industrial uses. The project would be consistent with this designation. The proposed Floor Area Ratio (FAR) of the project would be 0.18, which is within the maximum allowed FAR of 2.0 specified in the General Plan for this land use. The project site is zoned M2-General Industrial under the City's Code. As described previously, data processing establishments are permitted in this designation with an Architectural and Site Review permit. The maximum permitted building height within this zone is 75 feet. The project would reach a maximum height of 45 feet, including parapets, and would be within the maximum allowed height for this land use. Noise generated by the project would not exceed restrictions in the City's Zoning Ordinance (see **Section 3.13, Noise**). The project, therefore, would not conflict with the City's Zoning Ordinance. The project would be consistent both the General Plan and Zoning designations and the project would be designed in accordance with the City of Gilroy's industrial design guidelines. The guidelines address design aspects including building setback and height, parking requirements, and landscaping. As a result, no impact would occur.

Conflict with any applicable habitat conservation plan (i.e., Santa Clara Valley Habitat Plan) or natural community conservation plan?

No Impact. As discussed in **Section 3.4, Biological Resources**, a Habitat Plan application would be submitted, and applicable fees would be paid by the project applicant prior to the issuance of a grading

permit. With the application and fee submittal approval, the project would comply with the Santa Clara Valley Habitat Plan. As a result, no impact would occur.

Discussion of Less-than-Significant Impacts

The project would not result in any less-than-significant impacts related to land use and planning.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not result in any impacts that would require mitigation related to land use and planning.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant impacts related to land use and planning.

Cumulative Impacts

Less than Significant Cumulative Impact. The General Plan EIR did not identify any significant land use impacts that required mitigation. As described under **Section 3.11.3, Impacts and Mitigation Measures**, the project site is designated General Industrial under the General Plan. The purpose of this land use designation is to provide areas for heavy industrial uses. The project would be consistent with this designation. Thus, the project would not alter existing land uses in the area, and would not result in new or substantial impacts regarding land use as those identified in the General Plan EIR. Given that the project is consistent with the land use and zoning designated under the General Plan, the project would not result in a cumulatively considerable contribution to a significant land use and planning impact.

3.12 Mineral Resources

This section evaluates impacts associated with mineral resources that could occur as a result of the project.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding mineral resources were received during the 30-day NOP circulation period.

3.12.1 Regulatory Framework

State

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated Mineral Resource Zones (MRZs) in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

3.12.2 Environmental Setting

Gilroy is located within the Monterey Bay Production-Consumption Region identified and monitored by the California Department of Conservation Division of Mines and Geology. Mineral resources in the vicinity of Gilroy include resources such as sand, clay, or gravel. significant mineral resources (specifically alluvial deposit) which can be found in the Uvas Creek vicinity in southwestern Gilroy and west of Gilroy. Uvas Creek is designated as Mineral Resource Zone MRZ-2, which is used for areas where adequate information indicates a high likelihood that significant mineral deposits are present. The Board considers mineral resources within the Mineral Resource Zone MRZ-2 (sand and gravel used to make concrete) as being of statewide importance.

The Uvas Creek area of Gilroy is the only area within the City of Gilroy that is designated by the State Mining and Geology Board as containing mineral deposits of regional significance. The project site is approximately 1.9 miles northeast of the Uvas Creek area.

3.12.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, impacts to mineral resource are considered significant if the project would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Discussion of No Impacts

The project would result in no impact to mineral resources under the following thresholds:

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

and

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

No Impact. Uvas Creek area is the only locally important mineral resource recovery site within the City of Gilroy per General Plan policy 23.06. The project site is not on or adjacent to Uvas Creek. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, no impact would occur.

Discussion of Less-than-Significant Impacts

The project would not result in any less than significant impacts on mineral resources.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not result in impacts that are less than significant with mitigation on mineral resources.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant and unavoidable impacts on mineral resources.

Cumulative Impacts

No Cumulative Impact. The General Plan EIR did not identify any impacts related to mineral resources because no identified mineral resource zones are located within the Urban Growth Boundary. The project site is not on or adjacent to Uvas Creek, the only locally important mineral resource recovery site within the City of Gilroy. Therefore, the project would not result in a cumulatively considerable contribution to a significant mineral resources impact. No Impact would occur.

3.13 Noise

This section evaluates impacts associated with noise and vibration that could occur as a result of the project. The following discussion is based on **Appendix I**, Noise and Vibration Assessment, prepared by Trinity Consultants for the project in November 2020, and subsequent Memoranda.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding noise were received during the 30-day NOP circulation period.

Background Information

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, Day-Night Levels (DNL), or CNEL.[14] These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

[14] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq}.

3.13.2 Regulatory Framework

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in **Table 3-14** below. These criteria are applied to development projects in jurisdictions that lack vibration impact standards.

Table 3-14 Groundborne Vibration Impact Criteria

Land Use Category	Groundborne Vibration Impact Levels (VdB inch/sec)		
	Frequent Event	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: Federal Transit Administration. 2018. Transit Noise and Vibration Assessment Manual.

State

California Green Building Standards Code

For commercial uses, CalGreen (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite STC rating of at least 50 or a composite Outdoor/Indoor Transmission Class (OITC) rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source. The state requires interior noise levels to be maintained at 50 dBA L_{eq} (1-hr) or less during hours of operation at a proposed commercial use.

Local

Gilroy 2040 General Plan

The following outdoor noise standards shown in **Table 3-15** are identified in the Potential Hazards Element of the General Plan as permissible for maximum outdoor day-night average noise levels.

Table 3-15 City of Gilroy Permissible Maximum Outdoor Levels

Land Use Category	Maximum Outdoor L_{dn} (dBA)
Residential [1]	60
Commercial	65
Industrial	76

Source: City of Gilroy. 2020. Gilroy 2040 General Plan.
L_{dn} = The Day/Night Average Sound Level. Day-night average sound level is the 24 hour A-weighted decibel equivalent sound level, with a 10 decibel penalty applied to nighttime levels.
[1] The outdoor sound levels for residential properties shall be held to 60 dBA L_{dn}, or a maximum of 70 dBA if ALL of the following findings can be made: That feasible sound attenuation measures have been incorporated in the project design; That potential noise levels are part of the developer's disclosure to future residents; That interior noise limits established by the General Plan are strictly maintained; and potential noise levels will not jeopardize the health, safety, and general welfare of the public.

Furthermore, the Potential Hazards Element of the General Plan addresses the City's goals, policies, and implementing actions regarding noise and vibration. The following General Plan policies related to noise are applicable to the project:

> **PH 6.2. Noise Standard Consistency** – Review development proposals to assure consistency with noise standards, using the Future Noise Contours map to determine if additional noise studies are needed for proposed development.
>
> **PH 6.5. Acoustical Design** – Consider the acoustical design of projects in the development review process to reduce noise to an acceptable level. Ensure that noise mitigation features are designed and implemented in an aesthetically pleasing and consistent manner.
>
> **PH 6.8. Incremental Noise Impacts of Commercial and Industrial Development** – Review of proposed new or expanding commercial and industrial development shall consider potential noise impacts on nearby residential uses and, as necessary, shall require noise mitigation measures as a condition of project approval.
>
> **PH 6.10. Construction Noise** – Require proposed development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on those uses, to the extent feasible.
>
> **PH 6.11. Construction and Maintenance Noise Limits** - Limit the hours of construction and maintenance activities to the less sensitive hours of the day (7:00am to 7:00pm Monday through Friday and 9:00 am to 7:00 pm on Saturdays). Construction hours that vary from these timeframes may be approved by the Building Official, in conformance with Hours of Construction of the Gilroy City Code.
>
> **PH 6.12.** Requires a vibration impact assessment for proposed development projects in which heavy-duty construction equipment would be used (e.g., pile driving, bulldozing) within 200 feet of an existing structure or sensitive receptor.

Gilroy Noise Ordinance

The City of Gilroy Zoning Ordinance performance standards contains quantitative noise limits for noise sources within the City of Gilroy based on the land use of the property receiving the noise. The noise ordinance establishes acceptable exterior noise levels and exemptions from the ordinance for special

activities, such as emergency work and refuse and recycling collection. Special noise limits are also established for certain noise-generating activities.

The City of Gilroy's zoning ordinance, performance standards, reads as follows:

> (b) Maximum Outdoor Noise Levels:
>
> (1) Residential Noise Impacting Residential Properties. Fixed-source outdoor mechanical equipment installed after July 1, 2007 (e.g., pool, spa, air conditioning or similar equipment) is limited to a maximum of sixty (60) dBA L_{dn} measured at the property line or seventy (70) dBA (L10) measured at the property line.
>
> (2) Commercial and Industrial Noise Impacting Residentially Zoned Properties. Noise emanating from properties that are zoned for uses other than residential is limited to a maximum of 70 dBA (L10) measured at the residential property line. Such noise is limited to the hours of 7:00 a.m. to 10:00 p.m., and prohibited between the hours of 10:00 p.m. and 7:00 a.m.

The following policies under Hours of Construction, of the Gilroy Noise Ordinance apply to the project:

- Unless otherwise provided for in a validly issued permit or approval, construction activities shall be limited to the hours of seven (7) a.m. and seven (7) p.m., Monday through Friday and nine (9) a.m. to seven (7) p.m. on Saturday. Construction activities shall not occur on Sundays or city holidays, which include: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas. "Construction activities" are defined as including but not limited to, excavation, grading, paving, demolitions, construction, alteration or repair of any building, site, street or highway, delivery or removal of construction material to a site, or movement of construction materials on a site.
- In the event the chief building official or his or her designee determines that the public health and safety will not be impaired by the construction activities between the hours of seven (7) p.m. and seven (7) a.m., and that loss or inconvenience would result to any party in interest, the chief building official may grant permission for such work to be done between the hours of seven (7) p.m. and seven (7) a.m. upon an application being made at the time the permit for the work is issued or during the progress of the work.
- No third person, including but not limited to, landowners, construction company owners, contractors, subcontractors, or employers, shall permit or allow any person working on construction activities, which are under their ownership, control or direction to violate this provision. The provisions prescribed herein may be enforced by the chief building official or his or her designee or the police department. Violation of this section shall be a misdemeanor and each day such violation is committed or permitted to continue constitutes a separate offense and shall be punishable as such.

3.13.3 Environmental Setting

A noise monitoring survey was performed within multiple locations of the proposed facility to quantify and characterize ambient noise levels at the project site and in the surrounding area. The survey included two long-term measurement locations and six short-term measurement locations, as shown in

Figure 3-5. Also as shown in **Figure 3-5**, the predominant sources of noise in the project vicinity included traffic on U.S. Highway 101 and nearby industrial and commercial facilities.

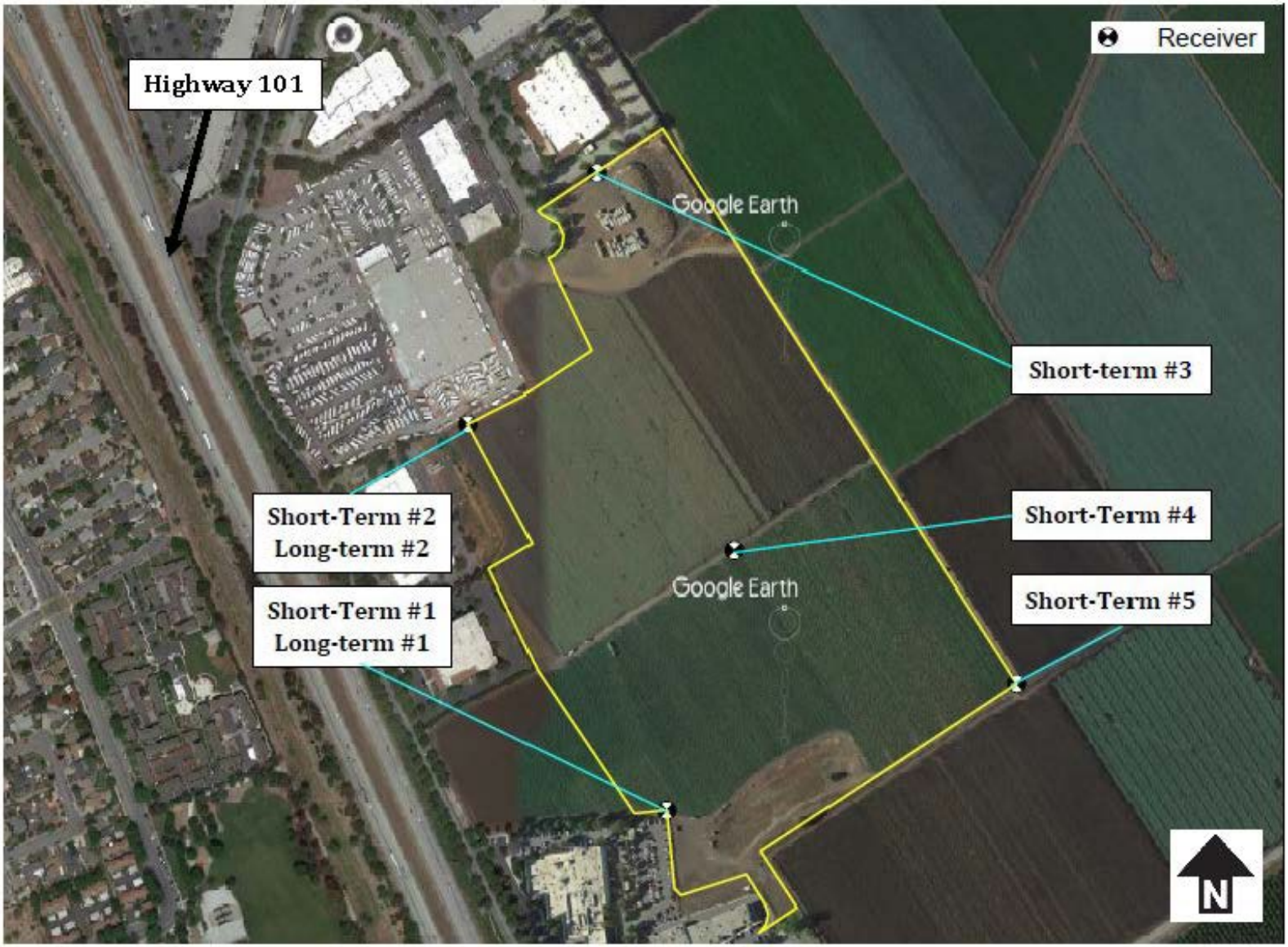
Long-term measurement location one, near the southwestern corner of the project site, had a L_{dn} ranging from 59 to 73 dBA. The short-term measurement at this location recorded L_{eq} values of 54 dBA for both daytime and nighttime. The L_{max} was also consistent across the daytime and nighttime measurements with values of 64 and 65 dBA, respectively. Long-term measurement location two, adjacent to the RV dealer at 7900 Arroyo Circle, had a L_{dn} ranging from 59 to 60 dBA. The short-term measurement at this location recorded L_{eq} levels at 54 and 56 dBA and L_{max} levels at 62 and 67 dBA for daytime and nighttime, respectively.

L_{eq} was measured at 50 and 53 dBA for daytime and nighttime levels, respectively, at location three (near the existing dead-end of Camino Arroyo). The L_{max} levels at this location were measured at 67 and 63 dBA for daytime and nighttime, respectively.

L_{eq} was measured at 52 and 54 dBA for daytime and nighttime levels, respectively, at location four (in the approximate center of the project site). The L_{max} levels at this location were measured at 62 and 71 dBA for daytime and nighttime, respectively. L_{eq} was measured at 50 and 49 dBA for daytime and nighttime levels, respectively, at location five (the southeastern corner of the project site). The L_{max} levels at this location were measured at 62 and 70 dBA for daytime and nighttime, respectively.

Sensitive Receptors

Receptors identified near the project site are shown in **Figure 3-6**. Receptors in this figure are labeled according to the type of land use, where “I” stands for “Industrial”, “C” stands for “Commercial”, and “R” stands for “Residential”. Of the receptors shown in **Figure 3-6**, only the residential uses are considered sensitive receptors for the purposes of CEQA. Industrial and commercial receptors are analyzed in this EIR for informational purposes. The residential receptors are all located between 1,300 and 1,700 feet west of the project site, separated by U.S. 101.



Ambient Noise Monitoring Locations Figure 3-5

Source: Trinity Consultants, 2020

Noise and Vibration Receptors Figure **3-6**

Source: Trinity Consultants, 2020

3.13.4 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, a noise and vibration impact is considered significant if the project would:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generate excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or 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, expose people residing or working in the project area to excessive noise levels.

Discussion of No Impacts

For a project located within the vicinity of a private airstrip or 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, expose people residing or working in the project area to excessive noise levels.

No Impact. The closest airport to the project is the San Martin Airport, located approximately 5 miles north of the project site in the village of San Martin. The project would thus be located well outside of the San Martin Airport's 55 CNEL noise contour. Therefore, the project would not expose people working in the project area to excessive noise levels.

Discussion of Less-Than-Significant Impacts

Result in generation of excessive groundborne vibration or groundborne noise levels.

Less Than Significant Impact. Construction activities would result in varying levels of ground vibration, depending on the equipment and methods used. The City of Gilroy does not specify a construction vibration limit. Therefore, a conservative threshold of 0.12 in/sec PPV for buildings extremely susceptible to vibration damage was used, based on FTA's Transit Noise and Vibration Impact Assessment Manual. Pile drivers are typically the most powerful source of vibration during construction (1.518 in/sec at 25 feet). To give a conservative construction vibration analysis, the level of vibration to be experienced by each potential receptor in the project vicinity was calculated during pile driving. Receptors considered as part of this analysis are shown in **Figure 3-6**. **Table 3-16** summarizes the estimated vibration levels that would be experienced by each of these receptors.[15]

[15] Although the Phase I BESS is an optional component of the project, the Noise and Vibration Assessment factored the construction of this facility into the analysis of construction noise.

Table 3-16 Pile Driver Vibration Impacts

Receptor	Approximate Separation Distance (feet)	Vibration Impact (in/sec)	Vibration Damage Threshold (in/sec)	Vibration Impact Below Damage Threshold?
R1	1400	0.0036	0.12	Yes
R2	1300	0.0040		Yes
R3	1700	0.0027		Yes
I1	850	0.0077		Yes
I2	650	0.0115		Yes
I3	520	0.0160		Yes
I4	520	0.0160		Yes
I5	520	0.0160		Yes
I6	590	0.0132		Yes
I7	820	0.0081		Yes
I8	1110	0.0051		Yes
C1	330	0.0317		Yes
C2	1200	0.0046		Yes
C3	1300	0.0040		Yes
C4	2600	0.0014		Yes
C5	1700	0.0027		Yes

Source: Appendix I: Environmental Noise and Vibration Assessment

As shown in **Table 3-16**, vibration impacts from pile driving would be below the conservative threshold for vibration damage for extremely fragile buildings at all receptors. Therefore, the project would not generate excessive groundborne vibration or noise levels. This impact would be less than significant.

Discussion of Less-than-Significant Impacts with Mitigation

The project would result in impacts that are less than significant with mitigation incorporated under the following thresholds:

Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Less than Significant with Mitigation. General Plan Policy 26.02 establishes maximum permissible outdoor and indoor noise levels at residential, commercial, and industrial uses, as discussed in **Section 3.13.2, Regulatory Framework**. The receptors in the project vicinity are shown and labeled in **Figure 3-6**.

Operational sources of noise would include exhaust fans, air handling units, roof-top condensing units, substation transformers, and backup generators. The Phase I BESS (if constructed) and Phase II BP facilities would use similar equipment in their operation, and thus the noise generated by these facilities would be comparable to the noise generated by these pieces of equipment. While most of the

equipment would operate 24 hours a day, the backup generators would only be tested during daytime hours. A conservative scenario assuming the continuous and simultaneous running of exhaust fans, air handling units, roof-top condensing units, substation transformers, and one generator operating continuously and simultaneously was modeled as part of the Noise and Vibration Assessment (**Appendix I**) and the results are shown in **Table 3-17.** Only one generator was modeled because, as discussed in **Section 2.5.4, Major Equipment**, only one generator would be operated at a time for routine testing activities.

Table 3-17 Normal and Maintenance Operation Sound Level Impacts

Receptor	Description	Operational Sound Impact Ldn (dBA)	Applicable Outdoor Noise Criteria Ldn (dBA)	Compliant with Noise Criteria?
R-1	Residential Detached Dwelling	57	60	Yes
R-2	Residential Detached Dwelling	58		Yes
R-3	Residential Detached Dwelling	56		Yes
I1	Renz & Renz Investment & Commercial Brokerage, Red Roots Baby Nutritional Care, Williams Dental Lab	60	76	Yes
I2	Kaiser Permanente Gilroy Medical Offices	61		Yes
I3	Specialty Truck Parts	65		Yes
I4	USA Sports Gilroy	65		Yes
I5	Gilroy Unified School District	64		Yes
I6	Ruggeri-Jensen-Azar	62		Yes
I7	Spectrum	61		Yes
I8	Morgan Hill Plastics Inc. of Gilroy	58		Yes
C1	See Grins RV Sales	64	65	Yes
C2	Multiple Retail Stores	58		Yes
C3		56		Yes
C4	Days Inn by Wyndham Gilroy	51		Yes
C5	Gilroy Healthcare and Rehabilitation Center	54		Yes

Source: Appendix I: Noise and Vibration Assessment

As shown in **Table 3-17**, operation of the project would not generate noise in excess of the applicable outdoor noise thresholds at the nearby receptors. Therefore, noise generated by the project's operation would be less than significant and no mitigation would be required.

During construction, the project would generate substantial increases in ambient noise levels through the use of pile driving, as discussed under **Impact NOI-1**.

Impact NOI-1: The project would generate a substantial increase in ambient noise levels during construction.

Project construction would occur in two phases. The Noise and Vibration Assessment (**Appendix I**) divided each phase into sub-scenarios of 1) demolition, site preparation, and grading; 2) concrete/foundation, structural/building exterior/roof; and 3) site work and paving, infrastructure construction. As documented in **Appendix I**, only the second sub-scenario (concrete/foundation, structural/building exterior/roof) was found to generate noise in excess of relevant thresholds (shown in **Table 3-15**), and only at specific receptors R1, R3 (located across US 101 from the project site) and C1 (located adjacent to the project site). The locations are shown in **Figure 3-6**.[16] Noise levels generated by the project at these locations for each phase of construction are shown in **Table 3-18**. At all other locations, including nearby uses such as the Gilroy Unified School district, sound levels during construction would be below the applicable outdoor noise threshold and are therefore not discussed further under this impact. For more information on project related noise levels during other sub-scenarios of construction and at other receptor locations not discussed here, refer to Section 7 of **Appendix I**.

Table 3-18 Noise Effects During Construction before Mitigation

Construction Phase	Receptor ID	Receptor Description	Sound Level Impact L_{dn} (dBA)	Applicable Outdoor Noise Criteria L_{dn} (dBA)	Compliance with Noise Criteria?
Phase I (Concrete/ Foundation and Structural/ Building Exterior/ Roof)	R1	Residential Detached Dwelling	60	60	No
	R3	Residential Detached Dwelling	61	60	No
	C1	See Grins RV Sales	71	65	No
Phase II (Concrete/ Foundation and Structural/ Building Exterior/ Roof)	R1	Residential Detached Dwelling	61	60	No
	C1	See Grins RV Sales	69	65	No

[16] While receptors R1 and R3 are located on the other side of U.S. Highway 101 from the project site, noise impacts would occur due to lower noise impact thresholds for residential land uses compared with commercial and industrial uses.

Source: Appendix I: Noise and Vibration Assessment

At each of the receptors shown in **Table 3-18**, the primary contributing factor to the noise exceedance would be the use of pile drivers. One of the following two mitigation options would be required to reduce construction noise impacts to a less-than-significant level.

NOI MM-1a: Construction Noise Barriers

To minimize noise during Phase I and Phase II pile driving activities, the project shall utilize construction noise barriers. Phase I shall require the use of two barriers, Barrier 1, which will be 330 feet in length and 10 feet in height, and Barrier 2, which will be 165 feet in length and 10 feet in height. Phase II construction shall include one noise Barrier which will be 560 feet in length and 13 feet in height. The locations of proposed noise barriers for the construction of Phase I and Phase II are shown in and **Figure 3-8**, respectively. **Table 3-19** below depicts noise level impacts with implementation of noise barriers.

Table 3-19 Noise Effects During Construction with Mitigation (Construction Noise Barriers)

Construction Phase	Receptor ID	Receptor Description	Applicable Outdoor Noise Criteria L_{dn} (dBA)	Sound Level Impact with Mitigation (dBA)	Compliance with Noise Criteria after Mitigation?
Phase I (Concrete/ Foundation and Structural/ Building Exterior/ Roof)	R1	Residential Detached Dwelling	60	58	Yes
	R3	Residential Detached Dwelling	60	59	Yes
	C1	See Grins RV Sales	65	64	Yes
Phase II (Concrete/ Foundation and Structural/ Building Exterior/ Roof)	R1	Residential Detached Dwelling	60	59	Yes
	C1	See Grins RV Sales	65	65	Yes

Source: Appendix I: Noise and Vibration Assessment

NOI MM-1b: Auger Cast Piles

As an alternative to the noise barriers described under **NOI MM-1a**, the applicant may use auger cast piles instead of pile driving. **Table 3-20** shows the resulting construction noise levels at receptors R1, R3, and C1 for Phase I and Phase II construction.

Table 3-20 Noise Effects During Construction with Mitigation (Auger Cast Piles)

Construction Phase	Receptor ID	Receptor Description	Applicable Outdoor Noise Criteria L_{dn} (dBA)	Sound Level Impact with Mitigation (dBA)	Compliance with Noise Criteria after Mitigation?
Phase I (Concrete/ Foundation and Structural/ Building Exterior/ Roof)	R1	Residential Detached Dwelling	60	49	Yes
	R3	Residential Detached Dwelling	60	52	Yes
	C1	See Grins RV Sales	65	62	Yes
Phase II (Concrete/ Foundation and Structural/ Building Exterior/ Roof)	R1	Residential Detached Dwelling	60	56	Yes
	C1	See Grins RV Sales	65	64	Yes

Source: Appendix I: Noise and Vibration Assessment

As demonstrated in **Table 3-19** and **Table 3-20**, implementation of either **NOI MM-1a** or **NOI MM-1b** would reduce construction noise impacts to a less-than-significant level.

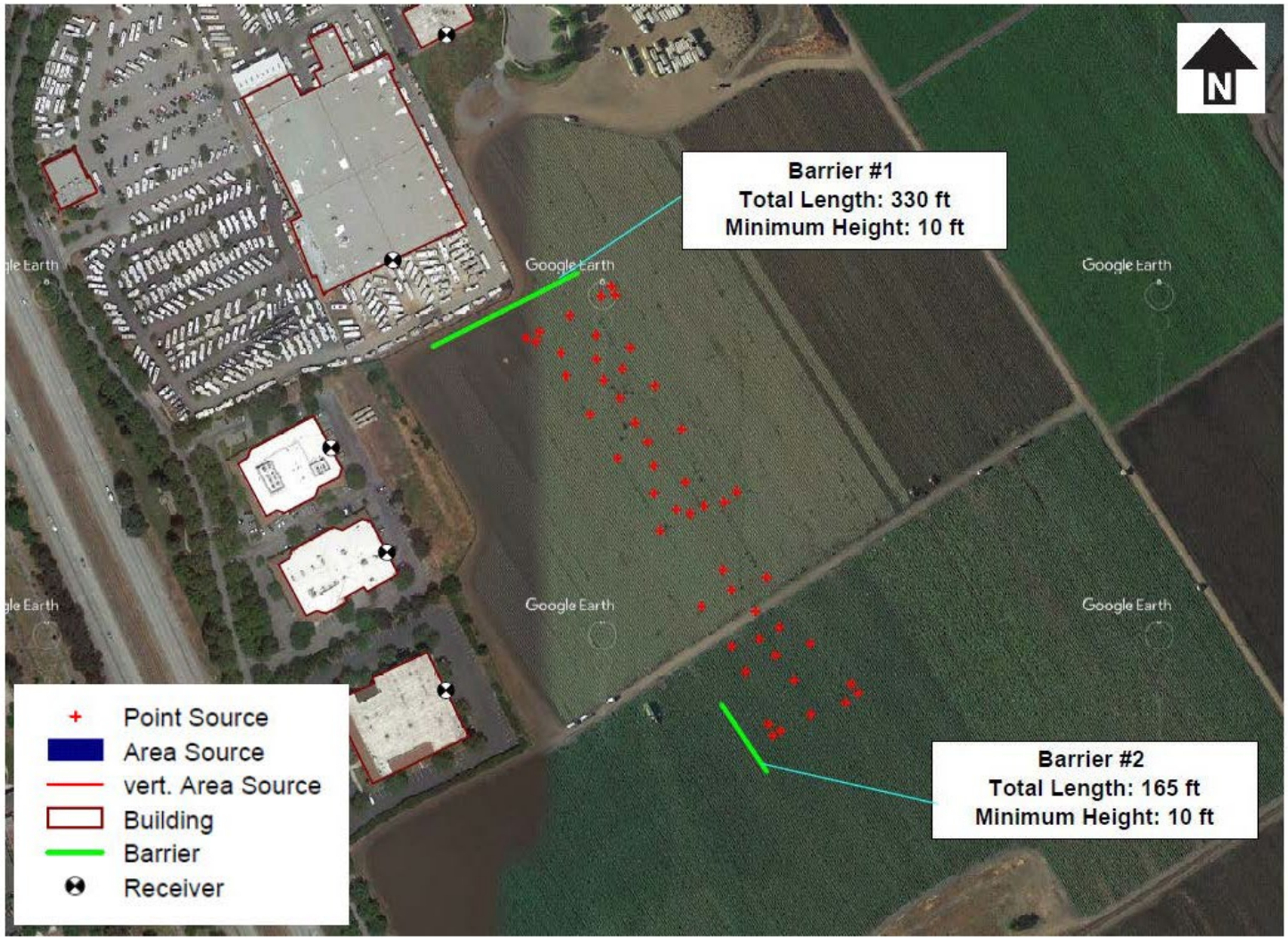
Discussion of Significant and Unavoidable Impacts

The project would not result in any significant and unavoidable impacts related to noise.

Cumulative Impacts

Less Than Significant Cumulative Impact. The General Plan EIR evaluated the impacts of all planned development in the City through the year 2040. The General Plan EIR determined that with implementation of General Plan policies listed in **Section 3.13.2, Regulatory Framework**, planned growth would not result in significant noise and vibration effects on sensitive receivers, including noise and vibration from new stationary sources, construction, and traffic. As noted above, construction noise impact would be less than significant with the inclusion of noise barriers during pile driving activities. Normal and maintenance operation of the project would not generate noise in excess of the applicable outdoor noise thresholds at the nearby receptors. Therefore, the project would not result in a cumulatively considerable contribution to cumulatively significant noise impact.

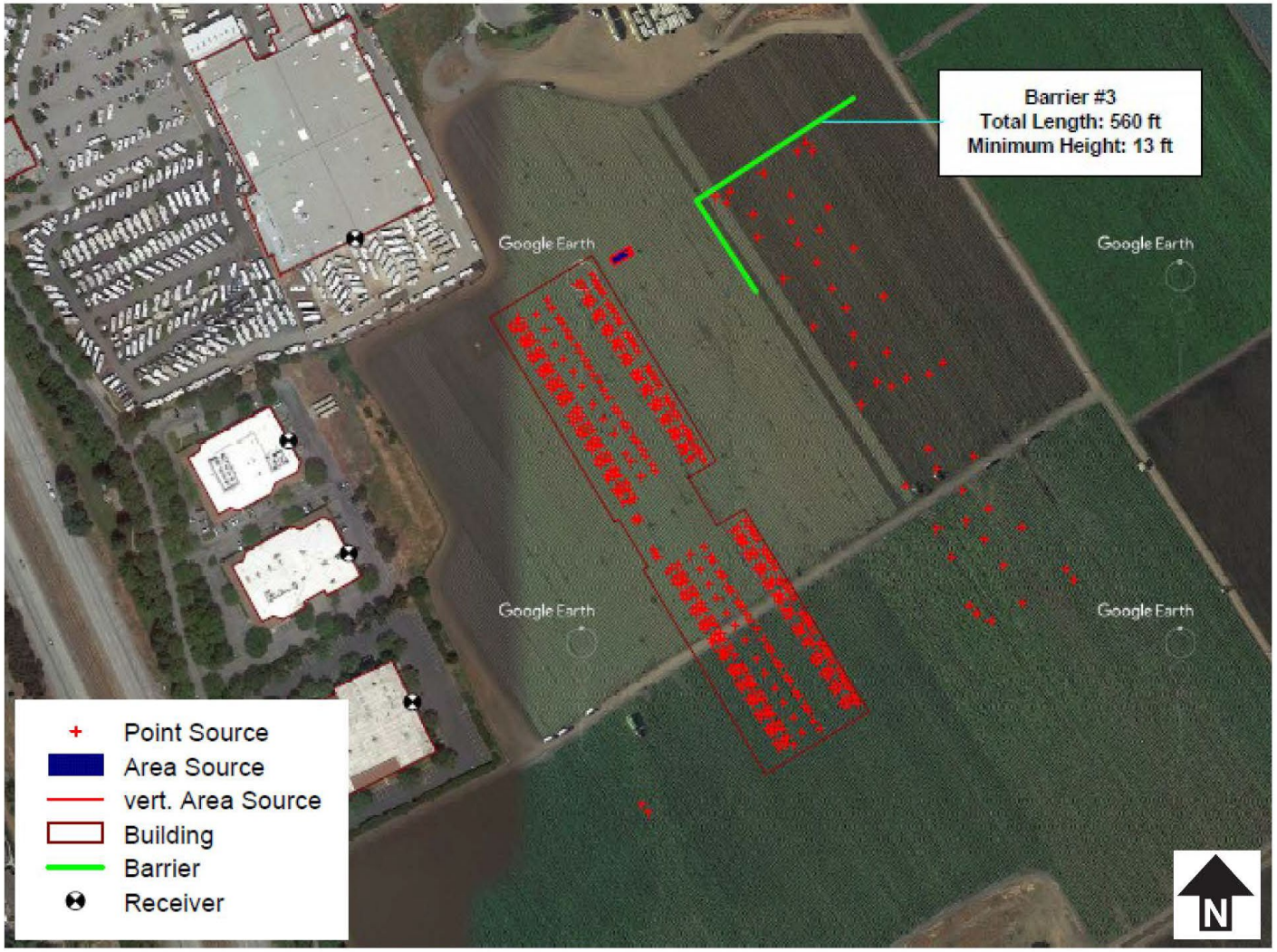
Figure 3-7 Noise Barrier Locations (Construction Phase I)



Proposed Noise Barriers (Construction Phase I) Figure 3-7

Source: Trinity Consultants, 2020

Figure 3-8 Noise Barrier Locations (Construction Phase II)



Proposed Noise Barriers (Construction Phase II) Figure **3-8**

Source: Trinity Consultants, 2020

3.14 Population and Housing

This section evaluates impacts related to population and housing that could occur because of the project.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding population and housing were received during the 30-day circulation period.

3.14.1 Regulatory Framework

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the State mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis (ABAG 2020). The City of Gilroy 2023-2031 Housing Element and related land use policies were adopted by the City of Gilroy City Council on May 1, 2023 and certified by the California Department of Housing and Community Development on August 21, 2023.

Regional

Plan Bay Area 2050

Plan Bay Area 2050 is a long-range transportation, land-use, and housing plan intended support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2050 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas.

ABAG allocates regional housing needs to each city and county within the nine-county San Francisco Bay Area, based on statewide goals. ABAG also develops forecasts for population, households, and economic activity in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Regional Forecast of Jobs, Population, and Housing, which is an integrated land use and transportation plan through the year 2050 upon which Plan Bay Area 2050 is based.

Local

Gilroy 2040 General Plan

The Housing Element of the General Plan addresses the City's goals, policies, and implementing actions regarding population and housing. The following policies in the General Plan related to population and housing are applicable to the project:

> **LU 1.3 Phased Commercial Growth.** Encourage new commercial and industrial development to locate in the following areas ordered by priority, assuming available land supply:
>
> - Land within the Urban Service Area;
> - Land outside the Urban Service Area, if a proposed project is too large or properties within the Urban Service Area are unable to accommodate the proposed development and following approval of a General Plan Amendment (if necessary) and a successful Urban Service Area amendment.

3.14.2 Environmental Setting

According to the U.S. Census Bureau data, the City had a population of approximately 58,101 as of July 2021 (United States Census Bureau, 2022). ABAG predicts that Gilroy will have a grow at a rate of 0.44 percent average annual growth rate to about 70,735 residents by 2040.

The job/housing ratio quantifies the relationship between the number of housing units required as a result of local jobs and the number of residential units available in the City. When the ratio reaches 1.0, a balance is struck between the supply of local housing and local jobs. The jobs/housing ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing. The City currently has more residents than jobs with a jobs/housing balance ratio of 1.06. ABAG estimates that there will be a total of 21,434 new jobs in the City by 2040.

Existing land uses are often used as the basis growth projections within cities and regions. Growth projections include predictions of future population, employees, and housing units over time. Construction of large employment centers can induce population growth by enticing new employees to move from other locales. Population growth can also be induced through the creation of large housing developments. In either case, rapid growth can disturb the jobs-housing balance of a city to create an imbalance and produce environmental impacts by increasing demand for services and infrastructure.

The City's growth is planned for through the General Plan, and through the Plan Bay Area 2050, a long-range regional plan that identifies land-use strategies to enable more economically sustainable growth and development.

3.14.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, a population and housing impact is considered significant if the project would:

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

- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Discussion of No Impacts

The project would have no impact to population and housing under the following threshold:

Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

No Impact. The existing project site does not contain any residences and, therefore, the project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, no impact would occur.

Discussion of Less-than-Significant Impacts

The project would result in a less than significant impact under the following threshold:

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

Less than Significant. The project would replace the existing agricultural land on the site with two data center buildings, Phase I BESS and Phase II BP facilities, a security building, on-site substation and switchyard, 27 backup generators, and associated access roads, utilities, and landscaping. Total buildout of Buildings 1 and 2 would require a total of approximately 50 full-time employees. The project would be a relatively low employment-generating land use; therefore, approval of the project would not substantially increase jobs in the City. The project would not induce substantial population growth in the City or substantially alter the City's job/housing ratio and would, therefore, result in a less than significant population and housing impacts**.** Furthermore, as a permitted use that would be consistent with the General Plan-designated land use (General Industrial) any growth associated with the project is accounted for in the General Plan. Therefore, the impact would be less than significant.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not result in impacts that are less than significant with mitigation on population and housing.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant and unavoidable impacts on population and housing.

Cumulative Impacts

Less than Significant Cumulative Impacts. According to the General Plan EIR, buildout of the 2040 Gilroy General plan would result in 6,477 additional housing units and would generate 21,434 new jobs. Operational employment of the project is anticipated to grow up to 50 full-time employees. As stated, this would be a relatively low employment-generating land use and would not induce substantial population growth in the City, and would be consistent with the policies outlined in the 2040 General Plan to accommodate population and economic growth. Therefore, the project would not have a

cumulatively considerable contribution to a significant cumulative unplanned population growth in the area. The impact would be less than significant.

3.15 Public Services

This section evaluates impacts to public services that could occur because of the project.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding public services were received during the 30-day NOP circulation period.

3.15.1 Regulatory Framework

State

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Local

Gilroy 2040 General Plan

The Public Facilities and Services Element and the Land Use Element of the General Plan addresses the City's goals, policies, and implementing actions regarding public utilities and service systems. The follow General Plan policies related to utilities and service systems are applicable to the project:

> **PFS 1.10.** Facility and Service Funding – Ensure that new development bears the cost for incremental public facilities and services costs it generates.
>
> **PFS 1.11.** Development Impact Feeds – Require applicants for new development to pay Development Impacts Fees for traffic circulation, water, wastewater, storm water, and public facilities to offset the costs of expanding these as detailed by the impact fee nexus study.
>
> **PFS 9.2.** Standards of Service – Provide and maintain police services that are adequate in staffing, equipment, and resources to respond to emergencies and calls for service as the City continues to grow. Measurable standards of level of service shall be established by the City Council in the biennial budget and be aligned with National Best Practices. City staff shall annually report on actual performance compared against the established standards.
>
> **PFS 9.3.** Development Review – Include the Police Department in the review of development proposals to ensure that crime and safety issues are consistently addressed in the review of new

development. Such review shall promote the implementation of Crime Prevention through Environmental Design principles.

PFS 10.1. Standards of Service – Provide and maintain fire services that are adequate in staffing, equipment, and resources to respond to emergencies and calls for service as the City continues to grow. Measurable standards of levels of service shall be established by the City Council in the biennial budget and be aligned with National Best Practices. City staff shall annually report on actual performance compared against the established standards.

PFS 10.3. Development Review – Under the direction and authority of the Fire Chief, the Fire Marshall shall review development proposals to ensure that projects adequately address fire access and building standards.

PFS 10.5. New Development – Continue to require that new development provides all necessary water service, fire hydrants, and roads consistent with Fire Department standards.

PFS 10.6. Sprinklers – Continue to require installation of sprinklers in all new buildings in accordance with the California Fire Code.

PFS 10.8. Fire Access Design and Building Materials – Require all new development to include use of fire-resistant landscaping and building materials and adequate access for fire equipment.

PFS 11.4. School Impact Fees – Continue to collect new development fees as established by the GUSD, in accordance with State law.

3.15.2 Environmental Setting

Fire Protection Services

Fire protection services for the project site are provided by the Gilroy Fire Department (GFD). The GFD responds to all fires, hazardous materials spills, and medical emergencies (including injury accidents) in the City. The GFD has three fire stations. Three fire engines are staffed on a daily basis, one at each Station. All engines are staffed with three person companies. Each station is staffed with at least one certified firefighter/paramedic for each apparatus that provides Advanced Life Support. The closest station to the project site is the Las Animas Station located at 8383 Wren Avenue, approximately 1.9 miles west of the project site, as disclosed in the General Plan EIR.

The GFD employs 41 authorized full-time staff members. Staff members include: one fire chief, three division chiefs, nine fire captains, nine fire engineers, 16 firefighters/paramedics, one management analyst, one management assistant, and one admin captain. The GFD has a daily staffing of 10-12 personnel, and has an average first-due emergency response time standard of 7:30 minutes, 90 percent of the time.

Police Protection Services

Police protection services for the project site are provided by the Gilroy Police Department (GPD), which is headquartered at 7301 Hanna Street, approximately 2.3 miles southwest of the project site. The GDP has 104 staff which consists of 65 sworn officers and 40 professional staff. Staff are deployed in the following areas of the department: Administration, Anti-Crime Team, Communications 911, Crime Analysis, Detectives, Records, and the Traffic Unit.

The General Plan identifies a service goal of 4.5 minutes or less for all calls (City of Gilroy Police Department, 2022).

Schools

The project site is located in the Gilroy Unified School District (GUSD). The school district operates 16 schools (seven elementary, three middle schools, five high schools, one preschool, and adult education program) serving over 11,000 students (GUSD, 2022). The nearest schools to the project site are Eliot School, located at 475 Old Gilroy Street (approximately 1.6 miles south of the project site), South Valley Middle School, located at 385 Loof Avenue (approximately 1.4 miles southwest of the project site), and Mt. Madonna High School, located at 8750 Hirasaki Court (approximately 2.5 miles west of the project site).

3.15.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, a public services and facilities impact is considered significant if the project would:

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    i. Fire protection
    ii. Police protection
    iii. Schools
    iv. Parks
    v. Other public facilities

Discussion of No Impacts

The project would have no impact on the following public services under the threshold discussed in Significant Criteria of **Section 3.15.3, Impacts and Mitigation Measures**, above:

Schools

No Impact. Projects with the potential to increase demand for schools are commonly residential projects, which directly increase students in a school district, or large employment uses that are likely to attract new residents to the school district thereby indirectly increasing the number of students. The project proposes to construct a data center facility which would not include a residential use, and would therefore not generate students. The project would not be a major employer and would therefore not attract new residents to Gilroy. The project, therefore, would not require new or expanded school facilities, the construction of which could cause environmental impacts and no impact would occur.

Discussion of Less-than-Significant Impacts

The project would have less than significant on the following public services under the threshold discussed in Significant Criteria of **Section 3.15.3, Impacts and Mitigation Measures** above:

Fire protection

Less than Significant. The project site is currently served by the GFD. The project may result in an increase in the need for fire services associated with increased building area and the BESS and BP facilities, but would not require the construction of new facilities or stations. The project would be constructed in conformance with current building and fire codes, and the GFD would review project plans to ensure appropriate safety features are incorporated to reduce fire hazards. The potential incremental increase in fire protection services would not require new or expanded fire protection facilities (the construction of which could cause significant environmental impacts) in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services. Therefore, this impact would be less than significant.

Police protection

Less than Significant. The project site is currently served by the Gilroy Police Department (GDP). The project may result in an incremental increase in the need for police services associated with increased building area but would not require the construction of new facilities or stations. The GPD would review the final site design, including proposed landscaping, access, and lighting, to ensure that the project provides adequate safety and security measures. The potential incremental increase in police protection services would not require new or expanded police protection facilities (the construction of which could cause significant environmental impacts) in order to maintain acceptable service rations, response times or other performance objectives for police protection services. Therefore, this impact would be less than significant.

Parks

Less than Significant. The project would not generate substantial population growth in the project area or result in the use of public facilities in the area by new residents. Some employees at the project site may visit local parks; however, this use would not create the need for any new facilities or adversely impact the physical condition of existing facilities. Therefore, this impact would be less than significant.

Other public facilities

Less than Significant. The project would not generate substantial population growth in the project area or result in the use of public facilities in the area by new residents. Some employees at the project site may visit other local public facilities such as libraries or community centers; however, this would not create the need for any new facilities or adversely impact the physical condition of existing facilities. Therefore, this impact would be less than significant.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not result in impacts that are less than significant with mitigation on public services.

Discussion of Significant Impacts

The project would not result in significant impacts on public services.

Cumulative Impacts

Less than Significant. The General Plan EIR found that, with adherence to all relevant regulations and General Plan policies, there would be no significant impacts related to public services. The project would not generate substantial population growth in the project area or result in the use of public facilities in the area by new residents that new facilities such as parks and other public facilities are needed. Although the project could result in an increase in the need of fire services or police services, these increases would not require new or expanded fire or police protection facilities. The project would not result in cumulatively considerable contribution to public service impacts. Therefore, cumulative impacts on public services are less than significant.

3.16 Recreation

This section evaluates impacts to the City's parks and recreational resources that could occur because of the project.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding recreation and recreational facilities were received during the 30-day NOP circulation period.

3.16.1 Regulatory Framework

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Regional

Countywide Trails Master Plan

The Santa Clara County Trails Master Plan Update is a regional trails plan approved by the Santa Clara County Board of Supervisors. It provides a framework for implementing the County's vision of providing a contiguous trail network that connects cities to one another, cities to the County's regional open space resources, County parks to other County parks, and the northern and southern urbanized regions of the County. The plan identifies regional trail routes, sub-regional trail routes, connector trail routes, and historic trails (Santa Clara County, 1995).

Local

Gilroy 2040 General Plan

The Parks and Recreation Element of the General Plan addresses the City's goals, policies, and implementing actions regarding recreational facilities. The following General Plan policies related to recreation are applicable to the project:

> **PR 1.4.** Park Land Standard – Maintain the City's established standard of five acres of developed park land per thousand population.
>
> - This standard includes neighborhood/school parks, community and community/school parks, sports parks, trails/linear parkways, and special use facilities.
> - Park preserves and limited active recreation use areas are valued at five percent of their total acreage toward meeting this standard.

- Golf courses, non-accessible open space, and private recreational facilities are not included in this standard. School lands are not included unless there is a long-term lease agreement for their use as City recreational facilities.

PR 1.9. Public Connections – Encourage new developments to include visible, public connections to parks, trails, and recreation facilities when such public access would improve the connections for current and future users.

3.16.2 Environmental Setting

According the General Plan, the City owns and maintains 17 parks, one open space preserve, one tot lot, six community centers, and four recreation facilities. The City's Recreation Department is responsible for development, operation, and maintenance of City park facilities. The nearest public park to the project site is San Ysidro Park, located at 7700 Murray Avenue, approximately 1.5 miles southwest of the project site, across the U.S. Highway 101. San Ysidro Park includes basketball and handball courts, a jogging path, a playground, and picnic areas.

The nearest recreational facility to the project site is the Gilroy Youth Center, located at 227 Ioof Avenue, approximately one mile south of the project site.

3.16.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, impacts to recreational resources are considered significant if the project would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Discussion of No Impacts

The project would not result in no impact determinations regarding recreation.

Discussion of Less-than-Significant Impacts

The project would have less than significant impacts on recreation under the following thresholds:

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

Less than Significant. The project at full buildout would employ 50 full time employees. While the project would result in an increase of jobs within the City, the increase would be minimal and would not lead to a substantial increase in employment. Some data center employees may use nearby parks and recreational facilities during breaks or before/after shifts; however, this would not have an impact on these facilities such that adverse physical effects would result. For these reasons, the impact would be less than significant.

Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Less than Significant. The project would not include recreational facilities. Some data center employees may use nearby parks and recreational facilities; however, this would not require the construction or expansion of recreational facilities. Therefore, the impact would be less than significant.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not result in any impacts considered to be less than significant with mitigation regarding recreation.

Discussion of Significant Impacts

The project would not result in any significant impacts regarding recreation.

Cumulative Impacts

Less than Significant Cumulative Impact. The General Plan EIR found that, with adherence to all relevant General Plan goals, policies, and implementation program, there would be a less than significant impact related to the provision of new parks and recreational facilities. The project at full buildout would employee 50 full time employees. While the project would result in an increase in employment and potential use of nearby parks and recreational facilities, the increase is minimal and would not require the construction or expansion of recreational facilities. The project would not contribute to cumulatively considerable impacts on recreation or recreational facilities. Therefore, the impact is less than significant.

3.17 Transportation

This section evaluates impacts related to vehicle miles travelled (VMT) and other transportation resources that could occur as a result of the project. This evaluation is based on **Appendix K**, VMT Assessment, prepared for the project by Hexagon Transportation Consultants, Inc. dated June 22, 2023.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. Comments pertaining to VMT and transportation demand management (TDM) were received from Caltrans and the Gilroy Bicycle and Pedestrian Advisory Committee. The Gilroy Bicycle and Pedestrian Advisory Committee made recommendations for the TDM program for the project, including installing electric car charging stations and providing updated bike maps to employees/contractors. Comments from Caltrans emphasized conducting VMT analysis pursuant to City guidelines and analysis of any potential impacts to Caltrans right-of-way (ROW). Proposed TDM measures are incorporated in **TRA MM-1** and discussed in **Section 3.17.3, Impacts and Mitigation Measures**.

3.17.1 Regulatory Framework

State

Regional Transportation Plan

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including the County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and the Association of Bay Area Governments (ABAG) adopted Plan Bay Area 2050 in October 2021, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2050 (MTC and ABAG, 2021).

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a VMT metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires the replacement of automobile delay—described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion—with VMT as the recommended metric for determining the significance of transportation impacts. The Governor's Office of Planning and Research (OPR) approved the CEQA Guidelines implementing SB 743 on December 28, 2018. Local jurisdictions are required to implement a VMT policy by July 1, 2020.

The City of Gilroy relies on VMT analysis methodology and impact thresholds recommended in the OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR 2018). While OPR emphasizes that a lead agency has the discretionary authority to establish thresholds of significance, the Technical Advisory suggests criteria that indicate when a project may have a significant, or less than significant, transportation impact on the environment. As stated in the technical advisory, for office projects, OPR recommends an impact threshold of 15% below the existing regional VMT per employee.

Regional

Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion (VTA, 2017). The relevant state legislation requires that urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic LOS standards, transit service standards, a trip reduction and transportation demand management (TDM) plan, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that are expected to affect CMP designated intersections.

Local

Gilroy 2040 General Plan

The Mobility Element provides the framework for decisions in Gilroy concerning the citywide transportation system. It is intended to support and encourage walking, bicycling, and transit ridership. The goals and policies address a variety of topics, including multimodal transportation, complete streets, pedestrian facilities, bikeways, public transit, vehicular transportation, parking, and goods movement. The Mobility Element is drafted to be consistent with State mandates regarding complete streets.

The following General Plan policies related to transportation are applicable to the project:

> **M 1.7. Reduce Vehicle Miles Traveled** – Reduce VMT and GHG emissions by developing a transportation network that makes it convenient to use transit, ride a bicycle, walk, or use other non-automobile modes of transportation.
>
> **M 1.12. Transportation Demand Management** – Encourage existing and proposed development to incorporate TDM measures such as carsharing, transit passes, and unbundling of parking (requiring separate purchase or lease of a parking space) where such measures will result in a reduction in vehicle miles travelled, reduction of required amount of parking or an increase in the use of alternate transportation modes.
>
> **M 3.2. New Development** – Require new development to include a system of sidewalks, trails, and bikeways that link all land uses, provide accessibility to parks and schools, and connect to all existing or planned external street and trail facilities in accordance with the Mobility Diagrams.
>
> **M 3.9. Bicycle Parking** – Require adequate short- and long-term bicycle parking for all land uses except for single-family residential uses.
>
> **M 4.2. Transit and Development** – Require new development to fully accommodate, enhance, and facilitate public transit, including pedestrian and bicycle access to transit.
>
> **M 5.3. Promote Non-Auto Modes of Transportation** – Consider offering incentives as part of a multimodal system approach, for projects that incorporate travel demand management techniques and promote transit ridership, biking, and walking in order to reduce air pollution, energy consumption, and GHG emissions.
>
> **M 5.12. Minimum Parking Standards** – Consider eliminating or reducing minimum parking standards for private vehicles in transit-oriented developments, mixed-use developments and

developments in high density areas over time, while increasing parking for shared vehicles, alternative energy vehicles, bicycles, and other alternative modes of transportation.

3.17.2 Environmental Setting

Regional and Local VMT

Currently, the City of Gilroy has limited employment land uses, which results in longer commute trips as a large number of Gilroy residents are required to travel outside of Gilroy for employment. This is reflected in the average VMT per employee for the City of Gilroy (18.79 VMT per employee), compared to the regional VMT (15.33) and the Countywide VMT (16.64) per employee, as reported by the VTA's VMT Evaluation Tool.

Regional and Local Roadway Access

The existing roadway network providing regional and local access to the project site is described in below.

U.S. Highway 101 is a six-lane freeway north of the Monterey Road interchange and transitions to a four-lane freeway south of that point. U.S. 101 extends northward through San Jose and southward into Salinas. This freeway serves as the primary roadway connection between Gilroy and Morgan Hill and other communities in the County, to the north and between Gilroy and Salinas to the south. Regional access to the project site is provided via the U.S. 101 interchanges at Leavesley Road and Tenth Street/SR 152.

SR 152 (Pacheco Pass Highway) is a two- to four-lane east-west highway that extends to the east starting at the U.S. 101 interchange at Tenth Street, where it is known as Pacheco Pass Highway, over the Pacheco Pass to Interstate 5 and through Los Banos. West of Gilroy, SR 152 is known has Hecker Pass Highway and extends westward from the U.S. 101 interchange at Leavesley Road via Monterey Road and First Street over the Santa Cruz Mountains to Watsonville and Highway 1.

Tenth Street is a two- to six-lane arterial roadway that begins at Uvas Park Drive and extends eastward to U.S. 101, where it changes designation to Pacheco Pass Highway (SR 152). Tenth Street is one of six freeway crossings within Gilroy and it is proposed to be extended from its current terminus point at Uvas Parkway westward over Llagas Creek to Connect to Santa Teresa Boulevard at the current Miller Avenue/ Santa Teresa Boulevard intersection.

Leavesley Road is a six-lane, east-west arterial roadway that extends from Monterey Road to the west (after which it becomes Wellburn Avenue), and the eastern foothills to the east (where it turns south and becomes Ferguson Road). Leavesley Road is one of six freeway crossings within Gilroy.

Camino Arroyo is a four-lane, north-south arterial roadway that extends from Arroyo Circle, just north of Sixth Street/Gilman Road, to Venture Way, south of Pacheco Pass Highway. Arroyo Circle extends northward to Leavesley Road along the east side of U.S. 101, and in conjunction with Camino Arroyo, provides a north/south connection between Leavesley Road and Pacheco Pass Highway. The project site is located between the two termini of Camino Arroyo, which abut the northern and southern borders of the project site.

Existing Transit Service

Transit service in the area includes local bus service provided by the VTA.

Bus Service

VTA Local Bus Routes 84 and 85 provide bus service in the project vicinity. VTA Local Bus Route 84 provides weekday and weekend service between the Gilroy Transit Center and Saint Louise Regional Hospital via Tenth Street, Camino Arroyo, and San Ysidro Avenue with approximately 60-minute headways during commute hours. VTA Local Bus Route 85 provides weekday and weekend service between the Gilroy Transit Center and Saint Louise Regional Hospital via Sixth Street, Wren Avenue, Kern Avenue, Mantelli Drive, Leavesley Road, and San Ysidro Avenue with approximately 60-minute headways during commute hours.

Caltrain

The Gilroy Caltrain Station is located at 7150 Monterey Street, roughly one mile west of the project site. Caltrain provides train service from Gilroy to San Francisco, with limited-stop service at other stations along the peninsula corridor. Caltrain service to Gilroy is only provided on weekdays; weekend service south of San Jose is not available. Currently, the Gilroy Caltrain station is served by two northbound trains in the morning and two southbound trains in the evening.

Existing Pedestrian and Bicycle Facilities

The project site is currently undeveloped farmland. Pedestrian access to the project site is provided by sidewalks on Camino Arroyo where it terminates at the site's northern border.

Bicycle facilities comprise paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. Bicycle lanes are lanes on roadways designated for bicycle use by striping, pavement legends, and signs. Bicycle routes are roadways designated for bicycle use by signs only. There are Class II bicycle facilities along Leavesley Road, Camino Arroyo, and Arroyo Circle.

3.17.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, a transportation impact is considered significant if the project would:

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

Discussion of No Impacts

The project would result in any "No Impact" determinations.

Discussion of Less-than-Significant Impacts

The project would have less than significant impacts on transportation under the following thresholds:

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

Construction and Operation

Less than Significant. The project site is located between the two termini of Camino Arroyo, which abut the northern and southern borders of the project site. Access to the project site would be provided by two 35-foot-wide driveways at the terminus of Camino Arroyo at the northern border of the project site and one 35-foot-wide driveway at the terminus of Camino Arroyo at the southern border of the project site. Internal roadways would connect the two termini of Camino Arroyo, providing access to the interior portions of the project site.

Although the project would alter the existing configurations of the two termini of Camino Arroyo by introducing driveways, the project would not alter the shape of the roads, nor would it create any sharp curves or dangerous intersections. Furthermore, the City is requiring that a traffic study be performed during final design to ensure that the geometric design features can safely accommodate large vehicles and fire trucks, and that automobiles accessing and/or leaving the site can do so safely without impacting existing traffic along Camino Arroyo. As a condition of approval, the applicant will be required to implement all recommendations included in the traffic study, as reviewed and approved by the City Engineer.

> **Condition of Approval:** The applicant shall retain a qualified traffic consultant to prepare a traffic study to confirm the safety of all geometric design features, including site entrances and exits to and from the site. The applicant shall incorporate all recommendations in the traffic study into the final project design. The traffic study shall be reviewed and approved by the City Engineer prior to granting of a grading permit.

Project construction and operation will occur entirely onsite. Therefore, with adherence to the condition of approval above, the project will not increase hazards due to geometric design features of roadways or incompatible use, and the impact would be less than significant.

Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Less than Significant. The following subsections discuss the project's impacts on programs, plans, ordinances and policies related to bicycle and pedestrian facilities and transit facilities. Because the project would not alter the City's roadway system or preclude the construction of planned roadway improvements in the City, the project's impact on programs, plans, ordinances, and policies related to roadway facilities is not discussed further.

Bicycle and Pedestrian Facilities

Pedestrian access to the project site is provided by sidewalks on Camino Arroyo where it terminates at the site's northern border. The project would install a new sidewalk on Camino Arroyo at the project's southern border. Proposed modifications to site access along the project frontage would not conflict with bicyclist's use of the existing Class II bike lanes on Camino Arroyo.

The General Plan assumed that a Class II bicycle path would be striped on a future roadway that would bisect the project site (see Figure N-2: Planned Bicycle Network in the General Plan). This assumption was based on another assumption that the new roadway would be needed if multiple smaller industrial facilities were developed on the project site, to facilitate access to the different buildings. Such access is no longer needed to develop the property as the project would encompass all of the land.

The two points that would have been connected by the new bicycle path envisioned in the General Plan is already connected by an existing bicycle path on Camino Arroyo. The previously planned bicycle path would not have shortened trip lengths between these two points, and would not provide meaningful access to anything other than privately-owned land. Therefore, eliminating this future bicycle path would not affect connectivity in the area and would not conflict with General Plan policies intended to increase bicycle path connectivity and bicycle usage.

Appendix K includes a memorandum from the City of Gilroy describing its concurrence that elimination of the bike lane would not interfere with the connectivity envisioned by its planning efforts. For the reasons listed above, the elimination of the proposed future bicycle path does not conflict with the City's bicycle and pedestrian plans.

Transit Facilities

Due to the small number of employees expected at full buildout of the project (up to 50), the project would not adversely impact levels of service at nearby transit, pedestrian, or bicycle facilities. Therefore, the impact would be less than significant.

Result in inadequate emergency access.

Less than Significant. Emergency access would be provided to the project site via proposed driveways at both termini of Camino Arroyo. The driveways would provide access to an internal roadway looping around the perimeters of the data center buildings for site circulation and emergency vehicle access. The City of Gilroy standards require two-way driveways providing access to industrial properties be a minimum width of 35 feet. All proposed driveways on the project site would be 35-feet wide. The final site design would be subject to review by the City including the Fire Department for consistency with requirements for fire truck access.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not result that are less than significant impacts with mitigation related to transportation.

Discussion of Significant and Unavoidable Impacts

The project would have a significant impact under the following threshold:

Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

Impact TRA-1: The project would result in exceedance of applicable VMT thresholds, and would conflict with CEQA Guidelines section 15064.3.

Significant and Unavoidable. A VMT Analysis was prepared and is included as **Appendix K**. The VTA's VMT Evaluation Tool indicates that the existing citywide average VMT per job employee is currently

18.79. Therefore, the OPR recommended impact threshold of 15 percent below the existing average VMT per job employee equates to a standard of 15.97 VMT per employee for the project's impact to be less than significant.

The results of the VMT evaluation indicate that at project buildout, the proposed development is projected to generate average daily per employee VMT equal to 19.13, which would exceed the identified impact threshold of 15.97 VMT per employee. Therefore, the proposed project would result in an impact on the transportation system based on OPR's 15 percent below existing average VMT impact threshold. The project would need to implement VMT reduction measures to achieve an approximately 16.5 percent reduction (from 19.13 to 15.97) in its VMT per employee in order to reduce its impact to less than significant levels. Therefore, the project will incorporate **TRA MM-1** described below.

It is anticipated implementation of **TRA MM-1** would achieve up to a 4 percent reduction in site employee commute VMT (CAPCOA, 2021). However, since the project would be required to reduce its VMT by approximately 16.5 percent, the project would require an additional 12.5 percent reduction in VMT to be under the threshold. Therefore, absent of the City adopting its own City-specific VMT policies and impact thresholds, the proposed project would result in a significant and unavoidable impact.

TRA MM-1: Transportation Demand Management Program

Per communication with the project applicant, at full buildout, the project is proposing (and will be conditioned) to implement TDM measures that would help reduce the project's VMT. Specifically, the project plans (and will be conditioned) to implement a voluntary commute trip reduction (CTR) program that shall include each of the following measures/programs to discourage single occupancy vehicle trips and encourage alternative modes of transportation:

- Ride sharing
- Subsidized transit
- Vanpool
- Guaranteed ride home
- Marketing program

The above programs are identified in the California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA, 2021), as T-5 (Voluntary CTR Program), one of the Transportation Measure to reduce GHG emissions and VMT. According to the CAPCOA handbook, implementation of the T-5 Program by a project could achieve up to a 4 percent reduction in site employee commute VMT.

Cumulative Impacts

Significant Unavoidable Cumulative Impact. The geographic setting for cumulative transportation impacts is the City. The General Plan EIR identified a significant unavoidable impact related to citywide VMT, despite incorporation of mitigation and adoption of General Plan policies intended to reduce VMT. Given that the project would be consistent with the existing General Plan land use designation, the

project would contribute to the significant unavoidable impact identified in the General Plan EIR, but would not create a new or substantially more severe impact than that disclosed in the General Plan EIR.

3.18 Tribal Cultural Resources

The discussion in this section is based on **Appendix E**, Cultural Resources Literature Search, prepared for the project by Holman & Associates, Inc. in December 2020. A copy of the report has been submitted to the City separately to maintain confidentiality pursuant to Government Code Section 6254(e) and 6254(k).

On November 11, 2022, the City's Community Development Department transmitted letters requesting tribal consultation to discuss the project and potential concerns related to Native American cultural resources on the project site (please refer to **Appendix N**, Tribal Consultation Outreach Letters). Consultation letters were transmitted to representatives of the following tribes:

- The Ohlone Indian Tribe;
- The Rumsen Am:a Tur:ataj Ohlone;
- The Amah Mutsun Tribal Band;
- The Amah Mutsun Band of Mission San Juan Bautisa;
- The Indian Canyon Mutsun Band of Costanoan;
- The North Valley Yokuts Tribe; and
- The Wuksache Indian Tribe/Eshom Valley Band

As of November 2023, no response to the above requests for tribal consultation were received.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding tribal cultural resources were received during the 30-day NOP circulation period.

3.18.1 Regulatory Framework

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or

- Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

- A resource determined by the lead agency to be a TCR.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the NAHC as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

California Native American Historical, Cultural, and Sacred Sites Act

Section 5097.9 – 5097.991 of the Public Resource Code (The California Native American Historical, Cultural, and Sacred Sites Act) applies to both state and private lands, providing protection to Native American historical and cultural resources, and sacred sites, and identifies the powers and duties of the NAHC. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Local

Gilroy Municipal Code

Section J110.5 Archeological Discovery. If in the course of any grading operation, any artifacts, human remains, or substantial fossils are discovered, all grading operations shall cease, and the discovery site shall be suitably marked and protected from further damage. A report of such findings shall be as outlined in the Zoning Ordinance. Specifically, if human remains are discovered, the Sheriff-Coroner and the Building Official shall be notified. If no human remains are discovered, but artifacts or significant fossils are discovered, the Building Official shall be notified.

3.18.2 Environmental Setting

As discussed in **Section 3.5, Cultural Resources**, there is low potential for archaeological resources on the site. During preparation of the General Plan, the City did not receive any requests for consultation from tribes that are traditionally or culturally affiliated with the project area pursuant to AB 52. The City offered consultation under SB 18 and no responses were received according to the General Plan EIR.

On November 13, 2020, a Sacred Lands Search request for the project site was sent to the NAHC. On November 23, 2020, the Sacred Lands Search results were received and showed a positive result for potential sacred lands (NAHC 2020). The NAHC search area is based on township and range location and encompasses many square miles around the site. Because the specific sacred lands identified in the

search are confidential, it is not known at this time whether the sacred lands are located on or in the vicinity of the site.

3.18.3 Impacts and Mitigation Measures

Significance Criteria

For the purposes of this EIR, an impact to a tribal cultural resource is considered significant if the project would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or
  ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Discussion of No Impacts

The project would not result in no impact determinations related to tribal cultural resources.

Discussion of Less-than-Significant Impacts

The project would not result in less-than-significant impact determinations prior to mitigation related to tribal cultural resources.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

Impact TCR-1: Potential for discovery of Native American Artifacts or Human Remains.

Less Than Significant with Mitigation. While there is a potential for unknown Native American subsurface artifacts or human remains to be present in the project area, the project's impact to unknown resources would be less than significant with the implementation measures identified in **Section 3.5, Cultural Resources** (**CUL MM-1**, **CUL MM-2**, and **CUL MM-3**).

In addition to impacts associated with the potential presence of artifacts and remains, impacts to TCRs could occur due to the presence of sacred lands on or adjacent to the project site. As described previously, the NAHC completed a Sacred Lands Search which determined that sacred lands are present within the same township and range as the project site. The NAHC provided a list of tribes to contact for more information. The California Energy Commission, which was originally the lead agency prior to the

modifications to the project described in the Project Description dated March 16, 2022, began outreach to tribal organizations. Copies of the letters are included as **Appendix M**.

Given the positive result of the Sacred Lands Search, it is more appropriate for the Lead Agency to conduct outreach to the identified tribes as part of the CEQA process, as opposed to a private applicant conducting outreach. On November 11, 2022, the City's Community Development Department transmitted letters requesting tribal consultation to discuss the project and potential concerns related to Native American cultural resources and sacred lands on or adjacent to the project site, As of November 2023, no response to the requests for tribal consultation were received. If a response is received that determines there are sacred lands are present in the project vicinity, the City will make a determination as to whether the project would result in significant impacts to TCRs associated with the sacred lands.

The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

Less Than Significant with Mitigation. As discussed under **Impact TCR-1**, any subsurface artifacts or human remains found on-site would be addressed consistent with the measures identified under **PD CUL-1** and **PD CUL-2**. The determination of whether the project would cause a substantial adverse change in the significance of a TCR will be made by the City after it has completed outreach to the tribes identified by the NAHC.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant and unavoidable impacts related to tribal cultural resources.

Cumulative Impacts

Less than Significant Cumulative Impact with Mitigation. The General Plan EIR concluded that buildout of the Gilroy 2040 General Plan would have a less than significant impact with mitigation on Tribal cultural resources, because future development within the Gilroy Urban Growth Boundary, as well as within other jurisdictions in the County of Santa Clara would be conditioned to avoid or lessen its impacts on cultural resources. In addition, consistency with Federal and state regulations designed to avoid or reduce the potential for significant impacts on Tribal cultural resources from site preparation (i.e. grading and trenching), construction and other activities would also reduce impacts to less than cumulatively considerable.

The project site has a low potential for containing archaeological resources near the surface. Although unlikely, in the event that trenching and excavation of the project site discover unrecorded Tribal cultural resources or human remains, the potential impacts to subsurface cultural resources would be minimized and/or avoided with implementation of **CUL MM-1**, Archaeological Monitoring, **CUL MM-2** Unanticipated Discovery of Archaeolocial Resources, and **CUL MM-3**, Protocol for Human Remains Discovery. As such, the project would not contribute to cumulative impact beyond what was identified in the General Plan EIR.

3.19 Utilities and Service Systems

This section evaluates impacts to the City's utilities and service systems that could occur as a result of the project.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding utilities and service systems were received during the 30-day NOP circulation period.

3.19.1 Regulatory Framework

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City adopted its most recent UWMP in May 2020.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans (IWMP), and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants the California Department of Resources Recycling and Recovery (CalRecycle) the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

Regional

National Pollution Discharge Elimination System

Wastewater generated in Gilroy is treated at the South County Regional Wastewater Authority (SCRWA) treatment plant (treatment plant) located at 1500 Southside Drive in Gilroy. The treatment plant provides secondary and tertiary treatment of wastewater to the cities of Gilroy and Morgan Hill. Discharges from the treatment plant are subject to discharge prohibitions, discharge limitations, and receiving water limitations. The RWQCB regulates discharges into the San Francisco Bay through NPDES regulations. The NPDES permit for the treatment plant documents current practices and levels of service for attainment of discharge water quality that is protective of beneficial uses. The RWQCB includes regulatory requirements that each wastewater collection system agency shall, at a minimum, develop goals for the Sewer System Management Plan (SSMP) to provide adequate capacity to convey peak flows. Other RWQCB regulatory requirements include the General Waste Discharge Requirements, which regulates the discharge from wastewater treatment plants.

Santa Clara County Integrated Waste Management Plan

The County's IWMP was approved by the California Integrated Waste Management Board in 1996 and reviewed in 2004, 2007, 2011, and 2016. Each jurisdiction in the County has a landfill diversion requirement of 50 percent per year. According to the IWMP, the County has adequate capacity beyond 2030 (Santa Clara County, 2016).

2020 Urban Water Management Plan

The Gilroy 2020 Urban Water Management Plan is designed to implement and maintain the reliability of urban water supplies in the City. According to the 2020 Urban Water Management Plan, the total water demand for the Gilroy service area is expected to increase from 9,425 AFY to 13,381 AFY in 2040, based on ABAG populations projections for the City (City of Gilroy 2020a). Supply projections show that the City would have enough water supply to meet projected demand through 2040 in normal, single-dry, and multiple-dry year scenarios.

Local

Gilroy 2040 General Plan

The Public Facilities and Services Element and the Land Use Element of the General Plan addresses the City's goals, policies, and implementing actions regarding public utilities and service systems. The follow General Plan policies related to utilities and service systems are applicable to the project:

> **PFS 4.2.** Wastewater Treatment and Disposal Capacities – Provide for and maintain adequate wastewater treatment and disposal capacities to meet the needs of existing users and support the buildout of the General Plan.
>
> **PFS 4.3.** Timing and Location of Development – Require that adequate wastewater treatment capacity is funded and in place prior to approval of new development.
>
> **PFS 6.1.** Mandatory Collection – Continue to require weekly solid waste collection throughout the city.

PFS 6.2. Adequate Service – Monitor solid waste and recycling services franchisee to ensure that services provided are adequate to meet the needs of the community and to meet the provisions of the City's franchise agreement.

PFS 6.3. Solid Waste Diversion – Comply with State goals regarding reduction of solid waste disposal, including calculated disposal rate standards.

PFS 6.4. Recycling – Reduce the volume of material sent to solid waste sites by maintaining recycling programs and encouraging the participation of all residents and businesses.

PFS 6.5. Source Reduction – Reduce the volume of disposed waste by encouraging efforts to decrease consumption; reduce material weight and volume; reuse products and materials; and increase the durability of products and materials.

PFS 6.6. Municipal Waste Reduction – Reduce municipal waste generation by continuing to employ a wide range of innovative techniques, including electronic communications to reduce paper usage and buying products with less packaging or in bulk, where feasible.

PFS 6.7. Recycled Products or Processes for Capital Projects – Continue and expand the use of recycled products or recycling processes whenever practicable.

PFS 6.8. Disposable, Toxic, or Non-Renewable Products – Reduce the use of disposable, toxic, or nonrenewable products in City operations.

PFS 6.9. Construction and Demolition Waste Recycling – Continue to require demolition, remodeling, and major new development projects to salvage or recycle asphalt and concrete and all other nonhazardous construction and demolition materials to the maximum extent practicable.

PFS 6.10. Regional Coordination – Coordinate with and support regional efforts to develop and implement effective waste management strategies.

LU 8.6. Utility Undergrounding – Proceed with the undergrounding of existing overhead utility lines throughout the City, as funding allows, and require undergrounding of utilities in all new developments.

City Code Chapter 12 – Garbage, Refuse, and Weeds

Chapter 12, Article V of the Gilroy City Code requires that all projects requiring a building or demolition permit for removal of 5,000 square feet or more are required to recycle or divert from disposal at a landfill at least 50 percent of the construction debris resulting from the construction or demolition.

3.19.2 Environmental Setting

Water

Water service is currently provided to the project site by the City of Gilroy Department of Public Works. Domestic water supply in Gilroy is provided through groundwater extraction from nine separate wells within the Llagas Subbasin, with an estimated operational capacity of 150,000 acre-feet (City of Gilroy, 2018). Valley Water also stores water supply banked underground at Semitropic Water Storage District near Bakersfield. According to Valley Water's 2017 Annual Groundwater Report, end of year groundwater storage of more than 300,000 acre-feet falls within the normal stage (Stage 1) of Valley

Water's Water Shortage Contingency Plan, indicating good water supply conditions. Valley Water's Semitropic groundwater bank reserves were at 100 percent of capacity, or 349,970 acre-feet as of December 31, 2019 (Valley Water, 2021).

Although not required to meet current water demand projections, SCRWA supplies recycled water to a small portion of the City along Hecker Pass Road. The nearest recycled water line is approximately 1.5 miles south of the project site located at the intersection of Camino Arroyo and Holloway Road (Valley Water/SCWRA, 2004). Currently, the City does not provide recycled water to the project site. Therefore, the analysis in this section assumes that no recycled water would be used. In the event that the project is able to connect with recycled water infrastructure as it becomes available, this scenario would result in lesser environmental impacts as it would reduce demand for potable water. Future connections to recycled water infrastructure would be similar in design to the proposed connections to existing potable water infrastructure, and therefore the environmental impacts would be comparable.

Wastewater

According to the General Plan EIR, SCRWA treatment plant has a permitted capacity of 8.5 million gallons per Day (mgd) for average dry weather flow. The total capacity of the treatment plant is shared between the cities of Gilroy and Morgan Hill, with 58.1 percent (or 4.93 mgd) of the inflow capacity allocated to Gilroy and the remaining 41.9 percent (or 3.56 mgd) allocated to Morgan Hill. The SCRWA treatment plant currently processes 6.2 mgd and has available capacity to treat 2.3 mgd. The City is currently generating approximately 3.5 mgd of wastewater that is treated at the plant.[17] Given the City's allocated capacity at the treatment plant of 4.93 mgd, and the City's current generation (3.5 mgd), there is 1.43 mgd of available treatment capacity at the plant for additional sewage generated in the City.

A planned expansion of the treatment plant is expected to be operational between 2024 and 2026 and would increase the total plant treatment capacity from 8.5 to 11.0 mgd. With the planned treatment plant expansion, the City's total treatment allocation at the plant would increase from 4.93 to 6.4 mgd.

Stormwater Drainage

The project site is currently made up of primarily pervious surfaces. The general topography of the project vicinity slopes southward and drains toward Miller Slough, which is ultimately conveyed to Llagas Creek.

Solid Waste

Solid waste generated in the City is taken to the San Martin Transfer Station where recyclable materials are separated from the solid waste stream and the solid waste is disposed of at the John Smith Road Landfill near Hollister. The John Smith Landfill has a permitted capacity of 9.35 million cubic yards and a remaining capacity of 3.5 million cubic tons remaining.

[17] City of Gilroy.2020. *South County Regional Wastewater Authority Wastewater Treatment Plant Facility Expansion Project Initial Study/Mitigated Negative Declaration.* Available: https://www.cityofgilroy.org/561/South-County-Regional-Wastewater-Authori. Accessed January 2023.

Energy

Pacific Gas and Electric (PG&E) is the primary provider of electricity and natural gas to the City. PG&E operates a major network of electricity and natural gas transmission lines within its service area, including the City. There are underground electricity lines and overhead lines near the project site.

3.19.3 Impacts and Mitigation Measures

Thresholds of Significance

For the purposes of this EIR, an impact to public services would be considered significant if implementation of the project would:

- Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Additionally, the City of Gilroy has its own locally adopted CEQA thresholds, described below. Impacts related to utilities and service systems would also be considered significant if the project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Discussion of No Impacts

The project would not result in a "No Impact" determination for any of the utilities and service systems thresholds discussed in Significance Criteria of **Section 3.19, Utilities and Service Systems**.

Discussion of Less-than-Significant Impacts

The project would have less than significant impacts on transportation under the following thresholds:

Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Potable Water Services

Less than Significant. The City of Gilroy General Guidelines require industrial plots to have minimum water pipe diameters of 12 inches, however, the pipe south of the site that the project would connect to

is only eight inches in diameter. The City of Gilroy Water System Master Plan designates a 16-inch water main routed around the project site with the nearest pipe approximately 700-feet away at Gilman Road. The three 16-inch pipes planned around the project site are estimated to be completed between 2020-2040. The applicant is working with the City to negotiate the acceleration of these improvements. The project would not require any further new or expanded facilities apart from the water pipe upgrade already planned by the City.

Wastewater

Less than Significant. The City of Gilroy General Guidelines require sanitary sewer average flowrates of 2,500 gallons per acre daily when calculating pipe sizes for industrial sites. This would allow for a total flowrate threshold of 0.14 mgd for the 56-acre project site. The project would discharge approximately 0.007 mgd gallons on an average day and a maximum of 0.052 mgd on a peak day. Thus, the project would be in compliance with the City's General Guidelines. The existing 14-inch sanitary sewer pipe south of the project site would be adequate to serve the project. The project's wastewater discharge on a peak day would make up approximately 0.6 percent of the SCRWA treatment plant's current available capacity (8.5 mgd) for the City of Gilroy. This would be an incremental increase in wastewater demand, which the SCRWA treatment plant would be able to accommodate.

Stormwater Drainage

Less than Significant. The project would introduce a series of low points onsite to promote runoff conveyance on the relatively flat site. Runoff would be conveyed to a biofiltration system that would treat stormwater on-site. Stormwater not absorbed by the biofiltration system would be conveyed to the City's stormwater system. The project would connect to the existing 72-inch stormwater pipe south of the project site, which would be sufficient in size to accommodate the project. The City does not have stormwater treatment facilities. Stormwater is untreated and drains to the Pajaro River, and eventually outfalls to Monterey Bay. Through implementation of the biofiltration system and consistency with the City's Post-Construction Requirements, the project would treat and reduce stormwater on-site and would not necessitate substantial new stormwater facilities.

Energy and Telecommunications

Less than Significant. The project would include construction of a new 98 MW electrical substation to provide electrical power to the proposed data center. The proposed substation would connect to the existing electrical lines near the project site via a transmission upgrade to be completed by PG&E as described in the Project Description dated March 16, 2022. The impacts associated with construction of the substation and the transmission upgrade have been incorporated into the construction assumptions for the project that have been analyzed throughout this EIR. As noted in **Section 3.6, Energy**, there are sufficient energy supplies to meet the energy demand of the project, which would be the same regardless of whether the Phase I BESS was constructed or not, and therefore the project would not necessitate the construction of new or expanded electricity or natural gas facilities.

The project would incrementally increase telecommunication use but would not require the construction of any additional off-site facilities.

Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

Less than Significant. The project will require water for cooling when outside air temperatures exceed 83F. The project would be designed to use potable water provided by the City of Gilroy, given that recycled water is not available on the project site, and extension of recycled water lines to the project site is not proposed as part of the project. At full buildout, the project will have a potable water demand of up to 23 AFY: 18 AFY for cooling; 3 AFY for landscaping; and 2 AFY for domestic purposes. **Appendix O** contains a Water Supply Assessment (WSA) conducted by the City. As demonstrated in the WSA, the City would have at least 65 AFY of potable water available to serve the project in a normal year. Assuming a worst-case scenario of five consecutive dry years, the City would have at least 38 AFY of potable water to serve the project. Therefore, this impact would be less than significant and no mitigation is required.

Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Less than Significant. As described under the first threshold discussion above, the project's wastewater discharge on a peak day would make up approximately 3.6 percent of the SCRWA treatment plant's available capacity for the City of Gilroy. This would be an incremental increase in wastewater demand, which the SCRWA treatment plant would be able to accommodate. Therefore, this impact would be less than significant.

Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Less than Significant. As noted in **Section 3.19.2, Environmental Setting**, the John Smith Landfill has a remaining capacity of 3.5 million cubic tons. The project would not involve substantial demolition and the project would not generate substantial solid waste during operation. Solid waste generated by the project would be an incremental increase and would not be in excess of the John Smith Landfill capacity. Therefore, this impact would be less than significant and no mitigation is required.

Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Construction and Operation

Less than Significant. The construction and operation of the project would comply with federal, state, and local regulations related to diversion of materials from disposal and appropriate disposal of solid waste. Therefore, this impact would be less than significant and no mitigation is required.

Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Less than Significant. The City has an established CEQA significance impact threshold for this checklist question. The significance threshold is if a project would exceed requirements or be inconsistent with the City's Sewer Master Plan. The City's Sewer Master Plan bases future demand and system requirements on the General Plan Land Use Map and related population and service area projections. The project would be consistent with the General Industrial land use designation for the site and growth projections contained in the General Plan and would not require expansion of the existing sewer system to serve the project. The Sewer Master Plan identified capital improvements needed to serve the

buildout of the 2040 General Plan. Development projects included within the growth assumptions of the General Plan (such as the proposed project) would be required to make a fair share contribution toward capital improvements projects with payment of a sewer impact fee. Therefore, the proposed project would be required to pay a sewer impact fee.

In addition, the sewage generated by the project would be treated at the treatment plant in accordance with the requirements of the treatment plant's existing NPDES permit. The sewage generated by the proposed industrial uses would not exceed the RWQCB wastewater treatment requirements or require new treatment permits. Therefore, this impact would be less than significant, and no mitigation is required.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not result in any impacts that are less-than-significant with mitigation related to utilities and service systems.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant and unavoidable impacts related to utilities and service systems.

Cumulative Impacts

Less than Significant Cumulative Impact. The General Plan concluded that the General Plan will not require new or expanded water facilities beyond those identified in the 2004 Water System Master Plan as a result of the 2016 Urban Growth Boundary Initiative. Therefore, there would be no environmental impacts associated with the provision of water service. Implementation of the Gilroy 2040 General Plan will require new or expanded wastewater facilities, but not beyond those identified in the City of Gilroy Sewer System Master Plan as a result of the 2016 Urban Growth Boundary Initiative. Therefore, the environmental impacts associated with the provision of wastewater service would be less than significant and no mitigation would be required. Implementation of the GP policies, described in **Section 3.19.1, Regulatory Framework**, in coordination with federal, state, and local mandates for solid waste source reduction, recycling and diversion would reduce the potentially significant impacts related to an increase in demand for solid waste disposal facilities to a less-than-significant level. These GP policies include PFS 6.1 through PFS 6.10 that reduce the amount of waste entering regional landfills through an effective waste management program and policy NCR 3.9 and NCR 3.13 that reduces residential, municipal and construction solid wastes.

The project's use of utilities and service systems was accounted for in the General Plan as part of the planned growth of the City. When applicable, the General Plan identified the need for increased services and infrastructure to support the planned growth of the City. The project, by itself, will have a less than significant impact on these resources and services. The project, combined with future growth throughout the City of Gilroy, would significantly increase the use/need for these resources and services, but would not result in a significant cumulative impact. Therefore, the project's contribution to the increased use of in any of these resource areas would not be considerable.

3.20 Wildfire

This section evaluates impacts associated with wildfire risk that could occur as a result of the project.

The NOP for this EIR was circulated on November 11, 2022, and a scoping meeting was held on December 6, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments regarding wildfire concerns were received during the 30-day NOP circulation period.

3.20.1 Regulatory Framework

State

Fire Hazard Severity Zones

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Fire Hazard Severity Zones (FHSZ) maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. FHSZs are divided into areas where the state has financial responsibility for wildland fire protection, known as state responsibility areas (SRAs), and areas where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs). Homeowners living in an SRA are responsible for ensuring that their property is in compliance with California's building and fire codes. Only lands zoned for very high fire hazard are identified within LRAs.

California Fire Code Chapter 47

Chapter 47 of the California Fire Code sets requirements for wildland-urban interface fire areas that increase the ability of buildings to resist the intrusion of flame or burning embers being projected by a vegetation fire, in addition to systematically reducing conflagration losses through the use of performance and prescriptive requirements.

California Public Resources Code Section 4442 through 4431

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that uses an internal combustion engine; specify requirements for the safe use of gasoline-powered tools on forest-covered land, brush-covered land, or grass-covered land; and specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period, from April 1 to December 1 (Public Resources Code Section4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain appropriate fire suppression equipment (Public Resources Code Section 4427); and

- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Code of Regulations Title 14

The California Board of Forestry and Fire Protection has adopted regulations, known as SRA Fire Safe Regulations, which apply basic wildland fire protection standards for building, construction, and development occurring in a SRA. The future design and construction of structures, subdivisions and developments in SRAs are required to provide for the basic emergency access and perimeter wildfire protection measures discussed in Title 14.

Fire Management Plans

CAL FIRE has developed an individual Unit Fire Management Plan for each of its 21 units and six contract counties. CAL FIRE has developed a strategic fire management plan for the Santa Clara Unit, which covers the project area and addresses citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality (CAL FIRE, 2022a). The plan includes stakeholder contributions and priorities and identifies strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire issues.

Local

Gilroy 2040 General Plan

The Potential Hazards Element of the General Plan addresses the City's goals, policies, and implementing actions regarding wildfire. The following General Plan policies related to wildfire are applicable to the project:

> **PH 4.2.** Development Review – Provide plan checks for new construction, remodels, tenant improvements, and demolitions to ensure compliance with applicable life safety and fire protection system requirements, including special requirements for fire safety in areas with wildfire risk.
>
> **PH 4.3.** Roofing Requirements – Require "Class A" fire-rated roofs on all new construction or re-roofing in the following areas:
>
> - West of Santa Teresa Boulevard, and south of Mantelli Drive
> - West of Rancho Hills Drive
>
> In all other areas, "Class C" or better fire rated roofs shall be required for new construction and re-roofing.
>
> **PH 4.4.** Hillside Areas – Require development in hillside areas to comply with the fire hazard policies and codes adopted into the Gilroy Fire Code for wildland/urban interface areas.

3.20.2 Environmental Setting

The project site is within a Local Responsibility Area (LRA) in an urbanized area of Gilroy. The project site is not located in or near a State Responsibility Area (SRA) including lands classified as very high

FHSZs.The nearest SRA to the project site is located approximately 2 miles east, located east of Ferguson Road (CAL FIRE, 2022b).

3.20.3 Impacts and Mitigation Measures

If located in or near state responsibility areas or lands classified as very high FHSZs, a significant impact related to wildfire would occur if a project would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan;
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Discussion of No Impacts

The project would have no impact on wildfire under all thresholds mentioned in **Section 3.20.3, Impacts and Mitigation Measures**, above:

No Impact. Given that the risk of wildfire at or near the project site is low, there is similarly low potential for the project to indirectly or directly interfere with emergency services during a wildfire event. Construction is not anticipated to require any closure of existing streets or emergency access routes. Construction would require construction vehicles to travel to and from the project site. Based on the size of the project site and its location in an urbanized area, construction traffic is not anticipated to create congestion which could interfere with emergency access. Emergency response access during the construction would not be impeded.

The project site is located within a Non-VHFHSZ LRA, indicating the risk of wildfire is low. The project site is not located within a SRA. The nearest VHFHSZ LRA is two miles from the project site, located on the east side of Ferguson Road. The project would not involve the installation or maintenance of infrastructure that might exacerbate fire risk, such as placement of overhead electrical lines in forested areas. Since the project site is relatively flat and surrounded by urban and agricultural development, slope and prevailing winds are unlikely to exacerbate the already low risk of wildfire. Therefore, the project would not result in wildfire impacts.

Discussion of Less-than-Significant Impacts

The project would not result in any less than significant impacts related to wildfire.

Discussion of Less-than-Significant Impacts with Mitigation

The project would not result in impacts that are less than significant with mitigation related to wildfire.

Discussion of Significant and Unavoidable Impacts

The project would not result in significant and unavoidable impacts related to wildfire.

Cumulative Impacts

No Impact. The General Plan EIR found that with adherence to relevant General Plan goals and policies, there would be a less than significant impact related to wildland fires. The project site is not located in or near SRAs or lands classified as FHFHSZs, nor would project involve the installation or maintenance of infrastructure that might exacerbate fire risk; therefore, the project would not contribute to cumulative wildfire impacts.

4. GROWTH INDUCING IMPACTS

For the purposes of this project, a growth-inducing impact is considered significant if the project would:

- Cumulatively exceed official regional or local population projections;
- Directly induce substantial growth or concentration of population. The determination of significance shall consider the following factors: the degree to which the project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds planned levels in local land use plans; or
- Indirectly induce substantial growth or concentration of population (i.e., introduction of an unplanned infrastructure project or expansion of a critical public facility (road or sewer line) necessitated by new development, either of which could result in the potential for new development not accounted for in local general plans.

The project would introduce two new data center buildings and associated development on an approximately 56-acre parcel that has been designated for General Industrial in the General Plan and zoned M2-General Industrial for over 25 years. The surrounding area to the north, west, and south is largely built out with commercial uses with the nearest residences approximately 0.25 mile west of the project site, across Highway 101. Adjacent lands to the east are primarily active agricultural lands. The project would be compatible with neighboring land uses and is not adjacent to undeveloped land that would be under pressure for redevelopment, given that the adjacent agricultural lands are designated Open Space in the General Plan.

Implementation of the project would result in a net increase of approximately 50 jobs in the City. However, the project is consistent with the General Plan land use designation and was accounted for in the growth projections upon which the General Plan EIR was based. Therefore, the project would not result in a growth inducing impact.

5. SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

An EIR must identify any significant irreversible environmental changes that would be caused by the project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources, or secondary or growth-inducing impacts that commit future generations to similar uses. In addition, irreversible damage can result from environmental accidents associated with a project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified. The CEQA Guidelines describe three categories of significant irreversible changes that should be considered, as further detailed below.

5.1 Changes in Land Use Which Would Commit Future Generations

As described in **Section 3.2, Agricultural and Forestry Resources**, the 56-acre project site is located on land classified as Prime Farmland and Farmland of Statewide Importance by the FMMP. Although the project would convert Prime Farmland and Farmland of Statewide Importance to non-agricultural uses, the use of the project site is consistent with the General Plan and Zoning Ordinance, where the project site has been designated for industrial uses for over 25 years. Impacts related to the conversion of farmlands are analyzed and addressed in the General Plan EIR. Additionally, the City adopted the Agricultural Mitigation Policy as part of the General Plan, in order to mitigate impacts associated with the loss of farmlands. The project would comply with the City's Agricultural Mitigation Policy through the implementation of **AG MM-1**.

5.2 Irreversible Changes from Environmental Actions

Implementation of the project would result in the development of two data center buildings and associated development on vacant land that was previously used for agricultural production. This change would add approximately 25 acres of impervious surface area within the approximately 56-acre project site. While irreversible, this change was already anticipated in the General Plan and Zoning Code. Other irreversible environmental changes associated with the project would include incremental demands for public services and utilities and changes to the visual environment that will not likely be reversed. As discussed in **Section 3.17, Transportation**, the project would result in significant unavoidable increases in VMT despite implementation of all feasible mitigation measures, conditions of approval, project design features, and local, State, and federal regulations.

5.3 Consumption of Non-Renewable Resources

Consumption of nonrenewable resources includes consumption of fossil fuels and metals, conversion of agricultural lands to urban uses, and lost access to mineral reserves. The project would convert lands previously used for agricultural production to urban use. Additionally, the project would require the use and consumption of energy from nonrenewable resources during construction and operation, which cannot be regenerated over time.

Energy would be consumed during both the construction and operational phases of the project. The construction phase would require the use of nonrenewable construction material, such as concrete, metals, plastics, and glass. Nonrenewable resources and energy would also be consumed during the manufacturing and transportation of building materials, preparation of the site, and construction of the buildings. The operational phase would consume energy for multiple purposes including, building

heating and cooling, lighting, appliances, and electronics. Energy, in the form of fossil fuels, would be used to fuel vehicles traveling to and from the project site. As discussed in **Section 2.5.4 Major Equipment**, cooling systems include the use of air chilled by evaporative cooling units installed on the walls of each data center building. These units would use potable water as the primary cooling water supply stored in four storage tanks, two located on the west side of Building 1 and two on the east side of Building 2. The project would result in an incremental increase in demand for nonrenewable resources, primarily in the form of diesel to power backup generators and gasoline to fuel automobiles. As discussed in **Section 3.6, Energy**, the project would use 100 percent carbon-free energy for routine data center operation and all other routine energy use on-site. Additionally, the project would be subject to the standards listed in California Code of Regulations Title 24 Part 6 and CALGreen energy efficiency requirements.

6. SIGNIFICANT AND UNAVOIDABLE IMPACTS

A significant unavoidable impact is an impact that cannot be mitigated to a less than significant level if the project is implemented as it is proposed. The following significant unavoidable impact has been identified for the project:

- **Agricultural and Forestry Resources.** The project would convert prime farmland and Farmland of Statewide Importance to non-agricultural uses. Implementation of **AG MM-1** (compliance with the City's Agricultural Mitigation Policy) would reduce the severity of this impact; however, the impact would remain significant and unavoidable.
- **Transportation.** At full buildout, the project would generate 19.13 average daily VMT per employee, which would exceed the identified impact threshold of 15.97 VMT per employee. Therefore, the proposed project would result in an impact on the transportation system based on OPR's 15 percent below existing average VMT impact threshold. The project would need to implement VMT reduction measures to achieve an approximately 16.5 percent reduction (from 19.13 to 15.97) in its VMT per employee in order to reduce its impact to less than significant levels. However, **TRA MM-1**, which includes all feasible TDM, would only reduce VMT by 4 percent. Therefore, this impact would be significant and unavoidable.[18]

All other significant impacts of the project would be reduced to a less than significant level with the implementation of mitigation measures identified in this EIR.

[18] The Gilroy General Plan EIR also concluded that significant and unavoidable VMT impacts would occur in part due to existing conditions related to the limited transportation network in Gilroy; future growth in the City would also result in significant and unavoidable VMT impacts.

7. ALTERNATIVES

CEQA Guidelines Section 15126.6 requires the consideration of a range of reasonable alternatives to the project that could feasibly attain most of the objectives of the project. The Guidelines further require that the discussion focus on alternatives capable of eliminating significant adverse impacts of the project or reducing them to a less-than-significant level. The analysis should focus on alternatives to the project, including alternative locations, that are capable of avoiding or substantially lessening the significant effects of the project. The key provisions of the CEQA Guidelines regarding analysis of alternatives are presented below.

The No Project Alternative shall be evaluated along with its impact. The No Project analysis shall discuss the existing conditions at the time the NOP is published, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved based on current plans.

The range of alternatives required in an EIR is governed by a "rule of reason" that considers only those alternatives necessary to permit a reasoned choice. The alternatives are limited to those that would avoid or substantially lessen the significant environmental effects of the project. The CEQA Guidelines do not specify a precise number of alternatives to be evaluated in an EIR.

For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.

An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

The range of feasible alternatives analysis is intended to foster meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the proponent could reasonably acquire, control, or otherwise have access to an alternative site, per CEQA Guidelines Section 15126.6(f)(1).

An EIR must briefly describe the rationale for selection and rejection of alternatives. The Lead Agency may make an initial determination of which alternatives are feasible and merit in-depth consideration, and which are infeasible (see CEQA Guidelines Section 15126.6(f)(3)). Alternatives may be rejected from detailed consideration in the EIR if they fail to meet project objectives, are infeasible, or do not avoid any significant environmental effects.

7.1 Significant Impacts of the Project

The CEQA Guidelines advise that the alternatives analysis in an EIR should be limited to alternatives that would avoid or substantially lessen any of the significant effects of the project and would achieve most of the project objectives. The EIR identifies the following significant impacts:

7.1.1 Agricultural and Forestry Resources

Impact AG-1: The project would convert prime farmland and Farmland of Statewide Importance to non-agricultural uses. Implementation of **AG MM-1** (compliance with the City's Agricultural Mitigation Policy)

would reduce the severity of this impact; however, the impact would remain significant and unavoidable.

7.1.2 Air Quality

Impact AQ-1: Potential to conflict with or obstruct implementation of the applicable air quality plan. Implementation of **AQ MM-1** (implementation of BAAQMD standard BMPs) would reduce this impact to a less-than-significant level.

7.1.3 Biological Resources

Impact BIO-1: The project could impact nesting birds due to the removal of trees. Implementation of **BIO MM-1** (nesting bird survey) would reduce this impact to a less-than-significant level.

Impact BIO-2: The project could impact migratory nesting birds due to the removal of trees. Implementation of **BIO MM-1** (nesting bird survey) would reduce this impact to a less-than-significant level.

7.1.4 Cultural Resources

Impact CUL-1: The project could adversely impact the significance of an archaeological resource. Implementation of **CUL MM-1** (archaeological monitoring) and **CUL MM-2** (unanticipated discovery of archaeological resources) would reduce this impact to a less-than-significant level.

Impact CUL-2: The project could disturb human remains. Implementation of **CUL MM-3** (protocol for human remains discovery) would reduce this impact to a less-than-significant level.

7.1.5 Geology and Soils

Impact GEO-1: The project may be subject to damage from seismic shaking. Implementation of **GEO MM-1** (geotechnical investigation) would reduce this impact to a less-than-significant level.

Impact GEO-2: The project could adversely impact the significance of an undiscovered paleontological resource. Implementation of **GEO MM-2** (unrecorded paleontological resources) would reduce this impact to a less-than-significant level.

7.1.6 Greenhouse Gas

Impact GHG-1: The project would generate construction-related GHG emissions. Implementation of **GHG MM-1** (BAAQMD Construction BMPs) would reduce this impact to a less-than-significant level.

Impact GHG-2: The project would generate operation-related GHG emissions. Implementation of **TRA MM-1** (Transportation Demand Management Plan) and **GHG MM-2** (purchase of carbon offsets) would reduce this impact to a less-than-significant level.

Impact GHG-3: Potential to conflict with an applicable plan adopted for the purpose of reducing the emission of GHGs. Implementation of **GHG MM-2** (purchase carbon offsets) would reduce this impact to a less-than-significant level.

7.1.7 Hazards and Hazardous Materials

Impact HAZ-1: Construction workers could be exposed to contaminated soil during grading and construction activities. Implementation of **HAZ MM-1** (site management plan) would reduce this impact to a less-than-significant level.

Impact HAZ-2: The BESS and BP facilities could create fire hazards. Implementation of **HAZ MM-2** (building permits) would reduce this impact to a less-than-significant level.

7.1.8 Hydrology and Water Quality

Impact HYD-1: The project will require fill to raise the site above base flood elevation and could impede or redirect flood flows. Implementation of **HYD MM-1** (conditional letter of map revision fill study) would reduce this impact to a less-than-significant level.

7.1.9 Noise and Vibration

Impact NOI-1: The project would generate a substantial increase in ambient noise levels during construction. Implementation of either **NOI MM-1a** (construction noise barriers) or **NOI MM-1b** (auger cast piles) would reduce this impact to a less-than-significant level.

7.1.10 Transportation

Impact TRA-1: The project would result in exceedance of applicable VMT thresholds, and would conflict with CEQA Guidelines section 15064.3. While implementation of **TRA MM-1** (transportation demand management program) would reduce VMT by approximately 4 percent, this impact would remain significant and unavoidable.

7.1.11 Tribal Cultural Resources

Impact TCR-1: Potential for discovery of Native American Artifacts or Human Remains. Implementation of **CUL MM-1** (archaeological monitoring) and **CUL MM-2** (protocol for human remains discovery) would reduce this impact to a less-than-significant level.

7.2 Project Objectives

Pursuant to CEQA Guidelines Section 15124, an EIR must identify the objectives sought by a project. As discussed in Section 2.2, Project Objectives, the objectives of the project are as follows:

- Develop a data center large enough to meet projected customer demand;
- Develop a data center on land that permits data centers as a use based on its current zoning;
- Develop a data center that can be constructed in phases which can be timed to match projected demand;
- Minimize the use of water and electricity;
- Incorporate reliable and flexible backup power technology that meets industry standards and customer expectations, to ensure a viable project. The following evaluation criteria will ensure the project is reliable and marketable:

- Reliability: The selected backup power technology must be reliable in the case of an emergency loss of electricity from the utility.
  - The backup power source must provide a higher reliability than 99.999 percent.
  - The selected backup power source technology must have a proven built-in resilience so if any of the backup unit fails due to external or internal failure, the system would have redundancy to continue to operate without interruption.
- Commercial Availability and Feasibility: The selected backup electric generation technology must currently be in use and proven as an accepted industry standard in order for the project to be feasible. It must be operational within a reasonable timeframe where permits and approvals are required.
- Technical Feasibility: The selected backup power source technology must utilize systems that are compatible with one another.

7.3 Alternatives Considered but Rejected

CEQA Guidelines Section 15126.6(c) recommends that an EIR identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons for their rejection. Among the factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in an EIR are failure to meet most of the basic objectives of a project, infeasibility, or inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to a project, CEQA Guidelines Section 15126.6(t)(l) states the following:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

In determining an appropriate range of project alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and then rejected. A description of the potential alternatives considered, but not carried forward, and the rationale for rejection is provided below.

7.3.1 Backup Electricity Generation Technology Alternatives

During project design, the applicant considered alternatives to the backup generators proposed as part of Phase I. The applicant considered a smaller capacity system as well as alternative generating technologies.

Reduced Electric Generation Backup System

The applicant considered a backup generating system with fewer emergency generators. However, any generating capacity less than the total demand of the project at maximum occupancy, with redundancy, would not allow the project to provide the amount of electricity needed during an emergency power outage. In addition to electricity that would be directly consumed by the servers themselves, the next largest electrical demand of the data center building would be related to cooling the server rooms. For the servers to function reliably, they must be kept within temperature tolerance ranges. The industry

standard is to design and operate a building that can meet those ranges even during a loss of utility electric power. Therefore, the proposed 25 backup generators were deemed necessary to meet the maximum load during full occupancy on the hottest design day and include redundancy. Because a reduced capacity system would not fulfill the basic objectives of the project, this alternative was not considered further.

Alternative Generating Technologies

The applicant considered using potentially available alternative technologies: gas-fired turbines; flywheels; gas-fired reciprocating internal combustion engines, batteries; fuel cells; and alternative fuels. None of the technologies considered could meet the overall project objectives because they were commercially or technically infeasible and/or would not meet the necessary standard of reliability during an emergency.

Flywheels

Flywheel energy storage systems use electric energy input which is stored in the form of kinetic energy. Kinetic energy can be described as "energy of motion," in this case the motion of a spinning mass, called a rotor. The rotor spins in a nearly frictionless enclosure. When short-term backup power is required because utility power fluctuates or is lost, the inertia allows the rotor to continue spinning and the resulting kinetic energy is converted to electricity.[19]

The applicant has concluded that flywheel technology would not be a viable option for the following reasons:

- Flywheel technology does not perform within the required reliability levels of the project and is prone to system failure.
- Flywheel technology requires an extensive amount of maintenance to keep each energy storage system functioning.
- Flywheel systems cannot provide sufficient time duration (e.g., 12-24 hours or more) as a backup generation as the fly wheel motion can typically only sustain 10-30 second outages at a time.

Gas-Fired Turbines

The applicant considered using natural gas-fired turbines instead of diesel generators to supply backup power for the project. This technology option was rejected because it would not meet the project objectives. Natural gas turbines have the advantages of quick start, better emission of NOx and CO than diesel, and ability to connect to a natural gas infrastructure that is more reliable than the electrical grid by factor of 10. However, as the backup choice, it has the following main issues:

- The gas infrastructure may have curtailment of the natural gas supplies in case of emergency due to natural disasters, impacting the data center operations.

[19] U.S. Department of Energy, 2010. Available: https://arpa-e.energy.gov/technologies/projects/next-generation-flywheel-energy-storage.

- Onsite storage or delivery is impossible to support long duration of backup (such as 12-24 hours or longer time).
- It is better suited for continuous operation instead of standby mode, which makes the maintenance challenging.
- It needs minimum load (30 percent), so additional load banks are required on site, leading to the change of design in terms of reliability.
- Typical turbine engines have larger system sizes (4 MW-50 MW), while the smaller ones such as micro-turbines of 2.5 MW will use two times more physical footprint and cost two times more, and their commercial use is yet to be certified.
- Local authorities having jurisdiction in California started to push back on natural gas due to clean air regulations on reducing fossil fuel.

Therefore, natural gas turbines are not considered reliable, nor technically feasible enough to meet the industry standard or needs of the project. A fixed fuel source such as a natural gas pipeline introduces another potential point of failure or load curtailment. Taking into account the natural gas outages from maintenance and repair by the utility, interruption due to construction accidents within the system, long-term damage and interruption during an earthquake, or outages caused by problems within the greater distribution system are higher probability occurrences than being able to obtain diesel fuel for longer than 24-hour outages. Therefore, this alternative was not analyzed further.

Gas-Fired Reciprocating Engines

The applicant considered using natural gas-fired reciprocating engines instead of diesel generators to supply backup power for the project. This technology option was rejected because it would not meet the project objectives. While natural gas engines could achieve start up times sufficient to work with the UPS systems design and there are 2.5 MW/3.1 MW engines available, this alternative suffers the same lack of reliability as natural gas turbine engines described above. Therefore, natural gas reciprocating engines are not considered technically feasible or reliable enough to meet the industry standard or needs of the project. As discussed above, storage of sufficient natural gas on site to maintain emergency electricity to the project during an outage would not be tenable given the volume of natural gas that would be required. Therefore, this alternative was not analyzed further.

Battery Storage

The applicant considered using batteries alone as a source of emergency backup power. The primary reason batteries alone were rejected was the limited duration of battery power. Batteries can provide power quickly, which is the reason they have been incorporated into the overall backup electrical system design. As described in **Section 2.5.4, Major Equipment**, batteries would be initiated at the first sign of electricity interruption. However, the current state of battery technology does not allow for very long durations of discharge at building loads as high as planned for the project. Since it is not possible to predict the duration of an electricity outage, batteries are not a viable option for emergency electrical power. Therefore, this technology option was rejected as technically and commercially infeasible and unable to allow the project to meet the applicant's reliability standards.

Fuel Cells – Backup Replacement

The applicant considered fuel cell technology, which is employed at other data centers utilized by the applicant. Fuel cell technology can provide both primary and emergency backup power. One example of primary power is that data center provider Equinix has partnered with Bloom Energy over the last 5 years to deploy over 45 MW of fuel cell technology at various sites around the country using fuel cells as base load.

There are other sites from Bloom Energy that run on both primary and backup such as in Home Depot. The fuel cells of Bloom Energy are solid Oxide Fuel Cells (SOFC) that operate in high temperature of 750 Deg C; they need to stay hot to provide power. As a choice of backup, Bloom Energy fuel cells need to run continuously in dual modes, as a primary source, or a standby mode when the grid is off (islanding mode). The Bloom Energy fuel cells have additional ultra capacitors to cope with the 10-20 second load transfer time to match up with diesel generators.

As a choice of backup, current fuel cell technology has the following issues:

- It needs to run to provide base load to stay hot. Thus the design of the data center architecture has to change in power configuration. This is why large data centers (Equinix, Apple, Yahoo) prefer to use Bloom Energy as primary source and maintain their existing diesel generator fleet for backup power.
- Its footprint would be about three times larger than the diesel generators proposed as part of this project.
- It relies on natural gas as feed stock, so issues with natural gas infrastructure and onsite storage discussed above remain. Bloom Energy also works with bio methane, but supply of this fuel is not great enough to represent a steady, reliable fuel source.

A faster type of Fuel Cells is based on a different mechanism, called Proton Exchange Membrane (PEM). This type is mostly used for transport, can cold start quicker, like an internal combustion engine. There are initiatives to apply this technology to provide the 2.5 MW backup units needed for this project.

Alternative Fuels

The applicant evaluated the use of biodiesel and renewable diesel (the new generation of biofuel such as Hydrotreated Vegetable Oil) as replacement for the CARB diesel proposed for use in the emergency backup generators. There are internal tests and certification processes for diesel gens of Caterpillar and Cummins to run biofuel (HVO) in the diesel generators. However, biofuel (HVO) test results are still preliminary and adoption in data centers has not yet started. In addition, particulate matter and GHG emissions of HVO are similar to diesel. Therefore, this alternative was not analyzed further.

No Backup Electric Generation Alternative

The No Backup Electric Generation Alternative would not involve the use of diesel generators, or any other source of backup energy supply. This would leave the project exposed to electricity outages caused by any emergency including and earthquake. This alternative was rejected as commercially infeasible and inconsistent with the primary reliability objectives of the project.

7.4 Alternatives Selected for Further Analysis

The following section discusses the alternatives evaluated in this EIR and the comparative environmental effects of each. The alternatives considered in this analysis are as follows:

- Alternative 1: No Project Alternative
- Alternative 2: Reduced Development Alternative
- Alternative 3: Reduced Footprint Alternative

7.4.1 Alternative 1: No Project Alternative

The CEQA Guidelines [Section 15126(d)4] require that an EIR specifically discuss a "No Project" alternative. The purpose of including a No Project alternative is to allow decision-makers to compare the impacts of approving the project with the impacts of not approving the project. The CEQA Guidelines specifically advise that the No Project alternative is "what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure and community services." [Section 15126.6(e)(2)] The Guidelines emphasize that an EIR should take a practical approach, and not "…create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment [Section 15126.6(e)(3)(B)]." To that end, Alternative 1 assumes that if the proposed project were not approved, the unoccupied and underutilized project site would be redeveloped with an alternative development consistent with what is allowed under the City's General Plan and Zoning Code.

The existing General Plan designated land use (General Industrial) allows for the development of heavy industrial uses including large scale manufacturing, assembly, storage, distribution, and wholesaling. While data centers are also an allowable use, and it is possible that another data center could be developed on the project site if the project were not selected to move forward, this analysis assumes that one of the other allowable uses would be selected. As a result, Alternative 1 would not meet any of the project objectives. This analysis also assumes that Alternative 1 would be designed to meet the maximum FAR of 2.0 and would have the same footprint as the project.

Many of the impacts of the project identified in **Section 7.1, Significant Impacts of the Project**, are not specific to the project, but would result from any project built on the project site. Alternative 1 would result in similar agricultural impacts due to the conversion of prime farmland, air quality impacts due to construction, biological impacts due to the removal of trees, cultural resources impacts due to ground disturbing activities, geological impacts due to the potential for seismic activity, hazardous waste impacts due to the presence of agricultural pesticides in the soils on-site, hydrologic impacts due to the need to raise the site above the base flood elevation before construction, and noise impacts from construction. Each of these impacts would be expected to be less than significant with mitigation.

Alternative 1 would differ from the project in the reduction of fire hazards (**Impact HAZ-2**) and assumes that Alternative 1 would not require BESS or BP facilities (or at least would not require facilities at the scale required for the project). Therefore, **Impact HAZ-2** would not occur. Alternative 1 would also likely increase VMT impacts (**Impact TRA-1**), since data centers require relatively few employees compared to other industrial uses. As discussed in **Section 3.17, Transportation**, only 50 employees would be required to operate the project and up to 125 employees and contractors could access the site per day, for the entire project at full buildout. Based on ITE trip generation rates for data center uses, the project

would generate approximately 434 daily trips, which is equivalent to the trips estimated to be generated by 90,000 square feet of industrial land use. Assuming that buildings constructed as part of Alternative 1 would have the same footprint as the project (432,212 square feet) and would be designed consistent with the maximum FAR (2.0), Alternative 1 would have a total square footage of 864,424 square feet (432,212 square feet multiplied by 2). This would result in approximately 4,168 daily trips. While the VMT per employee would likely be similar to the project (18.5 VMT per employee after mitigation), the magnitude of the total VMT impact would be nearly 10 times that of the project due to the increase in the number of trips.

Conclusion: Alternative 1 would not meet any of the project objectives, but would retain nearly all of the significant impacts identified for the project. Alternative 1 would eliminate **Impact HAZ-2**, but would increase the magnitude of **Impact TRA-1** by a factor of 10.

7.4.2 Alternative 2: Reduced Development Alternative

Under Alternative 2, it is assumed that only Phase I would be constructed, which would reduce the amount of development by half. Improvements constructed as part of Alternative 2 would only include those improvements listed under Phase I in Table 2-1; none of the improvements listed under Phase II would be constructed.

Under Alternative 2, many of the impacts of the project identified in **Section 7.1, Significant Impacts of the Project** would remain, but the magnitude of those impacts would be reduced. Prime Farmland would still be converted to non-agricultural uses, but a portion of the project site could remain vacant and retain its status as Prime Farmland. It should be noted that the industrial General Plan land use designation and zoning would remain in effect. As with the No Project Alternative, it is likely that the land would eventually be developed with industrial uses. In a similar way, project impacts related to air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise and vibration, and tribal cultural resources would all remain, but the severity of the impact and extent of mitigation would be reduced compared to the project. As with the project, each of these impacts would be anticipated to be less-than-significant with mitigation.

Alternative 2 would require a maximum of 25 full-time employees split between night and day shifts. As discussed in **Section 3.17, Transportation,** the ITE Trip Generation manual does not include trip rates per employee for the data center land use. However, according to the ITE manual, land uses such as light industrial, industrial park, manufacturing, and general office building generate daily trips ranging from 2.51 to 3.33 daily trips per employee (average of approximately 3 daily trips per employee). Additionally, based on ITE trip generation rates for general office land use (ITE Land Use Code #710), 30 office employees would generate approximately 100 daily trips.

Conservatively assuming that each of the 25 data center employees under Alternative 2 would generate up to four daily trips to/from the project site (one each at the beginning and end of their work shift and one outbound and one inbound during their work shift) calculates to approximately 100 daily trips generated by project employees.

Since the City of Gilroy does not currently have adopted VMT policies and impact criteria, the determination of project impacts on VMT must rely on the OPR's CEQA guidelines, which state that a project that generates fewer than 110 daily trips generally may be assumed to result in a less-than-significant impact on VMT. This threshold is based on trip generation expected to be generated by

10,000 square feet of office space. Based on OPR's small project screening threshold, Alternative 2 would have a less-than-significant impact on VMT and, no mitigation would be required.

Alternative 2 would achieve most of the project objectives; however, at half the size and capacity of the project, it would not be large enough to meet projected customer demand. The objective regarding phased construction would become moot, given the reduced size of Alternative 2.

Conclusion: Alternative 2 would meet most of the project objectives, but would not be capable of meeting total projected demand over the lifetime of the project. Reductions in development would reduce the severity of most of the impacts identified for the project, and would eliminate **Impact TRA-1.**

7.4.3 Alternative 3: Reduced Footprint Alternative

Under Alternative 3, the Buildings 1 and 2 would be reconfigured as separate floors of a two-story data center building, located on the site of the proposed Building 1. The new loop road would only surround a single building instead of two. All other improvements proposed as part of the project would remain in a similar configuration to that shown in **Figure 2-3**. The two-story data center building would be constructed in its entirety during Phase I. Only the Phase II BP facility would be constructed during Phase II.

With the configuration under Alternative 3, the total lot coverage of the project would be reduced by approximately 218,000 square feet. As with Alternative 2, Alternative 3 would still result in impacts related to agricultural land, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise and vibration, and tribal cultural resources. However, the severity of these impacts and extent of mitigation would be reduced compared to the project. As with the project, most of these impacts would be anticipated to be less-than-significant with mitigation. However, because the same number of employees and visitors would be anticipated for Alternative 3 and the project, the significant and unavoidable VMT impact would remain.

Alternative 3 would meet all of the project objectives, but would not meet the objective regarding project phasing to the same extent as the project given that both floors of the two-story data center building would need to be constructed during Phase I.

Conclusion: Alternative 3 would meet all of the project objectives and would reduce the severity of most impacts, compared to the project. Similar mitigation would be required to reduce these impacts to a less than significant level. Alternative 3 would result in the same significant unavoidable VMT impact as the project.

7.4.4 Summary of Alternatives to the Project

A comparison of alternatives selected for further consideration based upon whether they avoid or substantially lessen the significant environmental effects outlined of the project are provided in **Table 7-1**. Where the Alternatives would diverge from the findings for the project, these determinations are shown in **bold** type, and a brief rationale is provided.

Table 7-1 Comparison of Environmental Impacts for Alternatives to the Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
Aesthetics				
Have a substantial adverse effect on a scenic vista?	Less than Significant	Same as Project	Same as Project	Same as Project
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact	Same as Project	Same as Project	Same as Project
Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the project site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than Significant	Same as Project	Same as Project	Same as Project
Have a substantial adverse effect on a scenic vista or degrade the existing visual character in the Hecker Pass Specific Plan Area or the hillside areas?	No Impact	Same as Project	Same as Project	Same as Project
Substantially damage scenic resources viewed from Hecker Pass Highway or Pacheco Pass Highway?	No Impact	Same as Project	Same as Project	Same as Project
Substantially damage scenic resources (farmland and	Less than Significant	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
surrounding hills) viewed from Highway 101?				
Except as provided in Public Resources Code Section 21099, result in unattractive entrances (including lack of sufficiently landscaped entrances with landscaped medians, indicating civic pride and a concern for civic beauty) at the principal gateways to the City (north and south Monterey Street, Highway 152/ Pacheco Pass, north and south Santa Teresa Boulevard, and at the Highway 101 interchanges at Masten, Buena Vista, Leavesley, and Tenth Street)?	No Impact	Same as Project	Same as Project	Same as Project
Except as provided in Public Resources Code Section 21099, include or require a wall or fence higher than seven feet measured from the finished grade on the higher side of the fence at the property line, or as allowed by the Gilroy Zoning Ordinance, Section 30.34.	Less than Significant	Same as Project	Same as Project	Same as Project
Agricultural Resources				
Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Significant & Unavoidable	Same as Project	Same as Project	Same as Project
Would the project conflict with existing zoning for	No Impact	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
agricultural use, or a Williamson Act contract?				
Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timerland Production (as defined by Government Code Section 51104(g))?	No Impact	Same as Project	Same as Project	Same as Project
Would the project result in the loss of forest land or conversion of forest land to non-forest use?	No Impact	Same as Project	Same as Project	Same as Project
Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Less than Significant	Same as Project	Same as Project	Same as Project
Air Quality				
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less than Significant	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project result in other emissions such as those leading to odors adversely affecting a substantial number of people?	Less than Significant	Same as Project	Same as Project	Same as Project
Biological Resources				
Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project
Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project
Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact	Same as Project	Same as Project	Same as Project
Cultural Resources				
Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	No Impact	Same as Project	Same as Project	Same as Project
Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project
Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project
Energy				

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than Significant	Same as Project	Same as Project	Same as Project
Geology and Soils				
Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: ai) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. aii) Strong seismic ground shaking? aiii) Seismic-related ground failure, including liquefaction? aiv) Landslides	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project
Would the project result in substantial soil erosion or the loss of topsoil?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project be located on a geologic unit or soil that	Less than Significant	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project
Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No Impact	Same as Project	Same as Project	Same as Project
Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project
Greenhouse Gas Emissions				
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant	**Greater than Project** (due to larger increases in overall VMT for permitted industrial uses)	**Less than Project** (fewer construction and operational emissions due to smaller size)	Same as Project
Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the	Less than Significant	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
emissions of greenhouse gases?				
Hazards and Hazardous Materials				
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project
Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	No Impact	Same as Project	Same as Project	Same as Project
Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project
For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or	No Impact	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
excessive noise for people residing or working in the project area?				
Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than Significant with Mitigation	**Less than Project** (this impact would not occur under Alternative 1 because BESS and BP facilities would not be required at the same scale).	Same as Project	Same as Project
Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less than Significant	Same as Project	Same as Project	Same as Project
Hydrology and Water Quality				
Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project substantially alter the existing drainage pattern of the	Less than Significant	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
project site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: ci) Result in substantial erosion or siltation on- or off-site? cii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? ciii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? civ) Impede or redirect flood flows?	with Mitigation			
Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact	Same as Project	Same as Project	Same as Project
Place housing within a 100-year flood hazard area as mapped on Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	Less than Significant	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	Less than Significant	Same as Project	Same as Project	Same as Project
Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	Less than Significant	Same as Project	Same as Project	Same as Project
Land Use and Planning				
Would the project physically divide an established community?	No Impact	Same as Project	Same as Project	Same as Project
Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact	Same as Project	Same as Project	Same as Project
Mineral Resources				
Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? or Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact	Same as Project	Same as Project	Same as Project
Noise and Vibration				
Would the project result in generation of a substantial	Less than Significant	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	with Mitigation			
Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant	Same as Project	Same as Project	Same as Project
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact	Same as Project	Same as Project	Same as Project
Population and Housing				
Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact	Same as Project	Same as Project	Same as Project
Public Services				

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire Protection; Police;	Less than Significant	Same as Project	Same as Project	Same as Project
Schools; Parks; or Other Public Facilities.	No Impact	Same as Project	Same as Project	Same as Project
Recreation				
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than Significant	Same as Project	Same as Project	Same as Project
Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Less than Significant	Same as Project	Same as Project	Same as Project
Transportation				

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	**Alternative 2: Reduced Development**	**Alternative 3: Reduced Footprint**
Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than Significant Impact	Same as Project	Same as Project	Same as Project
Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Significant & Unavoidable	**Greater than Project** (due to 10x higher total VMT for permitted industrial uses)	**Less than Project** (would be under VTA's screening threshold given that reduced size would only require 25 employees)	Same as Project
Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than Significant Impact	Same as Project	Same as Project	Same as Project
Would the project result in inadequate emergency access?	Less than Significant Impact	Same as Project	Same as Project	Same as Project
Tribal Cultural Resources				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Less than Significant with Mitigation	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native America Tribe.				
Utilities and Service Systems				
Would the project require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during	Less than Significant	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
normal, dry and multiple dry years?				
Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant	Same as Project	Same as Project	Same as Project
Would the project comply with federal, state, and local management and reduction	Less than Significant	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
statutes and regulations related to solid waste?				
Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Less than Significant	Same as Project	Same as Project	Same as Project
Wildfire				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: i) Substantially impair an adopted emergency response plan or emergency evacuation plan? ii) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? iii) Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? iv) expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope	No Impact	Same as Project	Same as Project	Same as Project

Significant Impacts of the Project	Project	Alternatives		
		Alternative 1: No Project	Alternative 2: Reduced Development	Alternative 3: Reduced Footprint
instability, or drainage changes?				

7.5 Environmentally Superior Alternative

CEQA requires the identification of an environmentally superior project alternative. The environmentally superior alternative must be an alternative to the project that reduces some of the environmental impacts, regardless of the financial costs associated with this alternative. Identification of the environmentally superior alternative is an informal procedure and the alternative identified as the environmentally superior alternative may not be that which best meets the goals or needs of a project. Additionally, if the No Project Alternative is determined to reduce most impacts, CEQA requires that the EIR identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e]).

Given the comparative analysis shown in **Section 7.4.4, Alternative 2: Reduced Project Alternative**, would be the environmentally superior alternative because it would achieve most of the objectives of the project while eliminating the significant unavoidable VMT impact (**Impact TRA-1**). However, at half the size of the project, Alternative 2 would not meet objective of providing enough capacity to meet projected demand.

8. LEAD AGENCY AND CONSULTANTS

8.1 Lead Agency

City of Gilroy, Community Development Department

Sharon Goei, Community Development Director

Gloria Sciara, Senior Planner

Monica Sendejas, Management Analyst

Jonathan Crick, Deputy Fire Marshal

Cindy McCormick, Planning Manager

8.2 Consultants

Circlepoint

Brianna Bohonok, Principal in Charge

Andrew Metzger, Project Manager

Matthew Moore, Project Manager

Arun Bird, Senior Associate

Krysten McCue, Senior Associate

Karla Nayakarathne, Associate

Cristina Lefemine, Assistant

Berliner Cohen LLP

Andrew Faber

ERM

Ariana Jensen, Biologist

Michele Barlow, Biologist

Kimley-Horn

Miles Johnson, Engineer

Katherine Naegele, Arborist

Hexagon Transportation Consultants

Gicela Del Rio, Senior Associate

Schaaf & Wheeler

Charles Anderson, President

Trinity Consultants

Emily Wen, Senior Consultant

Tiffany Wang, Senior Consultant

9. REFERENCES

Association of Bay Area Governments (ABAG). 2020. *Housing Element Law – Changes from 1969 to Present.* Available at https://abag.ca.gov/sites/default/files/rhna_background.pdf. Accessed January 2023.

Bay Area Air Quality Management District (BAAQMD). 2017a. *Final 2017 Clean Air Plan, Spare the Air, Cool the Climate (2017 Plan)*. Adopted April 19, 2017. Available at https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-cleanair- plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed November 2022.

BAAQMD, 2017b. *CEQA Air Quality Guidelines*. Adopted May 2017. Available at http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed March 2022.

BAAQMD, 2017c. *Air Quality Standards and Attainment Status*. January 5, 2017. Available at https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainmentstatus. Accessed March 2022.

BAAQMD. 2020. *BAAQMD BACT Guideline, IC Engine-Compression Ignition: Stationary Emergency, non-Agricultural, non-direct drive fire pump, ≥1000 bhp Output, Document 96.1.5, Revision 0*. December 22, 2020. Available at https://www.baaqmd.gov/~/media/files/engineering/bact-tbactworkshop/combustion/96-1-5.pdf?la=en. Accessed March 2022.

BAAQMD. 202. *Chapter 6, Project-Level Climate Impacts*. Available at https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-6-project-climate-impacts_final-pdf.pdf?la=en. Accessed September 2023.

California Air Resources Board (CARB). 2000a. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October 2000. Available at https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/rrpfinal.pdf. Accessed March 2022.

California Air Resources Board (CARB). 2000b. *Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. October 2000*. Available at https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/rmgfinal.pdf?msclkid=116f9f7bb05411ecbd646d0d6a38b2cf. Accessed November 2022.

California Air Resources Board (CARB). 2022. *Overview: Diesel Exhaust and Health*. Available: https://www.arb.ca.gov/research/diesel/diesel-health.htm. Accessed November 2022.

California Building Standards Commission (CBSC). 2022. *California Building Standards Code*. Available: https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo. Accessed November 2022.

California Department of Conservation (DOC). 2022a. *Farmland Mapping and Monitoring Program*. Available: https://maps.conservation.ca.gov/agriculture/. Accessed November 2022.

California Department of Conservation (DOC). 2022b. *Williamson Act*. Available at http://www.conservation.ca.gov/dlrp/lca. Accessed November 2022.

California Department of Forestry and Fire Protection (CAL FIRE). 2022a. *CAL FIRE Santa Clara Unit Strategic Fire Plan*. May 8, 2022. Available at https://osfm.fire.ca.gov/media/hjndvue2/2022-santa-clara-contra-costa-alameda-west-stanislaus-west-sann-joaquin-unit-fire-plan.pdf. Accessed November 2022. Accessed November 2022. Accessed November 2022.

California Department of Forestry and Fire Protection (CAL FIRE). 2022b. *Fire Hazard Severity Zone Viewer.* Available at https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/fhsz/fire-hazard-severity-zones-maps/. Accessed November 2022.

California Department of Forestry and Fire Protection (CAL FIRE). 2022c. *Fire and Resource Assessment Program*. Available http://frap.fire.ca.gov/. Accessed November 2022.

California Department of Tax and Fee Administration. *Fuel Taxes Statistics & Reports*. Available at https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm. Accessed December 2022.

California Department of Transportation (Caltrans). 2022. *California State Scenic Highway System Map*. Available at https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed November 2022.

California Department of Water Resources (DWR). 2022. *Division of Safety Dams*. Available at https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams#:%7E:text=Since%20August%2014%2C%201929%2C%20the,Safety%20of%20Dams%20(DSOD). Accessed December 2022.

California Energy Commission (CEC). 2019. *2019 Build Energy Efficiency Standards*. Available at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency. Accessed November 2022.

California Energy Commission (CEC). 2022a. *Electricity Consumption by County*. Available at https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed December 2022

California Energy Commission (CEC). 2022b. *In-State Electric Generation by Fuel Type (GWh)*. Available at https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/electric-generation-capacity-and-energy. Accessed December 2022.

California Energy Commission (CEC). 2022c. *Supply and Demand of Natural Gas in California*. Available: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california. Accessed December 2022.

California Environmental Protection Agency (CalEPA). 2022. *Cortese List Data Resources*. Available: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed November 2022.

Central Coast Regional Water Quality Control Board (CCRWQB). 2023. *Welcome to the Irrigated Lands Program*. Available at: https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ilp/. Accessed November 2023.

City of Gilroy. 2004a. *City of Gilroy Storm Drainage System Master Plan*. Available: https://www.cityofgilroy.org/DocumentCenter/View/5256/Storm-Drain-Master-Plan---May-2004. Accessed December 2022.

City of Gilroy. 2004b. *City of Gilroy Water System Master Plan*. Available: https://cityofgilroy.org/DocumentCenter/View/5257/Water-System-Master-Plan---May-2004. Accessed January 2023.

City of Gilroy, City of Morgan Hill, and Santa Clara County. 2015. *Stormwater Management Guidance Manual for Low Impact Development & Post-Construction Requirements*. June 2015. Available at https://stgenpln.blob.core.windows.net/document/Stormwater_GuidanceManual_PostConstructionRequirements.pdf. Accessed December 2022.

City of Gilroy. 2015. *Hecker Pass Specific Plan, Gilroy, California.* Available at: https://www.cityofgilroy.org/277/Hecker-Pass-Specific-Plan. Accessed December 2022.City of Gilroy. 2016a. *2015 Urban Water Management Plan*. May 2016. Available at https://www.cityofgilroy.org/DocumentCenter/View/5908/2015-UWMP?bidId=. Accessed November 2022.

City of Gilroy. 2016b. *City of Gilroy – Agricultural Mitigation Policy*. Adopted May 2004. Revised January 2016. Available at: https://www.cityofgilroy.org/DocumentCenter/View/3050/Agriculture-Mitigation-Policy. Accessed: January 2023.

City of Gilroy. 2018. Annual Water Quality Report Available at http://www.ci.gilroy.ca.us/Archive/ViewFile/Item/576. Accessed December 2022.

City of Gilroy. 2020a. *City of Gilroy 2040 General Plan*. November 2, 2020. Available at https://www.cityofgilroy.org/DocumentCenter/View/11309/Gilroy-2040-General-Plan-39-MB?bidId=. Accessed November 2022.

City of Gilroy. 2020b. *City of General Plan EIR*. June 22, 2020. Available at https://www.cityofgilroy.org/DocumentCenter/View/11308/Draft-EIR---Gilroy-2040-General-Plan-?bidId=. Accessed December 2022.

City of Gilroy Police Department. 2022. "*Administration*". Available at https://www.cityofgilroy.org/152/Administration. Accessed November 23, 2022.

Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. Available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed December 2022.

Gilroy Unified School District. 2022. "*About Us and Contact Us*". Available at https://www.gilroyunified.org/about-us-and-contact/our-schools. Accessed November 23, 2022.

Governor's Office and Planning and Research (OPR). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Available at https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed June 2023.

Metropolitan Transportation Commission and Association of Bay Area Governments (MTC and ABAG). 2021. *Plan Bay Area 2050.* October 2021. Available at https://www.planbayarea.org/finalplan2050.

Sarah Fonseca, Native American Heritage Commission (NAHC). 2020. Sacred Lands Search Result Memo. November 2020.

Office of Historic Recreation Department of Parks and Recreation (OHP). 2001. *California Office of Historic Preservation Technical Assistance Series #1: California Environmental Quality Act (CEQA) and Historical Resources*. Accessed November 2022.

Office of Historic Recreation Department of Parks and Recreation (OHP). 2011. *California Office of Historic Preservation Technical Assistance Series #6: California Register and National Register, A Comparison*. Available at http://www.parks.ca.gov/pages/1069/files/03ca%20regq&a_090606.pdf. Accessed November 2022.

Pacific Gas and Electric Company (PG&E). 2022. *PG&E Energy Data Request – Public Data Sets.* Available at https://pge-energydatarequest.com/public_datasets. Accessed January 2023.

Santa Clara County. 1994. *Santa Clara County General Plan, 1995-2010*. Available at https://plandev.sccgov.org/ordinances-codes/general-plan. Accessed November 2022. Accessed November 2022.

Santa Clara County. 1995. *Santa Clara County Trails Master Plan Update*. November 14, 1995. Available at: https://parks.sccgov.org/sites/g/files/exjcpb961/files/documents/Countywide_Trails_Master_Plan%20SEARCHABLEOCR.pdf. Accessed November 2022.

Santa Clara County. 2006. Comprehensive Land Use Plan South County Airport. Available at https://countyairports.sccgov.org/sites/g/files/exjcpb686/files/E16_Masterplan-complete.pdf. Accessed January 2023.

Santa Clara County. 2015. *The Health Element of the Santa Clara County General Plan*. August 25, 2015. Available at https://www.sccgov.org/sites/opa/nr/Documents/HealthElement_20150825_Adopted_Final.pdf. Accessed November 2022. Accessed November 2022.

Santa Clara County. 2016. Five-Year CIWMP/RAIWMP Review Report. June 2016. Available at: https://reducewaste.sccgov.org/sites/g/files/exjcpb691/files/SCC-2nd-5yr-rpt-2006-rev4.pdf. Accessed November 2022. Accessed November 2022.

Santa Clara County. 2018. *Santa Clara Valley Agricultural Plan*. Available at https://stgenpln.blob.core.windows.net/document/SCV_ActionPlan.pdf. Accessed December 2022.

Santa Clara County. 2020. *Santa Clara County Geologic Hazard Zones*. Available at https://www.sccgov.org/sites/dpd/OrdinancesCodes/GeoHazards/Pages/GeoMaps.aspx. Accessed November 2022.

Santa Clara Valley Transportation Authority (VTA). 2021. *2021 Congestion Management Program.* December 2021. Available at https://www.vta.org/sites/default/files/2022-01/2021CMPDocumentV2_Reduced.pdf. Accessed November 2022.

Santa Clara Valley Water District/South County Regional Wastewater Authority (Valley Water/SCRWA). 2004. *South County Recycled Water Master Plan*. October 2004. Available: https://www.cityofgilroy.org/DocumentCenter/View/672/South-County-Recycled-Water-Master-Plan-PDF. Accessed December 2022.

Santa Clara Valley Water District (Valley Water). 2021a. *Water Year 2020 Report for the Santa Clara and Llagas Subbasins*. Available: https://s3.us-west-2.amazonaws.com/assets.valleywater.org/Water%20Year%202020%20Report%20for%20the%20Santa%20Clara%20and%20Llagas%20Subbasins.pdf. March 2021. Accessed December 2022.

Santa Clara Valley Water District (Valley Water). 2021b. *Groundwater Management Plan for the Santa Clara and Llagas Subbasins*. Available: https://s3.us-west-2.amazonaws.com/assets.valleywater.org/2021_GWMP_web_version.pdf. Accessed January 2023.

United States Census Bureau. 2022. *Quick Facts: Gilroy California*. Available: https://www.census.gov/quickfacts/gilroycitycalifornia. Accessed November 2022.

United States Department of Energy (DOE). 2022. *Energy Independence & Security Act of 2007*. Available: http://www.afdc.energy.gov/laws/eisa. Accessed December 2022.

United States Energy Information Administration. 2021. *California End-use energy consumption 2020, estimates*. Available at https://www.eia.gov/beta/states/states/ca/overview. Accessed November 2022.

United States Environmental Protection Agency (USEPA). 2020. *The 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975*. January 2021. Available: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010UBX.pdf. Accessed December 2022.

United States Environmental Protection Agency (USEPA). 2022a. *Summary of the Resource Conservation and Recovery Act*. Available at https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act. Accessed November 2022.

United States Environmental Protection Agency (USEPA). 2022b. *Superfund: CERCLA Overview*. Available at https://www.epa.gov/superfund/superfund-cercla-overview. Accessed November 2022.

United States Geologic Survey (USGS). 2022a. *U.S. Landslide Inventory*. Available at https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d. Accessed November 2022.

United State Geologic Survey (USGS). 2022b. *U.S. Quaternary Faults.* Available at https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf. Accessed November 2022.

United State Government Publishing Office (GPO). 2007. *Energy Independence & Security Act of 2007*. Available at http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf. Accessed December 2022.

10. ACRONYMS AND ABBREVIATIONS

Acronym or Abbreviation	Definition
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ATCM	Airborne Toxic Control Measures
APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
BACT	best available control technology
BESS	Battery Energy Storage Systems
bgs	Below ground surface
BMPs	Best Management Practices
BP	Backup power
Btu	British Thermal Unit
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CBC	California Building Standards Code
CBSC	California Building Standards Commission
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
Cal EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CAL/OSHA	Division of Occupational Safety and Health
CCR	California Code of Regulations

CCRWQCB	Central Coast Regional Water Quality Control Board
CDTFA	California Department of Tax Fee Administration
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFCs	Chlorofluorocarbons
CH_4	Methane
CHRIS	California Historical Resources Information System
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
dB	Decibels
DEIR	Draft EIR
DNL	Day-Night Level
DOC	Department of Conservation
DOE	Department of Energy
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EIR	Environmental Impact Report
EO	Executive Order
EPA	US Environmental Protection Agency

ESLs	Environmental Screening Levels
FAR	Floor Area Ratio
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
General Plan	Envision 2040 San José General Plan
GHG	Greenhouse Gas
GFD	Gilroy Fire Department
GUSD	Gilroy Unified School District
GPD	Gilroy Police Department
GWh	Gigawatt Hours
HAPs	Hazardous Air Pollutants
HRA	Health Risk Assessment
ITE	Institute of Transportation Engineers
IWMP	Integrated Waste Management Plan
LID	Low Impact Development
LOS	Levels of Service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MEIR	Maximally Exposed Individual Resident
MEIW	Maximally Exposed Individual Worker
MEISR	Maximally Exposed Individual Sensitive Receptor
mgd	Million Gallons per Day
mpg	Miles per Gallon
MRZ	Mineral Resource Zone
MTC	Metropolitan Transportation Commission

MW	Mega Watt
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NHPA	National Historic Preservation Act
NO_2	Nitrogen Dioxide
NO_x	Oxides of Nitrogen
NOI	Notice of Intent
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
O_3	Ozone
OHP	Office of Historic Recreation Department of Parks and Recreation
OITC	Outdoor/Indoor Transmission Class
Pb	Lead
PG&E	Pacific Gas & Electric
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
PM_{10}	Respirable Particulate Matter
POC	precursor organic compounds
PPV	Peak Particle Velocity
PSD	Prevention of Significant Deterioration
PUE	Power Utilization Efficiency
RCRA	Resource Conservation and Recovery Act
RHNA	Regional Housing Need Allocation

ROG	Reactive Organic Gases
ROW	Right-of-way
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCRWA	South County Regional Wastewater Authority
SCS	Sustainable Communities Strategy
SFBAAB	San Francisco Bay Area Air Basin
SFHA	Special Flood Hazard Areas
SHMA	Seismic Hazards Mapping Act
SIP	State Implementation Plan
SMARA	Surface Mining and Reclamation Act of 1975
SO_2	Sulfur Dioxide
SO_x	sulfur oxides
SR	State Route
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TCR	Tribal Cultural Resources
TDM	Traffic Demand Management
UWMP	urban water management plan
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VTA	Santa Clara Valley Transportation Authority
ZNE	Zero Net Carbon Emissions

This page is intentionally left blank.