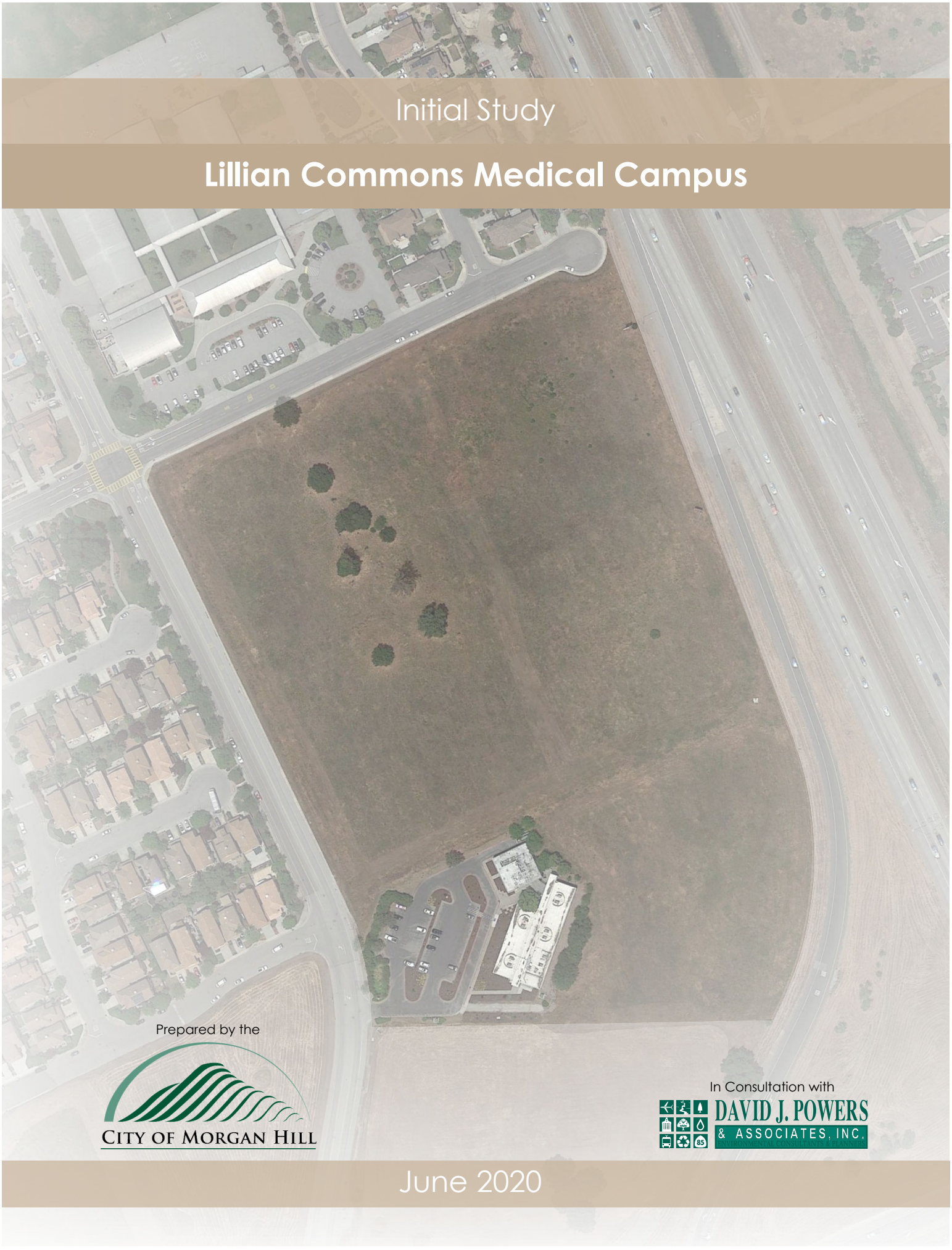
Initial Study

Lillian Commons Medical Campus



Prepared by the

CITY OF MORGAN HILL

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

June 2020

CITY OF MORGAN HILL

COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING DIVISION

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DRAFT
MITIGATED NEGATIVE DECLARATION

I. DESCRIPTION OF PROJECT:

Application #s: GPA2019-0005, ZA2019-0016, SD2019-0007 and EA2019-0023

APN: 817-09-041, 817-09-039, and 817-09-040

Project Title: Lillian Commons Medical Campus Project

Project Location: The 19.67-acre project site is located at the southeast corner of Juan Hernandez Drive and Barrett Avenue in the City of Morgan Hill.

Project Proponent: Lillian Commons, LLC, 782 Sleeper Avenue, Mountain View, CA 94040

Project Description: The project proposes to construct a 4,500 square foot urgent care facility, 10,000 square foot medial building, 100,000 square foot medical office/hospital with 55 beds, three-story parking garages with 500 spaces, 10,000 square foot commercial retail/restaurant building, and a 200-unit multi-family residential development. The project also includes a request for a General Plan Amendment (GPA), Zoning Amendment, Planned Development Master Plan, and Tentative Parcel Map.

II. DETERMINATION

In accordance with the City of Morgan Hill procedures for compliance with the California Environmental Quality Act (CEQA), the City has completed an Initial Study to determine whether the proposed project may have a significant adverse effect on the environment. On the basis of that study, the City makes the following determination:

- Although the project, as proposed, could have had a significant effect on the environment, there will not be a significant effect in this case because mitigation measures are included in the project, and, therefore, this **MITIGATED NEGATIVE DECLARATION** has been prepared.

III. CONDITIONS (Mitigation and Standard Conditions):

A. Air Quality

Standard Condition AIR-1: The following measures shall be implemented during all phases of construction to control dust and exhaust at the project site:

- 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.
- Replant vegetation in disturbed areas as soon as possible after completion of construction.
- 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, Section 2485 of the California Code of Regulations [CCR]). 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. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Impact AIR-3: The project would result in a significant cancer risk to the maximally exposed individual due to the project's construction TAC emissions.

Mitigation Measures:

MM AIR-3.1: The following mitigation measure shall be implemented during all phases of construction to minimize emissions:

- The project applicant shall develop a plan demonstrating that the off-road equipment used onsite to construct the project would achieve a fleet-wide average 70-percent reduction in DPM exhaust emissions or greater. One feasible plan to achieve this reduction would include the following:
    - All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall meet U.S. EPA Tier 4 particulate matter emissions standards. Alternatively, diesel-powered equipment that meets U.S.EPA Tier 2 or 3 engines and include CARB-certified Level 3 Diesel Particulate Filters (or equivalent) would meet this requirement, as would the use of equipment that is electrically powered or uses non-diesel fuels.

B. Biological Resources

Impact BIO-1: Construction activities on the project site could result in the loss of raptor and/or migratory bird eggs or nestlings, either directly by destroying an active nest or indirectly by disturbing and causing the abandonment of an active nest.

Mitigation Measures:

MM BIO-1.1: Construction shall be scheduled to avoid the nesting season to the extent feasible. If construction can be scheduled to occur between September 1st and January 31st (inclusive) to avoid the raptor nesting season, no impacts will be expected. If construction will take place between February 1st and August 31st, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. Surveys shall be completed within 30 days of the on-set of site clearing or construction activities. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, buildings) onsite trees as well as all trees within 250 feet of the site for nests.

MM BIO-1.2: If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist shall determine the extent of a disturbance-free buffer zone to be established around the nest (typically 250 feet for raptors and 50-100 feet for other species) that shall remain off limits to construction until the nesting season is over, to ensure that no nests of species protected by the Migratory Bird Treaty Act and California Fish and Wildlife Code will be disturbed during project implementation. A report indicating the result of the survey and any designated buffer zones shall be submitted to the satisfaction of the Development Services Director prior to issuance of a grading permit.

Impact BIO-5: Construction activities on the project site could damage City-protected trees on and adjacent to the site.

Mitigation Measures:

MM BIO-5.1: To the extent feasible, activities shall avoid impacts to any protected trees. Avoidance is considered to be completely avoiding any work or staging under the dripline of trees. The boundary of the designated avoidance buffer shall be flagged or fenced prior to initial ground disturbance. If complete avoidance is not feasible, BIO MM-5.2 shall be implemented.

MM BIO-5.2: The project proponent shall comply with local ordinances and submit permit applications for removal, trimming, damage, or relocation of all trees covered by the City ordinance. Any trees to be removed shall require replacement at a two-to-one ratio on a comparable ratio of size. The replacement trees shall be planted on site to the extent feasible and the project proponent shall comply with all other replacement requirements imposed by the City.

C. Cultural Resources

Standard Condition CUL-1: In the event of the unintentional discovery of undocumented human remains or significant historic or archaeological materials during construction, the following policies and procedures for treatment and disposition measures shall be implemented:

- If human remains are encountered, they shall be treated with dignity and respect as due to them. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
    - Remains shall not be held by human hands. Surgical gloves shall be worn if remains need to be handled.
    - Surgical mask shall also be worn to prevent exposure to pathogens that may be associated with the remains.
- In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped.[1] Ground-disturbing project activities may continue in other areas that are outside the discovery location.
- An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the Contractor Foreman or authorized representative, or party who made the discovery, or if on-site at the time or discovery, by the Monitoring Archaeologist (typically 25 to 50 foot buffer for a single burial or archaeological find).
- The discovery location shall be secured as directed by the City if considered prudent to avoid further disturbances.
- The Contractor Foreman or authorized representative, or party who made the discovery shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
    - The City of Morgan Hill Development Services Director
    - The Contractor's Point(s) of Contact
    - The Coroner of the County of Santa Clara (if human remains found)
    - The Native American Heritage Commission (NAHC) in Sacramento
    - The Amah Mutsun Tribal Band
- The Coroner will have two working days to examine the human remains after being notified of the discovery. If the remains are Native American, the Coroner has 24 hours to notify the NAHC. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD) from the Amah Mutsun Tribal Band. (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)
- Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.

[1] Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, groundstone mortars and pestles), culturally altered ash-stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials, and historic structure remains such as stone-lined building foundations, wells or privy pits.

- Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the Amah Mutsun Tribal Band may be considered and carried out.
- If the MLD recommendation is rejected by the City of Morgan Hill, the parties will attempt to mediate the disagreement with the NAHC. If mediation fails, then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

D. Geology and Soils

Standard Condition GEO-1: To avoid or minimize potential damage from seismic shaking, the proposed development shall be built using standard engineering and seismic safety design techniques. Building design and construction at the 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 structural designs for the proposed development will account for repeatable horizontal ground accelerations. The report shall be reviewed and approved by the City of Morgan Hill Building Division prior to issuance of a building permit. The buildings shall be required to meet the requirements of applicable Building and Fire Codes, including the 2019 California Building Code Chapter 16, Section 1613, as adopted or updated by the City. The project shall be designed to withstand soil hazards identified on the site 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.

Standard Condition GEO-2 (Storm Drain System): Prior to final map approval or issuance of a grading permit the applicant shall complete the following to the satisfaction of the Director of Public Works.

1. Plan describing how material excavated during construction will be controlled to prevent this material from entering the storm drain system.
2. Water Pollution Control Drawings for Sediment and Erosion Control.

Standard Condition GEO-3 (NPDES Permit Conformance): As required by the State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, construction activity resulting in a land disturbance of one acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) package and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with Section A, B, and C of the General Permit prior to the commencement of soil disturbing activities. A NOI Receipt Letter assigning a Waste Discharger Identification number to the construction site will be issued after the State Water Resource Control Board (SWRCB) receives a complete NOI package (original signed NOI application, vicinity map, and permit fee); copies of the NOI Receipt Letter and SWPPP shall be forwarded to the Building and Public Works Department review. The SWPPP shall be made a part of the improvement plans (SWRCB NPDES General Permit CA000002).

E. Greenhouse Gas Emissions

Impact GHG-1: Operation of the proposed project would generate GHG emissions resulting in a cumulatively considerable contribution to global climate change.

Mitigation Measures:

MM GHG-1.1: The following mitigation measure would reduce GHG operational emissions to a less than significant level:

- The applicant shall develop a GHG reduction plan that includes the proper elements that would reduce emissions from project implementation and demonstrate that GHG emission from the project would be reduced by a sufficient amount to achieve the 2020 or 2030 standard, based on when the project would become operational. Elements of this plan may include, but would not be limited to, the following:
    - Installation of solar power systems or other renewable electric generating systems that provide electricity to power on-site equipment and possibly provide excess electric power;
    - Construct onsite or fund off-site carbon sequestration projects (such as a forestry or wetlands projects for which inventory and reporting protocols have been adopted). If the project develops an off-site project, it must be registered with the Climate Action Reserve or otherwise approved by the BAAQMD in order to be used to offset Project emissions;
    - Purchase of carbon credits to offset Project annual emissions. Carbon offset credits must be verified and registered with The Climate Registry, the Climate Action Reserve, or another source approved by the California Air Resources Board or BAAQMD. The preference for offset carbon credit purchases include those that can be achieved as follows: 1) within the City; 2) within the San Francisco Bay Area Air Basin; 3) within the State of California; then 4) elsewhere in the United States. Provisions of evidence of payments, and funding of an escrow-type account or endowment fund would be overseen by the City;
    - Develop and implement a transportation demand management (TDM) program to reduce mobile GHG emissions.

F. Hydrology and Water Quality

Standard Condition HYD-1: In accordance with the City of Morgan Hill Standard Conditions of Approval and the Construction General Permit, the following measures are included in the project to reduce construction-related water quality impacts to a less than significant level:

The following BMPs shall be implemented during project construction:

- Burlap bags filled with drain rock will be installed around storm drains to route sediment and other debris away from the drains.
- Earthmoving or other dust-producing activities will be suspended during periods of high winds.
- All exposed or disturbed soil surfaces will be watered at least twice daily to control dust.
- Stockpiles of soil or other materials that can be blown by the wind will be watered or covered.
- All trucks hauling soil, sand, and other loose materials will be covered and all trucks will be required to maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction site will be swept daily (with water sweepers).
- Vegetation in disturbed areas will be replanted as quickly as possible.

Standard Condition HYD-2: In accordance with the City of Morgan Hill Standard Conditions of Approval and the Construction General Permit, the following measures shall be included in the project to reduce construction-related water quality impacts to a less than significant level:

- As required by the State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, construction activity resulting in a land disturbance of one acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) package and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with Section A, B, and C of the General Permit prior to the commencement of soil disturbing activities. A NOI Receipt Letter assigning a Waste Discharger Identification number to the construction site will be issued after the State Water Resource Control Board (SWRCB) receives a complete NOI package (original signed NOI application, vicinity map, and permit fee); copies of the NOI Receipt Letter and SWPPP shall be forwarded to the Building and Land Development Engineering Divisions review. The SWPPP shall be made a part of the improvement plans. (SWRCB NPDES General Permit CA000002).

Standard Condition HYD-3: The Project Engineer shall provide a hydrology report demonstrating that post-development stormwater runoff peak flows discharged from the site do not exceed pre-project peak flows for the two (2) through 10-year storm events. Peak flow controls must also meet the flood control standards established by the Santa Clara County Drainage Manual.

G. Noise

Impact NOI-1: Project construction could result in excessive noise levels at nearby noise-sensitive receptors. **(Significant Impact)**

Mitigation Measures:

MM NOI-1.1: Develop a noise construction control plan including but not limited to the following construction best management control:

- Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds);

- Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools; and
- Stationary noise sources shall be located as far from noise-sensitive receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or include other measures.
- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receptor and if the barrier is constructed in a manner that eliminates any cracks or gaps.
- Unnecessary idling of internal combustion engines shall be strictly prohibited.
- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.
- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- Where feasible, temporary power service from local utility companies should be used instead of portable generators.
- Locate cranes as far from noise-sensitive receptors as possible.
- During final grading, substitute graders for bulldozers, where feasible. Wheeled heavy equipment are quieter than track equipment and should be used where feasible.
- Substitute nail guns for manual hammering, where feasible.
- Avoid the use of circular saws, miter/chop saws, and radial arm saws near the adjoining noise-sensitive receptors. Where feasible, shield saws with a solid screen with material having a minimum surface density of two pounds per square foot (e.g., such as 0.75-inch plywood).
- Maintain smooth vehicle pathways for trucks and equipment accessing the site, and avoid local residential neighborhoods as much as possible.
- During interior construction, the exterior windows facing noise-sensitive receptors should be closed.
- During interior construction, locate noise-generating equipment within the building to break the line-of-sight to the adjoining receptors.
- The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

MM NOI-1.2: A qualified acoustical consultant shall be retained to review mechanical equipment systems during final design of the proposed project. The consultant shall review selected equipment and determine

specific noise reduction measures necessary to reduce noise to comply with the City's noise level requirements. Prior to the issuance of building permits for the project, the emergency generator must be selected and approved by the City planning department. The generator shall include adequate noise suppressing features to reduce impacts on surrounding uses to meet the City's exterior and interior noise level requirements of 60 dBA.

H. Transportation

Impact TRN-1: The Tennant Avenue and Condit Road intersection is projected to operate at an unacceptable level of service (LOS F) and have peak-hour traffic volume levels that warrant installation of a traffic signal during PM peak-hour. **(Significant Impact)**

Mitigation Measures:

MM TRN-1.1: Improvements to mitigate the impact at this intersection consist of the implementation of a traffic signal. However, the decision to install a traffic signal is not be based solely on satisfying one traffic signal warrant. Instead, intersections that meet the peak-hour signal warrant shall be subject to further analysis before determining that a traffic signal is necessary. Thus, the project impact at this intersection shall be mitigated with payment of the traffic impact fee, as determined by City staff.

III. FINDING

The City of Morgan Hill Development Services Director hereby finds that the proposed project could have a significant effect on the environment; however, there would not be a significant effect in this case because mitigation measures summarized above and described in the Initial Study are included in the project.

Jennifer Carman, Director
Development Services Department
City of Morgan Hill

6-24-2020
Date

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SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Morgan Hill, as the Lead Agency, has prepared this Initial Study for the Lillian Commons/Morgan Hill Medical Campus Mixed Use Development project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City Morgan Hill, California.

The project proposal includes a request for a General Plan Amendment (GPA), Zoning Amendment, Planned Development Master Plan, and Tentative Parcel Map. Development of the site would include construction of the following: a 4,500 square foot urgent care facility; a 10,000 square foot medical building; a 100,000 square foot medical office/hospital with 55 beds; a three-story parking garage with 500 spaces; a 10,000 square foot commercial retail/restaurant building; and a maximum 200-unit multifamily residential development. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 30-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 30-day public review period should be sent to:

Adam Paszkowski
Principal Planner
City of Morgan Hill
Development Services Department
17575 Peak Avenue
Morgan Hill CA 95037
adam.paszowski@morganhillca.gov

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of Morgan Hill will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of Morgan Hill will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Lillian Commons/Morgan Hill Medical Campus Mixed Use Development

2.2 LEAD AGENCY CONTACT

Adam Paszkowski
Principal Planner
City of Morgan Hill
Development Services Department
17575 Peak Avenue
Morgan Hill CA 95037

2.3 PROJECT APPLICANT

Lillian Commons, LLC
782 Sleeper Avenue
Mountain View, CA 94040

2.4 PROJECT LOCATION

The project site is located on a 19.67-acre site at the southeast corner of Juan Hernandez Drive and Barrett Avenue in Morgan Hill.

2.5 ASSESSOR'S PARCEL NUMBER

817-09-041, 817-09-039, and 817-09-040

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

General Plan:	Commercial
Zoning:	Service Commercial

2.7 HABITAT PLAN DESIGNATION

Land Cover:	Grain, Row-crop, Hay and Pasture, Disked / Short Term Fallowed (17 acres) Urban-Suburban (2.42 acres)

2.8 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

- General Plan Amendment
- Zoning Amendment
- Planned Development Master Plan
- Tentative Parcel Map

SECTION 3.0 PROJECT DESCRIPTION

3.1 EXISTING CONDITIONS

The 19.67-acre project site is located at the southeast corner of the intersection of Juan Hernandez Drive and Barrett Avenue in the City of Morgan Hill. The project site consists of three existing parcels: two undeveloped adjoining parcels of land, Assessor's Parcel Number (APN) 817-09-041 (13.94 acres) and APN 817-09-039 (4.04 acres), and an existing 12,300 square foot medical office, 3,600 square foot surgical facility, and paved parking lot on APN 817-09-040 (1.69 acres).

With the exception of the two medical buildings and associated parking lot, the project site is largely undeveloped and is predominantly covered by grassland with trees located on the northern portion of the site and along the west property line near the existing medical office building. The site is bounded by Barrett Avenue, Barrett Elementary School and residential uses to the north, the U.S. Highway 101/Tennant Avenue southbound off-ramp to the east, vacant land to the south, and residential development to the west. Vehicular access to the site is provided by an existing driveway to Juan Hernandez Drive. Regional, vicinity, and aerial maps of the project site are shown in Figure 3.2-2, and Figure 3.2-3.

3.2 PROPOSED DEVELOPMENT

The proposed project includes a request for a General Plan Amendment (GPA), Zoning Amendment, Planned Development Master Plan, and Tentative Parcel Map.

The proposed development would include a 4,500 square foot urgent care facility[1], a 10,000 square foot medical building, a 100,000 square foot medical office/hospital with 55 beds, a three-story parking garage with 500 spaces, a 10,000 square foot commercial retail/restaurant building, and a maximum 200-unit multi-family residential development.

The hospital would not be an emergency type hospital, it would provide general healthcare services and would not require a frequent use of ambulances nor does it propose a helicopter pad.

The project would have up to three backup diesel generators[2] in the event of a power outage.

Figure 3.2-4 shows a site plan of the proposed development.

3.2.1 General Plan Amendment

The GPA requests a General Plan (GP) Land Use designation change from Commercial to Mixed-Use Flex to accommodate the proposed residential portion of the project.

[1] The 4,500 square foot urgent care facility would be constructed on a portion of the existing parking lot. A portion of the parking lot would be demolished as part of the project.

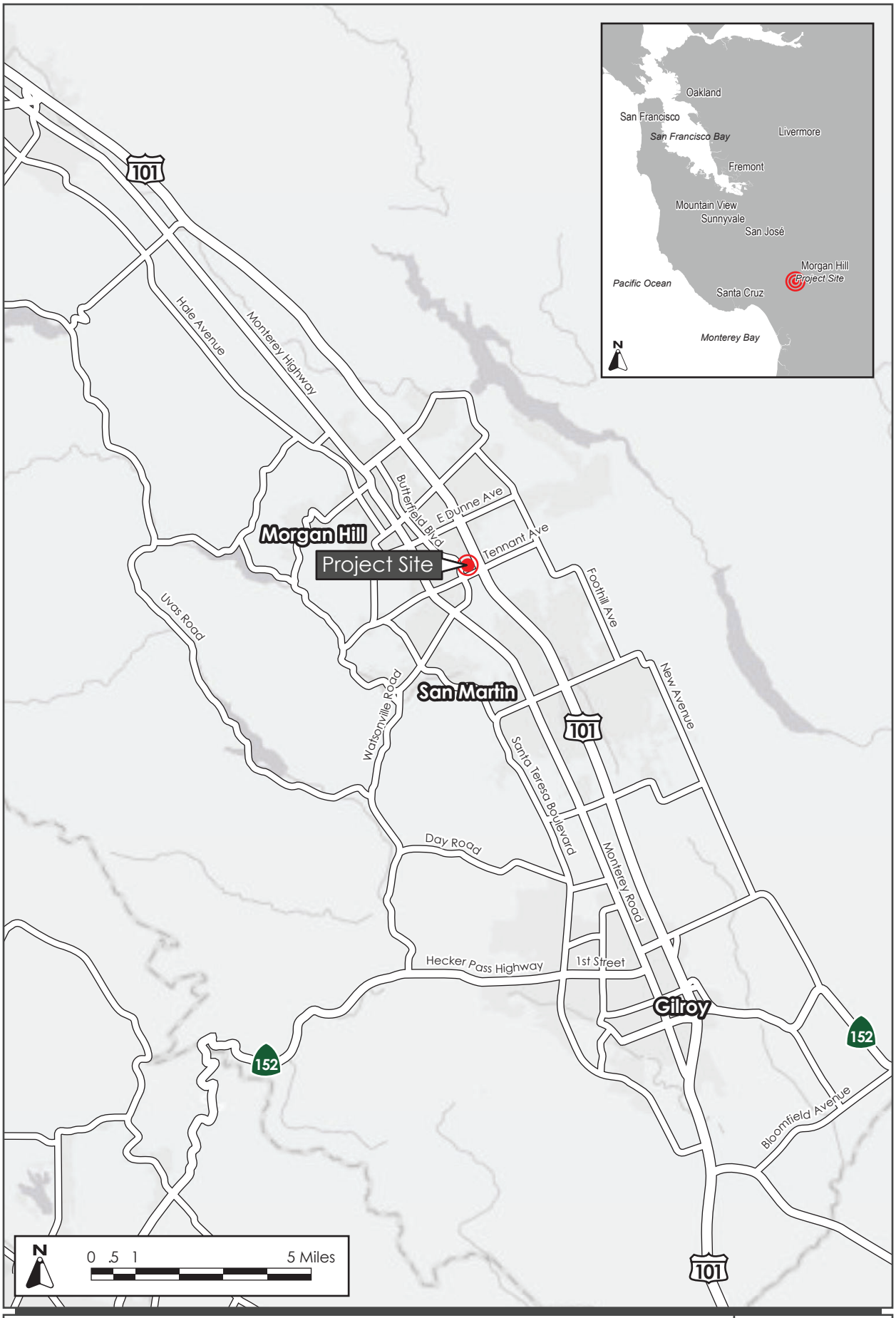
[2] The final locations and whether the project would install one or three generators have not yet been determined; therefore, a conservative analysis of three potential locations and sizes were evaluated, refer to Appendices A and D. The three generators could have approximate sizes of 100 kilowatts (134 horsepower), 150 kilowatts (201 horsepower), and 1,000 kilowatts (1,341 horsepower).

The project site is currently designated as Commercial, which allows for a wide range of retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers. The Commercial designation allows for a maximum floor area ratio (FAR) of 0.6.

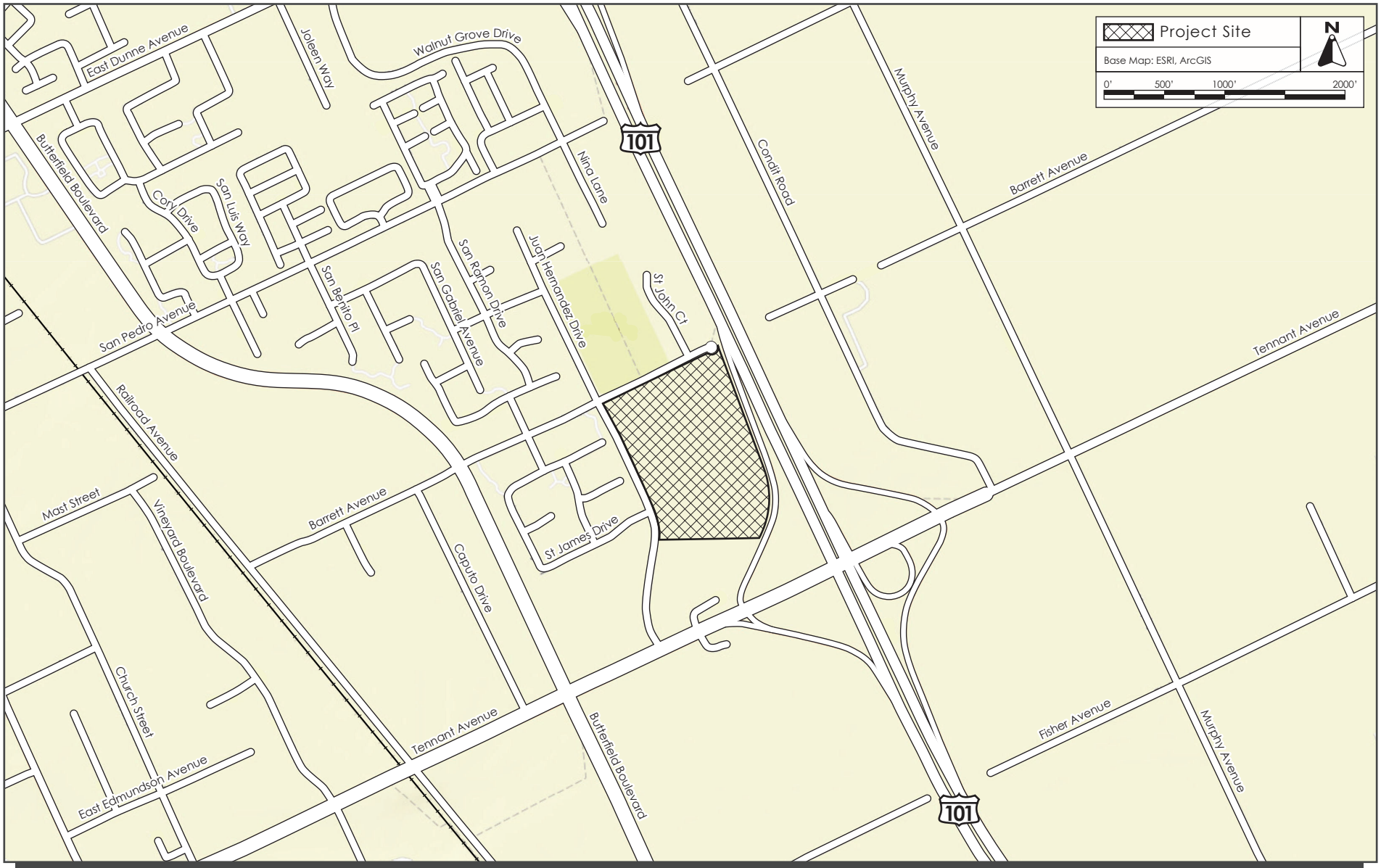
The Mixed-Use Flex designation allows for a mix of residential, commercial, and office uses applied either vertically or horizontally. The Mixed-Use Flex designation allows seven to 24 units per acre and a maximum FAR of 0.5.

3.2.2 Zoning Amendment

The Zoning Amendment requests to amend the zoning district from Service Commercial and Planned Development to Mixed-Use Flex with a Planned Development Combining District which provides land owners with enhanced flexibility to take advantage of unique site characteristics and develop projects that will provide public benefits to the community. A Planned Development Master Plan is required.

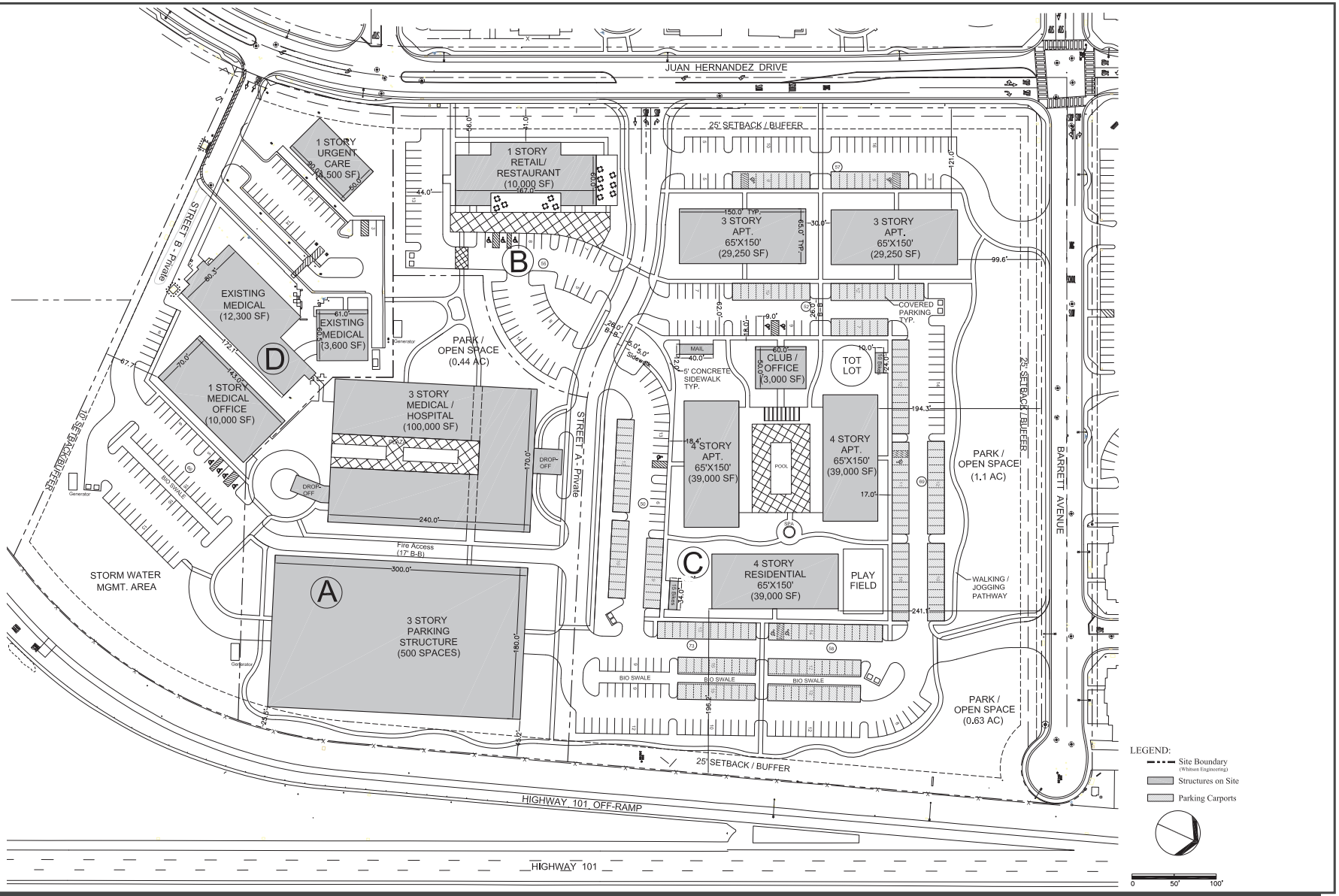


REGIONAL MAP | FIGURE 3.2-1



VICINITY MAP | FIGURE 3.2-2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 3.2-3



SITE PLAN | FIGURE 3.2-4

3.3 PROJECT COMPONENTS

3.3.1 Tentative Parcel Map

The project proposes to subdivide the project site into four parcels (identified as A, B, C and D). The proposed tentative parcel map is shown in Figure 3.3-1.

3.3.2 Building Heights

The four-story hospital building would have a maximum height of 55 feet. The three-story parking structure would be at a maximum height of 32 feet. The retail/restaurant building would reach a maximum height of 25 feet. The three-story multi-family buildings would have a maximum height of 35 feet. The four-story multi-family buildings would reach a maximum height of 45 feet. The club house would have a maximum height of approximately 25 feet.

3.3.3 Site Access, Circulation, and Parking

Vehicle access to the project site would be provided by four driveways. The existing driveway to the medical office would be retained and extended to provide secondary access to the medical/hospital facility and cancer center. An additional private driveway would be added to provide primary access through the center of the site. The project proposes two additional driveways to Barrett Avenue that would be limited to emergency vehicle access only. Sidewalks would be extended into the property from the existing sidewalks along Juan Hernandez Drive and Barrett Avenue.

3.3.4 Open Space and Recreation

The project would provide approximately 125,000 square feet of open space, passive park, and recreation areas. There would be 19,000 square feet of park/open space located next to the four-story hospital. North of the proposed four-story multifamily buildings, approximately 100,000 square feet of land would be park/open space. A walking/jogging pathway would be constructed throughout the entire site. Additionally, the multifamily component of the project would include a play field, tot lot, and swimming pool.

3.3.5 Landscaping and Trees

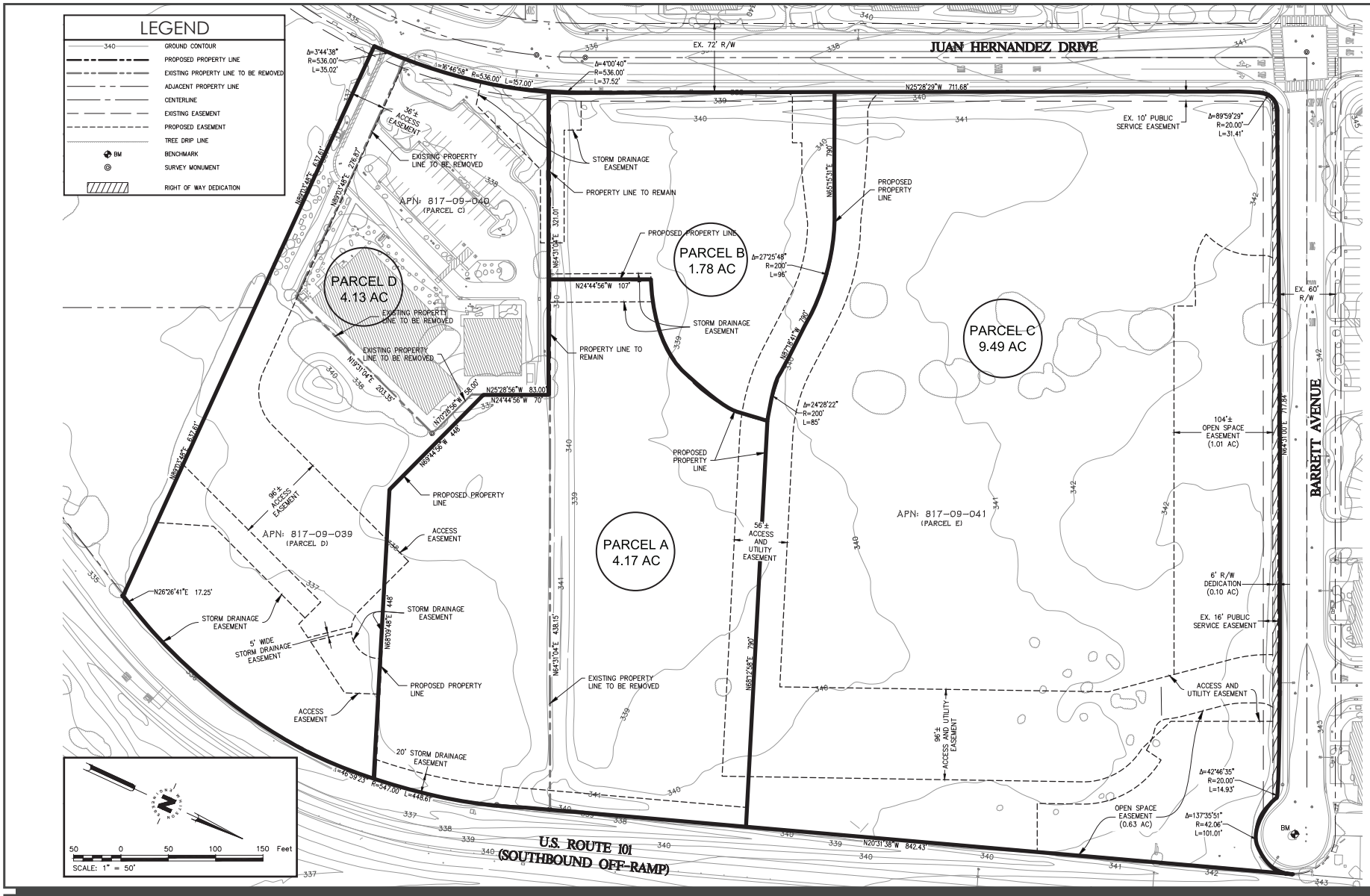
The project would remove all 16 trees currently on-site. A variety of trees and shrubs would be planted throughout the parking lots, around building perimeters, and along sidewalks.

3.3.6 Storm Drainage

The proposed project would include bioswales disbursed throughout the development, including a 25-foot landscape buffer along the east property line and a stormwater management area located in the southeast corner of the property, as shown in Figure 3.2-4.

3.3.7 Construction and Phasing

The proposed project is anticipated to be constructed in three phases starting with the development of Parcels B and D, followed by development of Parcel C, and closing with the development of Parcel A. Full buildout of the project site is expected in 2025.



TENTATIVE PARCEL MAP | FIGURE 3.3-1

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

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

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related to the 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). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also 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.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program 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. State laws governing the Scenic Highway Program are found in the Streets and Highway Code, Sections 260 through 263. There are no state-designated scenic highways in Morgan Hill. In Santa Clara County, the one state-designated scenic highway is State Route (SR) 9 from the Santa Cruz County line to the Los Gatos City Limit.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to aesthetic and visual impacts.[3] The following goal and policies are applicable to the proposed project:

Goal CNF-8: *A visually attractive urban environment.*

Policy CNF-8.1: **High Quality Design.** Require all development to feature high quality design that enhances the visual character of Morgan Hill.

Policy CNF-8.2: **Design Features.** Encourage design features and amenities in new development and redevelopment, including but not limited to:

- Highly connected street layouts, supporting multiple paths of travel for all modes.
- Cluster buildings to create useable open space.
- Abundant landscaping.
- Attractive transitions between uses.
- Comfortable pedestrian facilities that promote a high level of pedestrian activity.
- Distinctiveness and variety in architectural design.

Policy CNF-8.3: **Changes in Building Scale.** Discourage abrupt changes in building scale. A gradual transition between low-rise to mid-rise buildings should be achieved by using the low-rise buildings at the edge of the project site. Consider the

[3] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

relationship of buildings to the street, to one another and to adjacent structures and land uses.

Policy CNF-8.7: **Design Sensitivity.** Ensure that new development is sensitive to the character of adjacent structures and the immediate neighborhood.

4.1.1.2 *Existing Conditions*

The 19.76-acre project site is located along the west side of U.S. Highway 101 in southern Morgan Hill. The site is a patchwork of developed and undeveloped parcels. The project site is flat and mostly covered with non-native grasses with several trees located on the northern portion of the site and along the west property line near the existing single-story medical office buildings. The medical office buildings are flat-roofed grey buildings, modern in design, with clearstories and yellow roof accents.

Due to the flat topography of the project site and surrounding area, views of the project site are limited to the immediate area. The project site is not located within a designated scenic view corridor or visible from a designated scenic highway.

Views of the project site are shown in Photos 1 through 4.

4.1.1.3 *Surrounding Visual Character*

The project site is surrounded by developed and undeveloped parcels. The parcel directly adjacent to the south of the project site is flat, undeveloped, and covered with grasses. There are two-story attached single-family stucco residences located west of the project site on Juan Hernandez Drive. To the north and northeast of the site, across Barrett Avenue, there are additional two-story attached single-family stucco residences, as well as a public elementary school. The elementary school includes several one-story classroom and administration buildings, a tall gymnasium building, a student drop-off area, several surface parking lots, and large open play areas. The gymnasium building, surface parking lots, and student drop-off area face the project site on Barrett Avenue. The U.S. Highway 101/Tennant Avenue southbound off-ramp is located to the east of the project site. Sidewalks and streetlights are located along the project site's Juan Hernandez Drive and Barrett Avenue frontages. Views of the surrounding sites are shown in Photos 5 through 8.

Photo 1: View of the existing medical offices on the project site.

Photo 2: View of the existing parking lot facing south.

PHOTOS 1 & 2

Photo 3: View of the project site and adjacent residences, facing northwest.

Photo 4: View of the project site and mountains, facing northeast.

PHOTOS 3 & 4

Photo 5: View of the adjacent undeveloped parcel of land, facing south.

Photo 6: View of the residences located across Juan Hernandez Drive, facing west.

PHOTOS 5 & 6

Photo 7: View of Barrett Elementary School, facing northwest.

Photo 8: View of U.S. Highway 101 and mountains, facing east.

PHOTOS 7 & 8

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? [4] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. **(Less than Significant Impact)**

There are no scenic corridors, highways, or vistas in Morgan Hill that are designated by the state or the City. However, there are a few vistas within Morgan Hill that could be considered scenic. The City of Morgan Hill General Plan EIR identified El Toro as one of the most prominent visual landmarks in the City. El Toro is located to the west and is visible from U.S. Highway 101, along Monterey Road, and along Cochrane Avenue, Main Avenue, Dunne Avenue, and Tennant Avenue. Broader views of the Diablo Range to the east and the Santa Cruz Mountains to the west are visible from U.S. Highway 101 and from many points within the City.

Views of mountains are visible to the northeast and south from the residences west of the project site. These views would be partially obstructed by the new developments, since portions of the proposed project would be taller than the surrounding buildings. However, mountains would be intermittently visible between buildings. Thus, the proposed project would not have a substantial adverse effect on a scenic vista. **(Less than Significant Impact)**

[4] Public views are those that are experienced from publicly accessible vantage points.

Impact AES-2:	The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(Less than Significant Impact)**

There are no rock outcroppings at the project site. The project site is not located within or adjacent to a state-designated scenic highway. The nearest state-designated scenic highway is 26.5 miles northwest of the site. The proposed project would not impact historic buildings within a scenic highway. However, trees are considered visual resources since they contribute to aesthetic interest and character. The proposed project would remove trees including coast live oak, Monterey pine, and Peruvian pepper. The project would offset the aesthetic effects of tree removal by replacing trees in accordance with the City's requirements and implementing a landscape plan (refer to Section 4.4 Biological Resources). For these reasons, the project would not result in substantial damage to scenic resources. **(Less than Significant Impact)**

Impact AES-3:	The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

The proposed project would construct three- and four-story multi-family residential buildings, a four-story medical/hospital building, three-story parking structure, one-story urgent care, and one-story retail/restaurant building. The proposed buildings would have a modern and geometric aesthetic, using warm wood, grey stone, and light stucco. The proposed project would have a maximum building height of 55 feet, including any rooftop equipment. Landscaping, including trees and shrubs, would be planted throughout the site. The project would provide approximately 125,000 square feet of open space, passive park, and recreation areas that include a walking/jogging path, and pool.

As mentioned in Impact AES-1, potentially scenic views of mountains are available from residences on Tennant Avenue and Barrett Avenue. These views would be partially obstructed by the new developments, since portions of the proposed project would be taller than the surrounding buildings. The proposed project would comply with the Morgan Hill 2035 General Plan policies described in Section 4.1.1.1 by clustering buildings to create useable open space, providing abundant landscaping, and supplying pedestrian facilities that promote a high level of pedestrian activity.

While development under the proposed project would change the existing visual character of the site, the proposed project would not constitute a significant adverse change to the aesthetic environment. All development would be subject to review and approval by the City of Morgan Hill Design Permit process to ensure the development meets local design and aesthetic standards. Architecture and landscape plans would be subject to review and approval by the City of Morgan Hill Development Services Director to ensure compatibility with the surrounding built environment. **(Less Than Significant Impact)**

Impact AES-4:	The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

The proposed project would incrementally increase light and glare in the project area, due to the proposed new reflective surfaces and outdoor lighting. Building design, glazing materials, and outdoor lighting would be subject to review by the City of Morgan Hill Design Permit process for conformance with City standards. Additionally, lighting and signage plans would comply with the City of Morgan Hill Municipal Code. For these reasons, development on the site under the proposed project would not result in a new source of substantial light or glare that would affect day or nighttime views in the area. **(Less Than Significant Impact)**

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's 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.[5]

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.[6]

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.[7] Programs such as CAL FIRE's Fire and Resource Assessment Program 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.[8]

4.2.1.2 *Existing Conditions*

The 19.76-acre project site is comprised of three parcels in a suburban setting. The project site is largely undeveloped and is predominantly covered by grassland with trees scattered throughout the site. There are two existing medical office buildings and associated surface parking located in the southwest corner of the project site.

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[5] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed February 6, 2020. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.
[6] California Department of Conservation. "Williamson Act." http://www.conservation.ca.gov/dlrp/lca.
[7] Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).
[8] California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed February 6, 2020. http://frap.fire.ca.gov/.

The project site is not used for agricultural purposes and is not the subject of a Williamson Act contract.[9] No land adjacent to the project site is used for agricultural production. The City of Morgan Hill General Plan Land Use Diagram designates the project site as Commercial, and the Zoning Map designates the project site as Service Commercial/Planned Development. The land on and adjacent to the site is not forest land and is not zoned for timberland production.

According to the Santa Clara County Important Farmland 2016 Map, the project site consists of "Urban and Built-Up Land" and "Other Land" and does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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?	☐	☐	☐	☒
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
3) 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))?	☐	☐	☐	☒
4) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
5) 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?	☐	☐	☐	☒

[9] City of Morgan Hill. *Morgan Hill 2035 DEIR*. *Figure 4.2-2: Williamson Act Contracts*. January 2016.

Impact AG-1:	The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. **(No Impact)**

The project site is designated by the California Resources Agency Farmland Mapping and Monitoring Program as "Urban and Built-Up Land" and "Other Land", and therefore, would not convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance to a non-agricultural use. **(No Impact)**

Impact AG-2:	The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

The project site is not zoned for agricultural use, nor is it subject to the Williamson Act contract. The project would, therefore, not conflict with existing zoning for agricultural use or a Williamson Act contract. **(No Impact)**

Impact AG-3:	The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

The project site is not zoned for forest land or timberland. For this reason, the project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

Impact AG-4:	The project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

The project site is not designated as forest land. For this reason, the project would not result in the loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

Impact AG-5:	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. **(No Impact)**

The project site is not designated agricultural or forest land and is located within a light industrial area with no agricultural or forestry land nearby. As a result, implementation of the proposed project would not result in the conversion of farmland to non-agricultural use or forest land to non-forest uses. **(No Impact)**

4.3 AIR QUALITY

The following discussion is based in part on an Air Quality Analysis completed by Illingworth & Rodkin, Inc. on May 5, 2020. The report is included in Appendix A of this IS.

4.3.1 Environmental Setting

4.3.1.1 *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.[10] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
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 ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	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
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

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 Air Quality

[10] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

Management District's attempts to reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter 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

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and 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).[11] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups 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.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O_3, CO, SO_x, NO_x, and lead.

[11] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed February 20, 2020. https://www.arb.ca.gov/research/diesel/diesel-health.htm.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in additional to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), would significantly reduce emissions of DPM and NO_X.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[12]

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

[12] BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

Local

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals and policies to improve air quality issues facing the City of Morgan Hill.[13] The following goals, policies, and actions are applicable to the proposed project:

Goal NRE-10: *Reduced air pollution emissions.*

Policy NRE-10.3: **Automobile Emissions.** Encourage the use of and infrastructure for alternative fuel, hybrid, and electric vehicles. Encourage new and existing public and private development to include electric vehicle charging stations.

Policy NRE-10.4: **Reduced Automobile Use.** To reduce air pollution the frequency and length of automobile trips and the amount of traffic congestion by controlling sprawl, promoting infill development, and encouraging mixed uses and higher density development near transit. Support the expansion and improvement of alternative modes of transportation. Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that reduce vehicle trips.

Goal NRE-11: *Minimized exposure of people to toxic air contaminants such as ozone, carbon monoxide, lead, and particulate matter.*

Policy NRE-11.1: **TACs and Proposed Sensitive Uses.** Require modeling for sensitive land uses, such as residential development, proposed near sources of pollution such as freeways and industrial uses. Require new residential development and projects categorized as sensitive receptors to incorporate effective mitigation measures into project designs or be located adequate distances from sources of toxic air contaminants (TACs) to avoid significant risk to health and safety.

Policy NRE-11.2: **TACs and Existing Sensitive Uses.** Encourage the installation of appropriate air filtration mechanisms at existing schools, residences, and other sensitive receptors adversely affected by existing or proposed pollution sources.

Policy NRE-11.3: **Health Risk Assessments.** For proposed development that emits toxic air contaminants, require project proponents to prepare health risk assessments in accordance with Bay Area Air Quality Management District procedures as part of environmental review and implement effective mitigation measures to reduce potential health risks to less-than-significant levels. Alternatively, require these projects to be located an adequate distance from residences and other sensitive receptors to avoid health risks. Consult with the Bay Area Air

[13] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

Quality Management District to identify stationary and mobile toxic air contaminant sources and determine the need for and requirements of a health risk assessment for proposed developments.

Policy NRE-11.4: **Truck Routes.** For development projects generating significant heavy-duty truck traffic, design truck routes that minimize exposure of sensitive receptors to toxic air contaminants and particulate matter.

Policy NRE-11.5: **Truck Idling.** For development projects generating significant truck traffic, require signage to remind drivers that the State truck idling law limits truck idling to five (5) minutes.

Policy NRE-11.6: **Vegetation Buffers.** Encourage the use of pollution-absorbing trees and vegetation in buffer areas between substantial sources of toxic air contaminants and sensitive receptors.

Goal NRE-12: *Minimized air pollutant emissions from demolition and construction activities*

Policy NRE-12.1: **Best Practices.** Requirement that development projects implement best management practices to reduce air pollutant emissions associated with construction and operation of the project.

Policy NRE-12.2: **Conditions of Approvals.** Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At a minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines.

Policy NRE-12.3: **Control Measures.** Require construction and demolition projects that have the potential to disturb asbestos (from soil or building material) to comply with all the requirements of the California Air Resource Board's air toxics control measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations.

4.3.1.3 *Existing Conditions*

The Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the federal Clean Air Act and state Clean Air Act. The area is also considered nonattainment for PM_{10} under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O_3 and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O_3 precursor pollutants (ROG and NO_X), PM_{10}, and $PM_{2.5}$, and apply to both construction period and operational period impacts.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐
3) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Note: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the determinations.

4.3.2.1 *Thresholds of Significance*

Impacts from the Project

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 Morgan Hill has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin 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 identified in Table 4.3-2 below.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds			
Pollutant	**Construction Thresholds**	**Operation Thresholds**	
	Average Daily Emissions (pounds/day)	**Average Daily Emissions (pounds/day)**	**Annual Average Emissions (tons/year)**
Criteria Air Pollutants			
ROG, NO_x	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)	

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **(Less than Significant)**

The BAAQMD CEQA Air Quality Guidelines set forth criteria for determining consistency with the CAP. In general, a project is considered consistent if it a) supports the primary goals of the Clean Air Plan; b) includes relevant control measures; and c) does not interfere with implementation of CAP control measures. The proposed project would not conflict with the 2017 CAP because as discussed under Impact AIR-2, the proposed project's emissions would be below the BAAQMD operational thresholds. Therefore, the project is not required to incorporate project-specific control measures listed in the 2017 CAP. Implementation of the project would not inhibit BAAQMD or partner agencies from continuing progress toward attaining state and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP. **(Less than Significant Impact)**

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

Construction-Related Criteria Pollutant Emissions

The proposed project is anticipated to be constructed in three phases, beginning January 2021 and lasting approximately 48 months. The California Emissions Estimator Model (CalEEMod) was used to estimate annual emissions for both on- and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The project land use types and size, and anticipated construction schedule, were input to CalEEMod. Table 4.3-3 below shows the average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction of the project.

Table 4.3-3: Construction Period Emissions

Scenario	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Total construction emissions	3.0 tons	9.3 tons	0.62 tons	0.45 tons
Average daily emissions[1]	**6.2 lbs/day**	**19.1 lbs/day**	**1.3 lbs/day**	**0.9 lbs/day**
BAAQMD Thresholds	54 lbs/day	54 lbs/day	82 lbs/day	54 lbs/day
Exceed Threshold?	***No***	***No***	***No***	***No***

[1]Assumes 979 workdays

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries.

As shown in Table 4.3-3 above, construction emissions for the proposed project would not exceed BAAQMD thresholds. Implementation of the BAAQMD best management practices listed below, labeled as Standard Conditions, would ensure impacts are reduced to a less than significant level.

Standard Condition AIR-1: The following measures shall be implemented during all phases of construction to control dust and exhaust at the project site:

- 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.

- Replant vegetation in disturbed areas as soon as possible after completion of construction.
- 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, Section 2485 of the California Code of Regulations [CCR]). 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. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

As discussed above, emissions from project construction would not exceed BAAQMD emissions thresholds. Therefore, the project would have a less than significant impact. (**Less than Significant Impact)**

Operation-Related Criteria Pollutant Emissions

Operational air emissions from the proposed project would be generated primarily from vehicles driven by future employees, customers, residents, and vendors. Evaporative emissions from architectural coatings and maintenance products are typical emissions from these types of uses. CalEEMod was used to estimate emissions from operation of the proposed project. Table 4.3-4 below shows average daily construction emissions of ROG, NO_X, total PM_{10} and total $PM_{2.5}$ during operation of the project.

Table 4.3-4: Operational Period Emissions

Scenario	ROG	NO_X	PM_{10}	$PM_{2.5}$
Annual 2025 Project Operational Emissions	2.5 tons	2.2 tons	2.7 tons	0.8 tons
BAAQMD Thresholds (tons/year)	10 tons	10 tons	15 tons	10 tons
Exceed Threshold?	**No**	**No**	**No**	**No**
Daily 2025 Project Operational Emissions[1]	13.6 lbs	11.9 lbs	14.6 lbs	4.1 lbs
BAAQMD Thresholds (pounds/day)	54 lbs	54 lbs	82 lbs	54 lbs
Exceed Threshold?	**No**	**No**	**No**	**No**
[1]Assumes 365-day operation.				

As shown in Table 4.3-4 above, operational period emissions would not exceed BAAQMD significance thresholds emissions for the project. Therefore, the project would have a less than significant impact. **(Less than Significant Impact)**

Impact AIR-3:	The project would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact with Mitigation Incorporated)**

Community Risks from Project Construction

Construction of the proposed project would generate dust and equipment exhaust that could affect nearby sensitive receptors. Although it was concluded in Impact AIR-2 that construction exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations, construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and $PM_{2.5}$.[14] This assessment included dispersion modeling to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

CalEEMod Construction Emissions

The CalEEMod model provided total annual PM_{10} exhaust emissions for the off-road construction equipment and for exhaust emissions from on-road vehicles. The on-road emissions are a result of haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. Table 4.3-5 lists the DPM and fugitive $PM_{2.5}$ dust emissions annually by phase.

Table 4.3-5: Localized Project Construction Emissions of DPM and PM2.5 (in tons)

Phase	Year	DPM Emissions	Fugitive $PM_{2.5}$ Dust Emissions
Phase 1	2021	0.1386	0.0032
Phase 1	2022	0.0142	0.0032
Phase 2	2022	0.0982	0.0032
Phase 2	2023	0.0547	0.0032
Phase 3	2023	0.0301	0.0032
Phase 3	2024	0.0540	0.0032

Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict concentrations of DPM and $PM_{2.5}$ at sensitive receptors (residences and students) in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of

[14] DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

these types of emission activities for CEQA projects.[15] For the construction site modeled, the modeling utilized six area sources to represent the on-site construction emissions, three for exhaust emissions and three for fugitive dust emissions. To represent the construction equipment exhaust emissions, an emission release height of 20 feet (6 meters) was used for the area sources. The elevated source height reflects the height of the equipment exhaust pipes plus an additional distance for the height of the exhaust plume above the exhaust pipes to account for plume rise of the exhaust gases. For modeling fugitive $PM_{2.5}$ emissions, a near-ground level release height of seven feet (two meters) was used for the area sources. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area sources. Construction emissions were modeled as occurring daily between 7 AM to 8 PM, which are the City of Morgan Hill's construction noise hours limits per the City Municipal Code.

Results of the assessment indicated that the residential maximally exposed individuals (MEIs) most impacted by the construction $PM_{2.5}$ concentrations was located at a single-family home north of the project site across Barrett Avenue. Figure 4.3-1 shows the location of the MEI and other offsite receptors.

[15] Bay Area Air Quality Management District (BAAQMD), 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.*

Figure 4.3-1: Project Site and Locations of Off-Site Sensitive Receptors and TAC Impacts

At this location, the residential cancer risks would exceed the BAAQMD significance threshold of 10 in one million and the maximum $PM_{2.5}$ concentrations would exceed the BAAQMD significance threshold of 0.3 micrograms per cubic meter. The maximum cancer risks, $PM_{2.5}$ concentrations, and health hazard indexes for project-related construction activities affecting the residential MEI are shown in Table 4.3-6 below.

Table 4.3-6: Construction Risk Impacts at the Offsite MEI

Source	Cancer Risk (per million)	Annual PM2.5 (µg/m³)	Hazard Index
Project Construction			
Unmitigated	34.2 (infant)	0.31	0.04
Mitigated	3.0 (infant)	0.19	<0.01
BAAQMD Single-Source Threshold	***>10.0***	***>0.3***	***>1.0***
Exceed Threshold?			
Unmitigated	Yes	Yes	No
Mitigated	No	No	No

As shown in Table 4.3-6 above, the proposed project, if unmitigated, would exceed BAAQMD thresholds for construction impacts. However, implementation of the mitigation measure listed below would reduce any impacts to a less-than-significant level.

Mitigation Measures: The project proposes to implement the following mitigation measures to reduce construction impacts to a less-than-significant level.

MM AIR-3.1: The following mitigation measure shall be implemented during all phases of construction to minimize emissions:

- The project applicant shall develop a plan demonstrating that the off-road equipment used onsite to construct the project would achieve a fleet-wide average 70-percent reduction in DPM exhaust emissions or greater. One feasible plan to achieve this reduction would include the following:
    - All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall meet U.S. EPA Tier 4 particulate matter emissions standards. Alternatively, diesel-powered equipment that meets U.S.EPA Tier 2 or 3 engines and include CARB-certified Level 3 Diesel Particulate Filters (or equivalent) would meet this requirement, as would the use of equipment that is electrically powered or uses non-diesel fuels.

Additional modeling was completed to predict the cancer risks, non-cancer health hazards, and maximum $PM_{2.5}$ at Barrett Elementary School. Results of the assessment indicated that the maximum cancer risks (without any mitigation or construction emission controls) would be 15.8 per million for child exposure. The maximum-modeled $PM_{2.5}$ concentration, which is based on combined exhaust and fugitive dust emissions, would be 0.24 micrograms per cubic meter and the Hazard Index (HI)

based on the DPM concentration would be 0.03. Without mitigation, the increased cancer risk would exceed the BAAQMD single-source threshold. However, implementation of MM AIR-3.1 would reduce these risk values to 1.4 per million increased cancer risk, 0.1 micrograms per cubic meter for $PM_{2.5}$ concentrations, and <0.01 for the HI value. These reduced risk values would not exceed the BAAQMD single-source significance thresholds and would, therefore, reduce impacts to less-than-significant. **(Less than Significant Impact with Mitigation Incorporated)**

Community Risks from Project Operation

Project Emergency Diesel Generators

Operation of a diesel generator would also be a source of TAC emissions that were assumed to operate during the lifetime of project operation. The project would include one to three generators on site, depending on the ability of the different uses to share a generator. This analysis conservatively assumed three generators of approximate sizes of 100 kilowatts (134 horsepower), 150 kilowatts (201 horsepower), and 1,000 kilowatts (1,341 horsepower). The location was conservatively assumed to be located in the middle of the ground-level of the hospital building.

The diesel engine would be subject to CARB's Stationary Diesel Airborne Toxics Control Measure (ATCM) and would require permits from the BAAQMD, since it would be equipped with an engine larger than 50 HP. As part of the BAAQMD permit requirements for toxics screening analysis, the engine emissions would have to meet Best Available Control Technology for Toxics (TBACT) and pass the toxic screening level of less than ten in one million. The risk assessment would be prepared by BAAQMD. Depending on results, BAAQMD would set limits for DPM emissions (e.g., more restricted engine operation periods). Sources of air pollutant emissions complying with all applicable BAAQMD regulations generally would have a less-than-significant air quality community risk impact. **(Less than Significant Impact)**

Dispersion Modeling

To obtain an estimate of potential cancer risks and $PM_{2.5}$ impacts from operation of the emergency generators, the U.S. EPA AERMOD dispersion model was used to calculate the maximum annual DPM concentration at off-site sensitive receptor locations (nearby residences). The same receptors and breathing heights used in the construction dispersion modeling were used for the generator discern model. Stack parameters for modeling the generates were based on BAAQMD default parameters for emergency generators. Annual average DPM and $PM_{2.5}$ concentrations were modeled assuming that generator testing could occur at any time of the day.

To calculate the increased cancer risk from the generators at the MEI, the cancer risks exposure duration was adjusted to account for the MEI being exposed to construction for the first four years of the 30-year exposure period. The exposure duration for the generators was adjusted for 26 years. Based on this duration, the increased cancer risk from the generators would be 0.3 per million. The maximum annual $PM_{2.5}$ concentration would be less than 0.01 micrograms per cubic meters and the HI value would be less than 0.01, which is a less-than-significant impact.

For sensitive receptors at Barrett Elementary School, the increased cancer risk from the generators was adjusted for a seven-year exposure with students being exposed to construction for four years and to project operation for three years. The health risk assessment used a seven year exposure period

since the school includes transitional kindergarten to fifth grade. The analysis assumes that students would be exposed to both project construction and operation. Based on the duration of seven years, the increased cancer risk from the project generators would be 0.1 per million. The maximum annual $PM_{2.5}$ concentration would be <0.01 micrograms per cubic meters and the HI value would remain <0.01. After project construction is completed, the project's operational TAC sources would have a lower risk. **(Less than Significant Impact)**

Project Traffic on Juan Hernandez

All project-generated traffic (3,979 daily trips) was assumed to use Juan Hernandez Drive to access the project site. The cancer risk was adjusted for exposure duration since the MEI would only be exposed to the increased traffic impacts once the project becomes operational. The exposure duration was adjusted for 26 years of exposure since construction would last approximately four years and the distance from the roadway was adjusted for 20 feet. As a result, the increased cancer risk impact from the increase in traffic would be 0.2 per million and the maximum annual PM2.5 concentration would be 0.01 micrograms per cubic meter.

Barrett Elementary School is about 60 feet from the roadway. The exposure duration was adjusted for three years of exposure during project operation, after four years of exposure during project construction. As a result, the increased cancer risk impact from the increase in traffic would be 0.7 per million and the maximum annual $PM_{2.5}$ concentration would be 0.05 micrograms per cubic meter. Chronic or acute HI for the roadway would be below 0.03. Since these values are below the thresholds, there would be a less than significant impact. **(Less than Significant Impact)**

Overall, project impacts to sensitive receptors during construction and operation would be reduced to less-than-significant levels with implementation of Standard Conditions, BAAQMD best management practices, and the mitigation measures listed above. **(Less than Significant Impact with Mitigation Incorporated)**

Impact AIR-4:	The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(Less than Significant Impact)**

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable from time to time by adjacent receptors; however, the odors would be localized and temporary and would not affect people off-site. For these reasons, implementation of the proposed project would not result in significant long-term or short-term odor impacts, affecting a substantial number of people. **(Less Than Significant Impact)**

4.3.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of Morgan Hill has policies that address existing air quality conditions affecting a proposed project.

Illingworth and Rodkin's Air Quality Analysis for the proposed project (refer to Appendix A) included a refined analysis of the impacts of TACs and $PM_{2.5}$ to new sensitive receptors in order to evaluate potential cancer risks and $PM_{2.5}$ concentrations from U.S. Highway 101. Based on an annual average, U.S. Highway 101 traffic includes 135,500 vehicles per day[16] that are about 7.5 percent trucks, of which 4.6 percent are considered diesel heavy duty trucks and 2.9 percent are medium duty trucks.[17]

Dispersion modeling of TAC and $PM_{2.5}$ emissions was performed using the U.S. EPA AERMOD dispersion model. The model evaluated the emissions from northbound and southbound traffic on U.S. Highway 101 within 1,000 feet of the project site. The modeling used receptors placed within the project boundaries spaced approximately every 20 meters (66 feet). Receptor heights of 1.5 meters (4.9 feet) and 4.5 meters (14.7 feet) were used to represent the breathing heights of residential receptors on the first and second floor levels. Pollutant and TAC concentrations from the highway on higher floor levels would be lower than those of the first two floor levels.

The computed lifetime cancer risks at potential residential locations across the site include values ranging from 53.6 in one million to 7.7 in one million. The maximum cancer risks that are greater than 10.0 in one million or annual $PM_{2.5}$ concentration greater than 0.3 micrograms per cubic meter would exceed the BAAQMD significance thresholds and would need to be controlled in accordance with the City's General Plan policies. Depending on the proximity to the highway, varied levels of control would be required. Areas furthest from the highway would not require any control, while locations along the highway would require enhanced filtration. A properly installed and operated ventilation system with MERV16 filters would achieve reductions of at least 90 percent and a system with MERV13 would achieve reductions of at least 80 percent. The following conditions of approval shall be implemented to minimize risks to reduce existing conditions to acceptable levels:

<u>Condition of Approval AIR-1:</u>

- Install air filtration in residential and medical buildings. Air filtration devices shall be rated MERV16 or higher for portions of the site that have annual $PM_{2.5}$ exposure above 1.1 micrograms per cubic meter and MERV13 or higher for all other portions of the site. To ensure adequate health protection to sensitive receptors (i.e. residents), this ventilation system, whether mechanical or passive, all fresh air circulated into the dwelling units shall be filtered.
- As part of implementing this measure, an ongoing maintenance plan for the buildings' heating, ventilation, and air conditioning (HVAC) air filtration system shall be required.
- Ensure that the use agreement and other property documents:
    - Require cleaning, maintenance, and monitoring of the affected buildings for air flow leaks;
    - Include assurance that new owners or tenants are provided information on the ventilation system; and

[16] California Department of Transportation. 2018. *2017 Traffic Volumes on the California State Highway System*.
[17] Caltrans. 2017. *2016 Annual Average Daily Truck Traffic on the California State Highway System*

- Include provisions that fees associated with owning or leasing a unit(s) in the building include funds for cleaning, maintenance, monitoring, and replacements of the filters, as needed.

Condition of Approval AIR-2:

- Provide electrical power at truck loading docks to avoid use of truck refrigeration units.

Condition of Approval AIR-3:

- Designate truck circulation routes that avoid residential areas to the greatest extent reasonable.

Implementation of the above conditions of approval would reduce impacts of the environment on the proposed project.

4.4 BIOLOGICAL RESOURCES

The following discussion is based in part on a Biological Analysis completed by WRA, Inc. in March 2020. This report is included as Appendix B of this IS.

4.4.1 Environmental Setting

4.4.1.1 *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 proposed 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.[18] 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

[18] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed March 11, 2020. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

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 pursuant to 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 and Local

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 Santa Clara County. It was developed and adopted through a partnership between Santa Clara 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 southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan.

City of Morgan Hill Tree Removal Controls

The City of Morgan Hill maintains the urban natural landscape partly by promoting the health, safety, and welfare of the City by controlling the removal of significant sized trees (Municipal Code 12.32.020, G.). According to the City of Morgan Hill Tree Removal Controls, a significant tree is considered to be a tree with a single stem or trunk of a circumference of 40 inches (or diameter of 12.7 inches) or more for nonindigenous species and a circumference of 18 inches (or diameter of 5.7 inches) or more for indigenous species measured at four and one-half feet vertically above the ground. Indigenous species to Morgan Hill include oak (all types), California bay, madrone, sycamore, and alder trees.

“Street trees” are also protected and defined as a tree, of any size, situated within the public street right-of-way or publicly accessible private street (e.g., trees within a landscape park strip), or within five feet of publicly accessible sidewalk adjacent to a public or private street in the case of a street without a landscape park strip.

A “community of trees,” which is a group of trees of any size which are ecologically or aesthetically related to each other such that loss of several of them would cause a significant ecological, aesthetic, or environmental impact in the immediate area, are protected under the City’s ordinance.

In addition, the Tree Removal Controls specify that all commercial tree farms, nonindigenous tree species in residential zones, and orchards (including individual fruit trees) are exempted from the definition of significant tree.

City of Morgan Hill Burrowing Owl Habitat Mitigation Plan

Since 2003, the City of Morgan Hill has implemented a citywide program (Burrowing Owl Habitat Mitigation Plan) to evaluate and mitigate impacts to burrowing owls and potential burrowing owl habitat that could result from development activities within the City limits. Under the Burrowing Owl Habitat Mitigation Plan, the City requires pre-construction owl surveys to be completed in areas of potentially suitable habitat (generally any grassland and/or mixed herbaceous vegetation below 600 feet above mean sea level) within 30 days of the on-set of construction.

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to loss of biological resources.[19] The following goal and policies are applicable to the proposed project:

Goal NRE-6: Protection of native plants, animals, and sensitive habitats.

Policy NRE-6.2: **Habitat Conservation Plan**. Support the implementation of the Santa Clara Valley Habitat Plan to protect wildlife, rare and endangered plants and animals, and sensitive habitats from loss and destruction.

Policy NRE-6.4: **Tree Preservation and Protection.** Preserve and protect mature, healthy trees whenever feasible, particularly native trees, historically significant trees, and other trees which are of significant size or of significant aesthetic value to the immediate vicinity or to the community as a whole.

4.4.1.2 *Existing Conditions*

The 19.76-acre project site is comprised of three parcels in an urban setting. There are two existing medical office buildings and associated surface parking located in the southwest corner of the project site. The project site is largely undeveloped and is predominantly covered by grassland with trees located on the northern portion of the site and along the west property line near the existing medical office buildings.

The project site does not contain any riparian corridors or wetlands. The project site is not located in an area containing any of the sensitive natural communities or special status species identified in the City's General Plan EIR.[20] However, the biological assessment determined that three species of special-status birds may use the project site for breeding and foraging, including white-tailed kite, loggerhead shrike, and grasshopper sparrow.

The project site is covered under the Santa Clara Valley Habitat Plan (Habitat Plan), designated as "Urban Development Equal to or Greater than 2 Acres Covered."[21] The land cover of the site is

[19] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.
[20] City of Morgan Hill. *City of Morgan Hill 2035 General Plan DEIR.* Figures 4.4-2 and 4.4-4. January 2016.
[21] Santa Clara Valley Habitat Agency. *Habitat Agency Geobrowser*. Accessed February 12, 2020. http://www.hcpmaps.com/habitat/.

comprised of approximately 17 acres of "Grain, Row-crop, Hay and Pasture, Disked/Short-term Fallowed" and approximately three acres of "Urban-Suburban." A large portion of the project site (17 acres) is located within Fee Zone B (Agricultural and Valley Floor Lands); removal and development of this land cover type would be required to pay applicable fees per the Habitat Plan.

Trees

There are 16 trees located on the project site, consisting of 14 indigenous coast live oaks, one nonindigenous Peruvian pepper, and one nonindigenous Monterey pine. As mentioned in 4.4.1 Environmental Setting, the City of Morgan Hill's Municipal Code states that non-native trees with a single stem or trunk of a circumference of 40 inches (or diameter of 12.7 inches) and native trees with a circumference of 18 inches (diameter of 5.7 inches) are protected by the City. All street trees are also City-protected.

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐
2) 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 CDFW or USFWS?	☐	☐	☐	☒
3) 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?	☐	☐	☐	☒
4) 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?	☐	☐	☐	☒
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

Impact BIO-1: The project would not 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 CDFW or USFWS. **(Less than Significant Impact with Mitigation Incorporated)**

The project site contains potentially special-status species. The site is not located in a plant or wildlife survey area as identified in the Habitat Plan. The extent of disturbance of the areas surrounding the project site reduces the site's suitability for sensitive species.

The proposed project would remove 16 trees from the project site. The mature trees on-site could provide nesting or foraging habitat for nesting raptors and migratory birds. As noted in Section 4.4.1.2 Existing Conditions, the biological assessment determined that three species of special-status birds may use the project site for breeding and foraging, including white-tailed kite, loggerhead shrike, and grasshopper sparrow.

Grading and development may reduce nesting and foraging habitat for special-status species, or may impact these species through visual and auditory disturbance sufficient to cause nest abandonment. This would constitute a significant impact requiring project-level mitigation, as discussed below.

Impact BIO-1: Construction activities on the project site could result in the loss of raptor and/or migratory bird eggs or nestlings, either directly by destroying an active nest or indirectly by disturbing and causing the abandonment of an active nest. **(Significant Impact)**

Nesting raptors and migratory birds are protected under state and federal regulations. At the time of development, raptors and migratory birds could be nesting in the trees and vegetation on and adjacent to the project site. Construction during the nesting season could destroy nests or disturb occupied nests, resulting in the loss of reproductive effort. This would constitute a significant impact requiring project-level mitigation, as discussed below.

Mitigation Measures: The following mitigation measures will reduce impacts from construction at the project site nesting raptors and migratory birds to a less than significant level:

MM BIO-1.1: Construction shall be scheduled to avoid the nesting season to the extent feasible. If construction can be scheduled to occur between September 1st and January 31st (inclusive) to avoid the raptor nesting season, no impacts will be expected. If construction will take place between February 1st and August 31st, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. Surveys shall be completed within 30 days of the on-set of site clearing or construction activities. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, buildings) onsite trees as well as all trees within 250 feet of the site for nests.

MM BIO-1.2: If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist shall determine the extent of a disturbance-free buffer zone to be established around the nest (typically 250 feet for raptors and 50-100 feet for other species) that shall remain off limits to construction until the nesting season is over, to ensure that no nests of species protected by the Migratory Bird Treaty Act and California Fish and Wildlife Code will be disturbed during project implementation. A report indicating the result of the survey and any designated buffer zones shall be submitted to the satisfaction of the Development Services Director prior to issuance of a grading permit.

With the implementation of the above mitigation measures, the project would not result in a substantial adverse impact on sensitive species regulated by the CDFW or USFW. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact BIO-2:	The project would not 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 CDFW or USFWS. **(No Impact)**

The project site is located within a mixed urban and rural area of the City. There are no riparian habitats located on the project site. There are no sensitive natural communities located on or adjacent to the project site. Therefore, the proposed project would not result in adverse effects to riparian habitat or other sensitive natural communities. **(No Impact)**

Impact BIO-3:	The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(No Impact)**

The project site does not contain any wetlands. Therefore, implementation of the project would not result in a substantial adverse effect on protected wetlands. **(No Impact)**

Impact BIO-4:	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 native wildlife nursery sites. **(No Impact)**

The project area is an open field bordered by roads and other developments. The biological analysis reviewed the California essential connectivity project, which showed that the project site is not located within a connectivity area, core reserve or corridor, landscape block, or general wildlife corridors. Additionally, as discussed in the responses to Impacts BIO-2 and BIO-3, there are no riparian or wetland habitats on or adjacent to the site. The project would, therefore, not interfere with the movement of fish or wildlife species, nor interfere with established corridors or wildlife nursery sites. **(No Impact)**

Impact BIO-5:	The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact with Mitigation Incorporated)**

Tree Removal

The project area contains multiple ordinance sized trees as defined by the City of Morgan Hill. This includes 14 coast live oaks, one Peruvian pepper, and one Monterey pine, all of which would be removed for project construction. The ordinance size coast live oak trees have approximate circumferences ranging from 18 to 70 inches. The Peruvian pepper and Monterey pine have approximate circumferences between 50 to 70 inches.

In accordance with the Municipal Code Section 12.32.030, the applicant must apply for a tree removal permit prior to the removal of these trees. In accordance with Municipal Code Section 12.32.080, the project applicant would replace these trees with plantings of trees acceptable to the City's Development Services Director. Since the project is required to comply with the City's Municipal Code Chapter 12.32 for tree removal and replacement, the project would not result in a significant impact due to the loss of trees.

Impact BIO-5: The removal, cutting down, poisoning, or other destruction of protected trees, including pruning that would reduce the canopy area by more than 25 percent of any Ordinance sized tree, would require permits or mitigation measures under the City Municipal Code (Chapter 12.32). **(Significant Impact)**

Mitigation Measures: The following mitigation measures will ensure impacts to ordinance sized trees are reduced to a less than significant level.

MM BIO-5.1: To the extent feasible, activities shall avoid impacts to any protected trees. Avoidance is considered to be completely avoiding any work or staging under the dripline of trees. The boundary of the designated avoidance buffer shall be flagged or fenced prior to initial ground disturbance. If complete avoidance is not feasible, BIO MM-5.2 shall be implemented.

MM BIO-5.2: The project proponent shall comply with local ordinances and submit permit applications for removal, trimming, damage, or relocation of all trees covered by the City ordinance. Any trees to be removed shall require replacement at a two-to-one ratio on a comparable ratio of size. The replacement trees shall be planted on site to the extent feasible and the project proponent shall comply with all other replacement requirements imposed by the City.

With the implementation of the above mitigation measures, project construction would not result in a significant impact to any sensitive species nor would it conflict with a tree preservation policy. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact BIO-6: The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(Less than Significant Impact)**

The proposed project is covered under the Habitat Plan, designated as "Urban Development Equal to or Greater than 2 Acres Covered."[22] The land cover of the site is comprised of approximately 17 acres of "Grain, Row-crop, Hay and Pasture, Disked/Short-term Fallowed" and approximately three acres of "Urban-Suburban." A large portion of the project site (17 acres) is located within Fee Zone B (Agricultural and Valley Floor Lands); removal and development of this land cover type would require payment of applicable fees pursuant to the Habitat Plan.

The Habitat Plan also considers covered activities to result in a certain amount of indirect impacts from urban development mostly in the form of increased impervious surface and from the effects of nitrogen deposition. Urban development that increases the intensity of land use results in increased air pollutant emissions from passenger and commercial vehicles and other industrial and nonindustrial sources. Emissions from these sources are known to increase airborne nitrogen, of which a certain amount is converted into forms that can fall to earth as depositional nitrogen. It has been shown that increased nitrogen in serpentine soils can favor the growth of nonnative annual grasses over native serpentine species and these nonnative species, if left unmanaged, can overtake the native serpentine species, which are host plants for larval Bay Checkerspot butterfly. As such, covered projects within the Habitat Plan area are subject to paying a "Nitrogen Deposition Impact Fee" which is calculated based on the number of daily vehicle trips attributed to the activity and collected prior to the commencement of the use. The proposed project would generate approximately 3,884 more daily vehicle trips, when compared to the existing site.

In addition, all covered activities in the Habitat Plan are subject to certain conditions (as identified in Chapter 6 of the Plan) based on the project's location and type of project. To ensure that the project complies with conditions of the Habitat Plan, the conditions would be applied to each component as part of the entitlement approval conditions and/or other permits (i.e. grading permits, building permits, etc.).

[22] Santa Clara Valley Habitat Agency. *Habitat Agency Geobrowser*. Accessed February 12, 2020. http://www.hcpmaps.com/habitat/.

The City of Morgan Hill has adopted the Habitat Plan and, as an ordinance[23] implementing the measures and conditions set forth in the Habitat Plan, would levy applicable impact fees and incorporate relevant conditions on covered activities into the project. Therefore, the project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. **(Less Than Significant Impact)**

[23] Chapter 18.132 of the City of Morgan Hill Municipal Code.

4.5 CULTURAL RESOURCES

4.5.1 Environmental Setting

4.5.1.1 *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.

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.[24]

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.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

[24] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." March 14, 2006.

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.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to loss of cultural resources.[25] The following goal and policies are applicable to the proposed project:

Goal HC-8: *Historic identity and cultural resources that are preserved for future generations.*

Policy HC-8.1: **Identify and Protect Resources.** Identify and protect heritage resources from loss and destruction. (South County Joint Area Plan 15.09)

Policy HC-8.2: **Historic Structures.** Encourage the preservation and rehabilitation of the City's historic structures.

Policy HC-8.3: **Demolition.** Prior to approving demolition or alteration of historically significant buildings, evaluate alternatives, including structural preservation, relocation or other mitigation, and demonstrate that financing has been secured for replacement use.

Policy HC-8.4: **Tribal Consultation.** Consult with Native American tribes that have ancestral ties to Morgan Hill regarding proposed new development projects and land use policy changes.

[25] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

Policy HC-8.5: **Mitigation.** Require that if cultural resources, including tribal, archaeological, or paleontological resources, are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented.

4.5.1.2 *Existing Conditions*

Based on the Archaeological Sensitivity Map included in the City of Morgan Hill General Plan, the project site is not located within an archaeologically sensitive area.[26] No historic structures are located on the project site. The project site is mostly undeveloped with an existing medical office of modern construction and associated parking lot. Based on the historic properties listed in the City's General Plan EIR (Table 4.5-1), no historic properties are adjacent to the site. The nearest historic property is Newbold House, located 1.3 miles northwest at 20 East Fifth Street.

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☒
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☒	☐
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

Impact CUL-1: 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)**

There are no historic structures located on or near the project site. The nearest historic property to the project site is the Newbold House, located 1.3 miles northwest of the project site. Given the distance of the site from the nearest historic property, the project would have no impact on historic resources. **(No Impact)**

Impact CUL-2: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact)**

According to the City of Morgan Hill's Archaeological Sensitivity Map, the project site is not located in an archaeologically sensitive area of the City. Nevertheless, the project shall implement the

[26] City of Morgan Hill. *Archaeological Sensitivity Map*. April 2000.

following standard conditions in the event that an archaeological resource is discovered during project construction activities:

Standard Condition CUL-1:

In the event of the unintentional discovery of undocumented human remains or significant historic or archaeological materials during construction, the following policies and procedures for treatment and disposition measures shall be implemented:

- If human remains are encountered, they shall be treated with dignity and respect as due to them. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
    - Remains shall not be held by human hands. Surgical gloves shall be worn if remains need to be handled.
    - Surgical mask shall also be worn to prevent exposure to pathogens that may be associated with the remains.
- In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped.[27] Ground-disturbing project activities may continue in other areas that are outside the discovery location.
- An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the Contractor Foreman or authorized representative, or party who made the discovery, or if on-site at the time or discovery, by the Monitoring Archaeologist (typically 25 to 50 foot buffer for a single burial or archaeological find).
- The discovery location shall be secured as directed by the City if considered prudent to avoid further disturbances.
- The Contractor Foreman or authorized representative, or party who made the discovery shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
    - The City of Morgan Hill Development Services Director
    - The Contractor's Point(s) of Contact
    - The Coroner of the County of Santa Clara (if human remains found)
    - The Native American Heritage Commission (NAHC) in Sacramento
    - The Amah Mutsun Tribal Band
- The Coroner will have two working days to examine the human remains after being notified of the discovery. If the remains are Native American, the Coroner has 24 hours to notify the NAHC. The NAHC is responsible for identifying and immediately notifying the Most Likely

[27] Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, groundstone mortars and pestles), culturally altered ash-stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials, and historic structure remains such as stone-lined building foundations, wells or privy pits.

Descendant (MLD) from the Amah Mutsun Tribal Band. (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)

- Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.
- Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the Amah Mutsun Tribal Band may be considered and carried out.
- If the MLD recommendation is rejected by the City of Morgan Hill, the parties will attempt to mediate the disagreement with the NAHC. If mediation fails, then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

With the implementation of the above standard conditions, the project would have a less than significant impact on archaeological resources. **(Less than Significant Impact)**

Impact CUL-3:	The project would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact)**

The project is not located in an archaeologically sensitive area. In the unlikely event that human remains are discovered during construction activities, implementation of Standard Condition CUL-1 would reduce the project's impact on human remains to a less than significant level. **(Less than Significant Impact)**

4.6 ENERGY

The following discussion is based in part on an Air Quality Analysis completed by Illingworth & Rodkin, Inc. on May 5, 2020. The report is included in Appendix A of this IS.

4.6.1 Environmental Setting

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the United States Environmental Protection Agency (EPA) apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

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. In 2008, Executive Order 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 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, and the 2019 Title 24 updates went into effect on January 1, 2020.[28] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[29]

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. The most recent update to CALGreen went into effect on January 1, 2020, and covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

[28] California Building Standards Commission. "California Building Standards Code." Accessed January 21, 2020. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.
[29] California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed January 21, 2020. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[30]

Local

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to conserve energy and mitigate energy impacts resulting from planned developments within the City of Morgan Hill.[31] The following goals, policies, and actions are applicable to the proposed project:

Goal NRE-16: *Conservation of energy resources.*

Policy NRE-16.1: **Energy Standards for New Development.** New development, including public buildings, should be designed to exceed State standards for the use of energy.

Policy NRE-16.2: **Energy Conservation.** Promote energy conservation techniques and energy efficiency in building design, orientation, and construction.

Policy NRE-16.3: **Energy Use Data and Analysis**. Provide information to increase building owner, tenant, and operator knowledge about how, when, and where building energy is used.

Policy NRE-16.5: **Energy Efficiency.** Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that promote energy efficiency.

Policy NRE-16.6: **Landscaping for Energy Conservation.** Encourage landscaping plans for new development to address the planting of trees and shrubs that will provide shade to reduce the need for cooling systems and allow for winter daylighting.

Policy NRE-16.7: **Renewable Energy.** Encourage new and existing development to incorporate renewable energy generating features, like solar panels and solar hot water heaters.

[30] California Air Resources Board. "The Advanced Clean Cars Program." Accessed February 12, 2020. https://www.arb.ca.gov/msprog/acc/acc.htm.
[31] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

4.6.1.1 *Existing Conditions*

Total energy usage in California was approximately 7,881 trillion British thermal units (Btu) in the year 2017, the most recent year for which this data was available.[32] Out of the 50 states, California is ranked second in total energy consumption and 48th in energy consumption per capita. The breakdown by sector was approximately 18 percent (1,416 trillion Btu) for residential uses, 19 percent (1,473 trillion Btu) for commercial uses, 23 percent (1,818 trillion Btu) for industrial uses, and 40 percent (3,175 trillion Btu) for transportation.[33] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Santa Clara County in 2018 was consumed primarily by the commercial sector (77 percent), followed by the residential sector consuming 23 percent. In 2018, a total of approximately 16,668 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.[34]

The community-owned Silicon Valley Clean Energy (SVCE) is the electricity provider for the City of Morgan Hill.[35] SVCE sources the electricity and the Pacific Gas and Electric Company (PG&E) delivers it to customers over their existing utility lines. Customers are automatically enrolled in the GreenStart plan and can upgrade to the GreenPrime plan. Both options are considered 100 percent GHG-emission free.

Natural Gas

PG&E provides natural gas services within Morgan Hill. In 2018, approximately one percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.[36] In 2018, residential and commercial customers in California used 34 percent of the state's natural gas, power plants used 35 percent, the industrial sector used 21 percent, and other uses used 10 percent. Transportation accounted for one percent of natural gas use in California. In 2018, Santa Clara County used approximately 3.5 percent of the state's total consumption of natural gas.[37]

In response to the growing climate crisis, the City has determined that natural gas use in local buildings, which accounts for approximately one-third of the community's carbon footprint, represents the City's greatest opportunity to reduce future greenhouse gas emissions. Requiring all new buildings to be constructed without natural gas will dramatically reduce future emission growth as electricity procured by Silicon Valley Clean Energy is 100% carbon free. The City Council

[32] United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed February 12, 2020. https://www.eia.gov/state/?sid=CA#tabs-2.
[33] United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed February 12, 2020. https://www.eia.gov/state/?sid=CA#tabs-2.
[34] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed February 12, 2020. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[35] Silicon Valley Clean Energy. "Frequently Asked Questions." Accessed February 12, 2020. https://www.svcleanenergy.org/faqs.
[36] California Gas and Electric Utilities. 2019 *California Gas Report.* Accessed February 12, 2020. https://www.socalgas.com/regulatory/documents/cgr/2019_CGR_Supplement_7-1-19.pdf.
[37] California Energy Commission. "Natural Gas Consumption by County." Accessed February 12, 2020. http://ecdms.energy.ca.gov/gasbycounty.aspx.

adopted Ordinance No. 2306 on November 6, 2019, which prohibits natural gas infrastructure in new buildings.

Fuel for Motor Vehicles

In 2017, 15 billion gallons of gasoline were sold in California.[38] 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 miles per gallon (mpg) in the mid-1970s to 24.9 mpg in 2018.[39] 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 miles per gallon by the year 2020, was subsequently revised to apply to cars and light trucks model years 2011 through 2020.[40,41]

4.6.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

[38] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed February 12, 2020. http://www.cdtfa.ca.gov/taxes-and-fees/MVF_10_Year_Report.pdf.

[39] United States Environmental Protection Agency. "The 2018 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." March 2019.

[40] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed February 12, 2020. http://www.afdc.energy.gov/laws/eisa.

[41] Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007.* Accessed February 12, 2020. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.

Impact EN-1:	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. **(Less than Significant Impact)**

As proposed, the project would construct three- and four-story multi-family buildings, a four-story medical/hospital building, three-story parking structure, one-story urgent care, and one-story retail/restaurant building. The proposed project would result in increased demand for energy during its construction and operation.

Estimated Energy Use of the Proposed Project

Energy would be consumed during the construction and operational phases of the proposed project. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site for grading, and the actual construction of the buildings. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks. Implementation of the proposed development would consume energy (in the form of electricity and natural gas) during operation, primarily from building heating and cooling, lighting, and water heating. Table 4.6-1 below summarizes the estimated energy use of the proposed project.

Table 4.6-1: Estimated Annual Energy Use of Proposed Development

Land Use	Electricity Use (kWh/yr)	Natural Gas Use (kBTU/yr)
Apartments Mid Rise	899,250	0
Park	0	0
Enclosed Parking with Elevator	1,172,000	0
High Turnover Sit Down Restaurant	289,700	2,104,200
Hospital	519,640	1,669,930
Medical Office Building	277,248	396,720
Parking Lot	76,440	0
Total	**3,234,278**	**4,170,850**

Source: Illingworth & Rodkin, Inc. *Lillian Commons Construction Air Quality and Community Risk Assessment*. May 5, 2020.

Compared to existing conditions, the proposed project would substantially increase on-site electricity and natural gas use. However, the project would be built in accordance with the 2019 CALGreen requirements and Title 24 energy efficiency standards, which would improve the efficiency of the overall project and reduce impacts. Based on the CalEEMod results, the total annual vehicle miles traveled (VMT) for the project would be approximately 7,044,701.[42] Using the U.S. EPA fuel economy estimates (22.0 mpg) the proposed project would result in consumption of approximately 320,214 gallons of gasoline per year.[43] New automobiles purchased by future occupants of the proposed project would be subject to fuel economy and efficiency standards applied throughout the State of California, which means that over time the fuel efficiency of vehicles associated with the project site would improve. Implementation of the proposed project would not result in a wasteful, inefficient, or unnecessary consumption of energy resources during operation. **(Less than Significant Impact)**

Energy Efficiency During Construction

The anticipated construction schedule assumes that the project would be built in three phases, with completion estimated by 2025. The project would require site preparation, grading and excavation, trenching, paving, and building of interior and exterior. Energy would not be wasted or used inefficiently by construction equipment, as the proposed project would include several measures to improve efficiency of the construction process. For example, during construction, construction waste management methods and processes would be employed to reduce the amount of and trash construction waste. **(Less than Significant Impact)**

Energy Efficiency During Operation

Operation of the project would consume energy for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. Operational energy would also be consumed during each vehicle trip generated by future employees and residents. The building would meet or exceed the requirements of the California Building Energy Efficiency Standards.

The project would not use energy or fuel in a wasteful manner, given the project features that reduce energy use, including the following:

- Bicycle parking would be provided on-site.
- The proposed buildings would meet or exceed the requirements of the California Building Energy Efficiency Standards.
- The proposed building would include water conserving fixtures.
- Implementation of construction waste management methods during construction to reduce the amount of construction waste.

For all the reasons listed above, the proposed project would have a less than significant impact. **(Less Than Significant Impact)**

[42] CalEEMod. *Lillian Commons AQ-GHG Model.* April 17, 2020.
[43] 7,044,701 VMT / 22 mpg = 320,214 gallons of gasoline

Impact EN-2:	The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

Electricity for the proposed project would be provided by Pacific Gas & Electric Company. Although the project would increase the project site's energy use, the proposed development would be completed in compliance with the current energy efficiency standards set forth in Title 24, CALGreen, and the City's Municipal Code. Additionally, the project would comply with the City's natural gas ordinance, which prohibits natural gas infrastructure in new buildings. Therefore, the project would comply with state and local plans for energy efficiency. **(Less than Significant Impact)**

4.7 GEOLOGY AND SOILS

The following discussion is based, in part, on a Geologic Impact Analysis completed by EMC Planning Group, Inc. on October 16, 2019. The report is attached as Appendix C.

4.7.1 Environmental Setting

4.7.1.1 *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 (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS 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 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.

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 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

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to conserve energy and mitigate geological impacts resulting from planned developments within the City of Morgan Hill.[44] The following goals, policies, and actions are applicable to the proposed project:

Goal SSI-1: *Development that avoids or minimizes risks from environmental hazards.*

Action SSI-1.A: **New Development and Hazards.** New development should avoid hazardous and sensitive areas, and should occur only where it can be built without risking health and safety. New habitable structures should not be allowed in areas of highest hazard, such as floodways, active landslides, active fault traces, and airport safety zones. In areas of less risk, development should be limited and designed to reduce risks to an acceptable level.

Policy SSI-1.2: **Hazard Reporting.** Known or potential geologic, fire, and flood hazards shall be disclosed as part of every real estate transaction and recorded on documents to be reported for building permits, subdivisions, and land development reports. Mitigation of hazards shall be noted in the same manner.

Goal SSI-2: *Reduction of potential harm to persons or property from geologic/seismic hazards.*

Policy SSI-2.4: **Code Requirements for Critical Structures.** Design and construct critical structures above and beyond the applicable engineering and building standards, where such measures are deemed necessary from available geologic and engineering data. Critical structures are those structures:

a) Needed after a disaster (e.g., emergency communications, fire stations, hospitals, bridges and overpasses);
b) Whose continued functioning is critical (e.g. major power lines and stations, water lines, and other public utilities); or

[44] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

c) Whose failure might be catastrophic (e.g., large dams).

Policy SSI-2.5: **Design of Critical Structures.** Design and construct critical structures to resist minor earthquakes without damage, resist moderate earthquakes without structural damage, and resist major earthquakes of the intensity or severity of the strongest experienced in California without collapse.

4.7.1.2 *Existing Conditions*

Geology and Soils

The project site is located in the Santa Clara Valley, an alluvial basin, bounded by the Santa Cruz Mountains to the west, the Hamilton/Diablo Range to the east, and the San Francisco Bay to the north. Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Hamilton/Diablo Range were exposed by the continued tectonic uplift and regression of the inland sea that had previously inundated this area.

The project site is made up of Arbuckle gravelly loam and San Ysidro loam soils[45], which are well-draining soils that are not susceptible to expansion or liquefaction. The potential for erosion and landslides at the project site is low due to the flat slope of the project site and surrounding area. The project site is not located within a landslide hazard zone.[46]

Seismicity

The project site is located within the San Francisco Bay Area, the most seismically active region in the United States. Faults in the region are capable of generating earthquakes of magnitude 6.7 or higher, and strong to very strong ground shaking would be expected to occur at the project site during a major earthquake on one of the nearby faults. Based on a 2015 to 3009 forecast completed by the U.S. Geological Survey, there is a 72 percent probability that one or more major earthquakes will occur in the San Francisco Bay Area by 2044.[47] Active faults (faults in which historic displacement has occurred within the last 200 years) near the project site are shown below in Table 4.7-1.[48]

[45] United States Department of Agriculture. Natural Resources Conservation Service. Web Soil Survey. Accessed February 24, 2020. https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
[46] California Geological Survey. *Earthquake Zones of Required Investigation*. Accessed February 20, 2020. https://maps.conservation.ca.gov/cgs/EQZApp/app/.
[47] U.S. Geological Survey. "UCERF3: A New Earthquake Forecast for California's Complex Fault System. Fact Sheet 2015-3009." March 2015. Accessed February 20, 2020. Available at: http://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf.
[48] California Geological Survey. *Fault Activity Map of California (2010)*. Accessed February 20, 2020. http://maps.conservation.ca.gov/cgs/fam/.

Table 4.7-1: Active Faults Near the Project Site	
Fault	**Physical Distance from Site**
Calaveras	3.5 miles east
San Andreas	10 miles west
Hayward	30 miles north

Although the project site is within a seismically active region, the site is not located within a fault zone on a state-designated Alquist-Priolo Earthquake Fault Zoning Map.[49]

Liquefaction

Liquefaction is a type of ground failure that occurs when a saturated soil loses its strength in response to a stressful event, such as ground shaking during an earthquake. The project site is located within a low-susceptibility liquefaction zone.[50]

Lateral Spreading

Lateral spreading is a failure within a nearly horizontal soil zone (possibly due to liquefaction) that causes the overlying soil mass to move toward a free face (such as an open body of water, channel or excavation) or down a gentle slope. There are no creeks or open channels on or adjacent to the project site. The likelihood of lateral spreading on the site is low.

Paleontological Resources

Paleontological resources or fossils are the remains of prehistoric plant and animal life. Paleontological resources do not include human remains or artifacts. Fossil remains such as bones, teeth, shells, and wood are found in geologic formations. Paleontological resources are limited, non-renewable, sensitive scientific and educational resources. The potential for fossil remains at a location can be predicted based on whether or not previous fossil finds have been made in the vicinity, as well as based on the age of the geologic formations. Based on the findings in the General Plan EIR, no paleontological resources have been identified in the City of Morgan Hill.

[49] California Geological Survey. *Earthquake Zones of Required Investigation*. Accessed February 20, 2020. https://maps.conservation.ca.gov/cgs/EQZApp/app/.
[50] Ibid.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
– 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)?	☐	☐	☒	☐
– Strong seismic ground shaking?	☐	☐	☒	☐
– Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
– Landslides?	☐	☐	☒	☐
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
3) 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?	☐	☐	☒	☐
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
5) 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?	☐	☐	☐	☒
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☒	☐

Impact GEO-1:	The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. **(Less than Significant Impact)**

As discussed in Section 4.7.1.2, the project site is in the seismically active San Francisco Bay Area, which has a 72 percent probability of experiencing at least one magnitude 6.7 earthquake during the next 30 years. In the event of a large earthquake, the project site would experience intense ground shaking. No known faults occur beneath the project site. The project site is not located within an earthquake fault zone on an Alquist-Priolo Earthquake Fault Zoning Map, and therefore, the potential for fault rupture at the site is low.

As noted in Section 4.7.1.2, the project site is located in a low-susceptibility liquefaction hazard zone. Therefore, the potential for liquefaction to occur on the site is low. Since the soils on the site are not prone to liquefaction and the site is not located near a creek or other open channel, the probability of lateral spreading occurring on-site low. The project site and area are flat and are not located in a landslide hazard zone. Therefore, there is no potential for landslides to occur on-site.

The project would conform to the foundation design, excavation, retaining wall, pavement design, and on-site utility trenching, and subgrade surface soil criteria in the project's geotechnical investigation report. The project would implement the following standard condition.

Standard Condition GEO-1:

- To avoid or minimize potential damage from seismic shaking, the proposed development shall be built using standard engineering and seismic safety design techniques. Building design and construction at the 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 structural designs for the proposed development will account for repeatable horizontal ground accelerations. The report shall be reviewed and approved by the City of Morgan Hill Building Division prior to issuance of a building permit. The buildings shall be required to meet the requirements of applicable Building and Fire Codes, including the 2019 California Building Code Chapter 16, Section 1613, as adopted or updated by the City. The project shall be designed to withstand soil hazards identified on the site 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.

By conforming to standard engineering and seismic safety design techniques outlined in the City of Morgan Hill's Building Division and California Building Code and the recommendations in the geotechnical investigation report, the proposed project would not expose people or structures to substantial adverse effects. The project would, therefore, have a less than significant impact. **(Less Than Significant Impact)**

Impact GEO-2:	The project would not result in substantial soil erosion or the loss of topsoil. **(Less than Significant Impact)**

Grading, trenching, and construction of the proposed project would result in ground disturbance at the site. Ground disturbance would expose soils and increase the potential for wind or water related erosion and sedimentation at the site until construction is complete. The City has developed standard conditions to avoid significant soil erosion impacts during construction. The following conditions would be included as part of the project:

Standard Condition GEO-2 (Storm Drain System): Prior to final map approval or issuance of a grading permit the applicant shall complete the following to the satisfaction of the City Engineer.

1. Plan describing how material excavated during construction will be controlled to prevent this material from entering the storm drain system.
2. Water Pollution Control Drawings for Sediment and Erosion Control.

Standard Condition GEO-3 (NPDES Permit Conformance): As required by the State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, construction activity resulting in a land disturbance of one acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) package and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with Section A, B, and C of the General Permit prior to the commencement of soil disturbing activities. A NOI Receipt Letter assigning a Waste Discharger Identification number to the construction site will be issued after the State Water Resource Control Board (SWRCB) receives a complete NOI package (original signed NOI application, vicinity map, and permit fee); copies of the NOI Receipt Letter and SWPPP shall be forwarded to the Building and Land Development Engineering Divisions review. The SWPPP shall be made a part of the improvement plans (SWRCB NPDES General Permit CA000002).

By implementing the standard conditions discussed above, the project would have a less than significant impact on soil erosion. **(Less than Significant Impact)**

Impact GEO-3:	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. **(Less than Significant Impact)**

With implementation of the standard engineering and seismic safety design techniques outlined in the City of Morgan Hill's Building Division and California Building Code (refer to Standard Condition GEO-1), the project site would not be located on an unstable geologic unit that would result in subsidence or collapse of the proposed buildings. The project site and area are not subject to landslides and have a low potential for liquefaction and lateral spreading. Therefore, compliance with

Standard Condition GEO-1 would reduce impacts to a less than significant level. **(Less than Significant Impact)**

Impact GEO-4:	The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(Less than Significant Impact)**

The soils on-site have low expansion potential. Additionally, the project would comply with Standard Condition GEO-1 and standard engineering practices to ensure that future buildings are designed properly to account for soils-related hazards on-site. The project's potential to create risks to life or property would be reduced to a less than significant level. **(Less than Significant Impact)**

Impact GEO-5:	The project would not 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 proposed project would connect to the City's existing sanitary sewer system. No septic tanks would be developed for the project. Therefore, no impacts related to septic systems would occur. **(No Impact)**

Impact GEO-6:	The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact)**

No paleontological resources have been identified in the City of Morgan Hill. The proposed project would excavate to a maximum depth of approximately six feet below ground surface to install utilities. Given that the proposed project would not require excavation below six feet below ground surface and would not contact bedrock, paleontological resources would not be discovered during construction. The project would, therefore, not result in a significant impact to paleontological resources. **(Less than Significant Impact)**

4.8 GREENHOUSE GAS EMISSIONS

The following discussion is based in part on an Air Quality Analysis completed by Illingworth & Rodkin, Inc. on May 5, 2020. The report is included in Appendix A of this IS.

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, 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 (GWP) 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 would 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 would 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.

4.8.1.2 *Regulatory Framework*

State

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 ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

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 Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (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 (PDAs).

Regional and Local

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.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to reduce greenhouse gas emissions from planned developments within the City of Morgan Hill.[51] The following goal and policies are applicable to the proposed project:

Goal NRE-15: *An adaptive and resilient community that responds to climate change.*

Policy NRE-15.1: **Greenhouse Gas Emission Reduction Targets**. Maintain a greenhouse gas reduction trajectory that is consistent with the greenhouse gas reduction targets of Executive Orders B-30-15 (40 percent below 1990 levels by 2030) and S-03-05 (80 percent below 1990 levels by 2050) to ensure the City is consistent with statewide efforts to reduce greenhouse gas emissions.

Policy NRE-15.2: **Linking Land Use and Transportation**. Encourage land use and transportation patterns that reduce dependence on automobiles.

Policy NRE-15.11: **Green Building**. Promote green building practices in new development.

4.8.1.3 *Existing Conditions*

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, emissions of GHGs 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.

Post 2020-Impact Thresholds

As described previously, BAAQMD adopted GHG emissions thresholds of significance to assist in the review of projects under CEQA. These thresholds were designed to establish the level at which BAAQMD has determined that GHG emissions would cause significant environmental impacts. The GHG emissions thresholds identified by BAAQMD are 1,100 metric tons (MT) of CO_2e per year or 4.6 MT CO_2e per service population per year.

The numeric thresholds set by BAAQMD were calculated to achieve the state's 2020 target for GHG emissions levels (and not the SB 32 specified target of 40 percent below the 1990 GHG emissions level). The project would be constructed in three phases beginning January 2021 and lasting about 48 months. The project, therefore, would not be fully constructed and occupied until after December 31, 2020.

CARB has completed a Scoping Plan, which would be utilized by BAAQMD to establish the 2030 GHG efficiency threshold. BAAQMD has yet to publish a quantified GHG efficiency threshold for 2030. For the purposes of this analysis, a Substantial Progress efficiency metric of 2.6 MT CO_2e/year/service population has been calculated for 2030 based on the GHG reduction goals of SB

[51] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

32 and Executive Order B-30-15, taking into account the 1990 inventory and the projected 2030 statewide population and employment levels.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

Impact GHG-1: The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy, and water usage, and solid waste disposal. Emissions for the proposed project were analyzed using CalEEMod and the methodology recommended in the BAAQMD CEQA Air Quality Guidelines and are discussed below.

Construction Emissions

Construction activity would generate an estimated 1,943 MT CO_2e of GHG emissions over four years of construction. These are the emissions from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. BAAQMD also encourages the incorporation of best management practices (BMPs) to reduce GHG emissions during construction where feasible and applicable.

Operational Emissions

The proposed project would generate an estimated 2,915 MT CO_2e of annual GHG emissions under operations in 2023 and 2,650 MT CO_2e in 2030. The service population would be 472 employees and 1,102 residents. The service population emissions for the years 2025 and 2030 are predicted to be 2.56 and 2.40 MT of CO2e annually per service population, respectively.

Table 4.8-1: Annual Project GHG Emissions (CO_2e) in Metric Tons		
Source Category	**Proposed Project in 2025**	**Proposed Project in 2030**
Area	3	3
Energy Consumption	258	258
Mobile	2,285	2,020
Solid Waste Generation	352	352
Water Usage	17	17
Metric Ton Total	**2,915**	**2,650**
Bright-Line Significance Threshold	*660 MT of CO_2e*	
Service Population Emissions	2.65	2.40
Per Capita Significance Threshold	*2.8 MT of CO_2e/year/service population*	
Exceed Both?	**No**	**No**

As shown in Table 4.8-1, the project's 2025 and 2030 emissions would not exceed the per capita threshold of 2.8 MT of CO_2e per year per service population. However, the project would exceed the bright-line significance threshold, which would be considered a significant impact and would require mitigation.

Impact GHG-1: Operation of the proposed project would generate GHG emissions resulting in a cumulatively considerable contribution to global climate change. **(Significant Impact)**

Mitigation Measures:

MM GHG-1.1: The following mitigation measure would reduce GHG operational emissions to a less than significant level:

- The applicant shall develop a GHG reduction plan that includes the proper elements that would reduce emissions from project implementation and demonstrate that GHG emission from the project would be reduced by a sufficient amount to achieve the 2020 or 2030 standard, based on when the project would become operational. Elements of this plan may include, but would not be limited to, the following:
    - Installation of solar power systems or other renewable electric generating systems that provide electricity to power on-site equipment and possibly provide excess electric power;
    - Construct onsite or fund off-site carbon sequestration projects (such as a forestry or wetlands projects for which inventory and reporting protocols have been adopted). If the project develops an off-site project, it must be registered with the Climate Action Reserve or otherwise approved by the BAAQMD in order to be used to offset Project emissions;

- Purchase of carbon credits to offset Project annual emissions. Carbon offset credits must be verified and registered with The Climate Registry, the Climate Action Reserve, or another source approved by the California Air Resources Board or BAAQMD. The preference for offset carbon credit purchases include those that can be achieved as follows: 1) within the City; 2) within the San Francisco Bay Area Air Basin; 3) within the State of California; then 4) elsewhere in the United States. Provisions of evidence of payments, and funding of an escrow-type account or endowment fund would be overseen by the City;
- Develop and implement a transportation demand management (TDM) program to reduce mobile GHG emissions.

Some of the measures involve project features or operational measures that would serve to reduce project emissions. However, it may not be possible to accomplish the required reduction through the design, construction, and operation of the project, in which case the use of carbon offsets would be required. Carbon offsets, as purchased through a verified registry, are a feasible and appropriate method to reduce a project's GHG emissions and is recognized by BAAQMD and CARB. Because the project would be required to purchase whatever remaining amount of GHG reduction was required, after exhausting on-site reduction options listed above, the project's GHG emissions would be reduced to a level below the applicable threshold. Therefore, implementation of a GHG reduction plan, as set forth in the mitigation measure above, would reduce the project's GHG emissions impact to a less than significant level. **(Less Than Significant Impact with Mitigation)**

Impact GHG-2:	The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

Although the proposed project's operational emissions would exceed the 2030 bright-line threshold, implementation of MM GHG-1.1 would ensure that project emissions are below the 2030 threshold. The project would comply with state and local plans and policies pertaining to GHG emission reductions. The project would be consistent with the greenhouse gas reduction targets of Executive Order B-30-15. Therefore, the project would not conflict with policies adopted at the state and local levels for the purpose of reducing GHG emissions. **(Less than Significant Impact)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Environmental Setting

4.9.1.1 *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, commonly known as Superfund, and the Resource Conservation and Recovery Act. In California, the 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 and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

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).[52]

[52] California Environmental Protection Agency. *Cortese List Data Resources.* Accessed February 24, 2020. https://calepa.ca.gov/sitecleanup/corteselist/

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program 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 CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Santa Clara County Department of Environmental Health reviews CalARP risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Local

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to reduce the effects of hazardous materials from planned developments within the City of Morgan Hill.[53] The following goals, policies, and actions are applicable to the proposed project:

Goal SSI-1: *Development that avoids or minimizes risks from environmental hazards.*

Action SSI-1.A: **New Development and Hazards.** New development should avoid hazardous and sensitive areas, and should occur only where it can be built without risking health and safety. New habitable structures should not be allowed in areas of highest hazard, such as floodways, active landslides, active fault traces, and airport safety zones. In areas of less risk, development should be limited and designed to reduce risks to an acceptable level.

[53] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

Goal SSI-4: *Avoidance and exposure to hazardous substances.*

Policy SSI-4.16: **Contaminated Site Mitigation**. Require new or expanding development projects in areas contaminated from previous discharged to mitigate their environmental effects.

4.9.1.2 *Existing Conditions*

The 19.67-acre project site is largely undeveloped, vacant land, with the exception of existing medical offices and associated parking in the southern corner of the site. A review of federal, state, and local regulatory agency databases was completed to evaluate the likelihood of contamination incidents at and near the project site. The project site is not identified on any of the regulatory databases and is not on the Cortese list.[54] The San Martin Airport is located approximately four miles south of the project site. The project site is not located within an Airport Influence Area (AIA) of a Comprehensive Land Use Plan and is not located within an FAA height restriction area for new structures.

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
4) 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?	☐	☐	☒	☐
5) 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 or excessive noise for people residing or working in the project area?	☐	☐	☐	☒

[54] California Environmental Protection Agency. *Cortese List Data Resources.* Accessed February 24, 2020. https://calepa.ca.gov/sitecleanup/corteselist/

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

Project construction may involve the use and transport of hazardous materials, such as fuels, oils, mechanical fluids, and other chemicals used during construction. Operationally, the transport, use, and disposal of hazardous materials from residential and retail uses would be minimal because these uses do not typically necessitate hazardous materials, except for substances such as household cleaners, paint, etc. However, hospitals and medical offices may routinely transport hazardous materials.

The use and storage of hazardous materials in the City of Morgan Hill is regulated by Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division (SCCDEH). The construction and operation of the proposed project would conform to the requirements of the SCCDEH. Compliance with applicable federal, state, and local handling, storage, and disposal requirements would ensure that no significant hazards to the public or the environment are created by these routine activities. For these reasons, the storage and handling of hazardous materials on the site, under the proposed project, would not result in a significant impact. **(Less Than Significant Impact)**

Impact HAZ-2: The project would not 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 Impact)**

As discussed under Impact HAZ-1, the use and storage of hazardous materials would be regulated by the SCCDEH, and compliance with applicable laws would reduce potential impacts to the public to a less than significant level. **(Less than Significant Impact)**

Impact HAZ-3:	The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(Less than Significant Impact)**

The project site is located less than 0.25 miles from Barrett Elementary School, which is located at 895 Barrett Avenue, north of the project site. Compliance with applicable local, state, and federal regulations, as discussed under Impacts HAZ-1 and HAZ-2, would reduce potential impacts from hazardous emissions to a less than significant impact. **(Less than Significant Impact)**

Impact HAZ-4:	The project would not 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, create a significant hazard to the public or the environment. **(Less than Significant Impact)**

The project is not included on a list of hazardous materials sites pursuant Government Code Section 65962.5.[55] **(Less than Significant Impact)**

Impact HAZ-5:	The project would not be 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. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(No Impact)**

The project site is not located within an airport land use plan, within two miles of a public airport, or near a private landing strip. Therefore, the project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(No Impact)**

Impact HAZ-6:	The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(No Impact)**

The project would be constructed in accordance with current building and fire codes to ensure structural stability and safety. In addition, the Morgan Hill Fire Department would review the site development plans to ensure fire protection design features are incorporated and adequate emergency access is provided. The project proposes to include two emergency access driveways off Barrett Avenue. For these reasons, the operations of the proposed mixed-use project would not interfere with the City-adopted Emergency Operations Plan or any adopted statewide emergency response or evacuation plans.[56] **(No Impact)**

[55] California Environmental Protection Agency. *Cortese List Data Resources.* Accessed February 24, 2020. https://calepa.ca.gov/sitecleanup/corteselist/

[56] City of Morgan Hill, Office of Emergency Services. *Emergency Operations Plan*. Revision 2.0. January 11, 2018.

Impact HAZ-7:	The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. **(No Impact)**

The project site is not located in a fire hazard severity zone (FHSZ).[57] Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death as a result of wildland fires. **(No Impact)**

[57] California Board of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed February 6, 2020. http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones.

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Overview

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 EPA and the SWRCB have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (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 the Central Coast RWQCB.

Federal and State

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) 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 (FIRMs) 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.

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.

Regional and Local

Central Coast Basin Plan

The Central Coast RWQCB regulates water quality in accordance with the Water Quality Control Plan for the Central Coast Basin (Basin Plan). The Basin Plan lists the beneficial uses that the Central Coast RWQCB has identified for local aquifers, streams, marshes, rivers, as well as the water quality objectives and criteria that must be met to protect these uses. The Central Coast RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for

nonprofit sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Phase II Small MS4 General Permit

Gilroy, Morgan Hill, and the portion of Santa Clara 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 pursuant to 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 low impact development (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).[58]

Water Resources Protection Ordinance and District Well Ordinance

The Santa Clara Valley Water District (Valley Water) operates as the flood control agency for Santa Clara 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.

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to reduce impacts to hydrology and water quality from planned developments within the City of Morgan Hill.[59] The following goal and policies are applicable to the proposed project:

Goal SSI-16: Minimized adverse effects on property, natural resources, and ground and surface water quality from stormwater runoff.

Policy SSI-16.2: **Drainage System Capacity**. Ensure that the level of detention or retention provided on the site of any new development is compatible with the capacity of the regional storm drainage system.

Policy SSI-16.3: **Stormwater Management Plans**. Require a stormwater management plan for each proposed development, to be presented early in the development

[58] City of Gilroy, City of Morgan Hill, and County of Santa Clara. *Stormwater Management Guidance Manual for Low Impact Development & Post-Construction Requirements*. June 2015.
[59] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

process and describe the design, implementation, and maintenance of the local drainage facilities.

4.10.1.2 *Existing Conditions*

Hydrology and Drainage

The City of Morgan Hill is divided into several hydrologically distinct drainage areas, with each having a system of conveyance facilities, pumps, and detention basins to collect and dispose the runoff. The stormwater runoff from these areas is collected and ultimately discharged into creeks that flow through the City and are tributary to either of the Monterey Bay or San Francisco Bay. The project site is in the Butterfield Channel storm drainage basin, which drains to Monterey Bay.[60]

The project site currently has 806,295 square feet of pervious surfaces consisting of non-native grasses and 50,530 square feet of impervious surfaces.

Water Quality

The water quality of ponds, creeks, streams, and other surface waterbodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as "non-point" source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Grading and excavation activities during construction of a project could increase the amount of surface water runoff (i.e., particles of fill or excavated soil) from the site, or could erode soil downgradient, if the flows are not controlled. Deposition of eroded material in water features could increase turbidity, thereby endangering aquatic life, and reducing wildlife habitat. Excessive precipitation can carry these non-point pollutants downstream.

Groundwater

The site is located in the Santa Clara Valley Subbasin of the Santa Clara Valley Groundwater Basin. The site is within the Coyote Valley Recharge Area designated by the Santa Clara Valley Water District (SCVWD).[61] The site does not contain aquifer recharge facilities, such as streams or ponds. According to the Geologic Impact Analysis completed by EMC Planning Group, Inc., groundwater lies at depths of approximately 20 to 30 feet beneath the project site.

Flooding and Other Hazards

The project site is not located within a 100-year flood hazard area. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM), the project site is located within Zone X which is an area of one percent annual chance flood with average depths of less than one foot or drainage areas less than one square mile.[62]

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[60] City of Morgan Hill. *2018 Storm Drainage System Master Plan.* September 2018.
[61] Santa Clara Valley Water District. *Groundwater Management Plan*. Adopted November 22, 2016. Accessed May 21, 2019. https://www.valleywater.org/your-water/where-your-water-comes-from/groundwater.
Groundwater recharge area = Area that supplies water to an aquifer in a groundwater basin.
[62] Federal Emergency Management Agency. *Flood Insurance Rate Map, Community Panel #06085C0607H*. May 18, 2009.

A seiche is an oscillation of the surface of a lake or landlocked sea varying in period from a few minutes to several hours. There are no landlocked bodies of water near the project site that in the event of a seiche would affect the site. A tsunami is a series of water waves caused by the displacement of a body of water, such as an ocean or a large lake. Due to the immense volumes of water and energy involved, tsunamis can devastate coastal regions. The project site does not lie within a tsunami inundation hazard area.[63]

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
3) 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 addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
– result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
– substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
– 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; or	☐	☐	☒	☐
– impede or redirect flood flows?	☐	☐	☒	☐
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

[63] California Emergency Management Agency. *California Official Tsunami Inundation Map.* Accessed February 24, 2020. https://www.conservation.ca.gov/cgs/tsunami/maps.

Impact HYD-1:	The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact)**

Construction Water Quality Impacts

There is the potential for water quality impacts to occur during project construction. In addition to generating dust, litter, oil, and other pollutants that could contaminate runoff from the site, construction activities would increase the potential for erosion and sedimentation by disturbing and exposing underlying soil to the erosive forces of water and wind. Since construction of the proposed project would disturb more than one acre of soil, the project would be required to comply with the NPDES General Permit for Construction Activities.

In accordance with the City of Morgan Hill Standard Conditions of Approval and the NPDES General Permit for Construction Activities, Standard Condition GEO-3 (refer to Section 4.7 Geology and Soils), and Standard Conditions HYD-1 and HYD-2 are included in the project to reduce construction-related water quality impacts to a less than significant level.

Standard Condition HYD-1: In accordance with the City of Morgan Hill Standard Conditions of Approval and the Construction General Permit, the following measures shall be included in the project to reduce construction-related water quality impacts to a less than significant level:

The following BMPs shall be implemented during project construction:

- Burlap bags filled with drain rock will be installed around storm drains to route sediment and other debris away from the drains.
- Earthmoving or other dust-producing activities will be suspended during periods of high winds.
- All exposed or disturbed soil surfaces will be watered at least twice daily to control dust.
- Stockpiles of soil or other materials that can be blown by the wind will be watered or covered.
- All trucks hauling soil, sand, and other loose materials will be covered and all trucks will be required to maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction site will be swept daily (with water sweepers).
- Vegetation in disturbed areas will be replanted as quickly as possible.

Standard Condition HYD-2: In accordance with the City of Morgan Hill Standard Conditions of Approval and the Construction General Permit, the following measures shall be included in the project to reduce construction-related water quality impacts to a less than significant level:

- As required by the State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, construction activity resulting in a land disturbance of one acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated

with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) package and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with Section A, B, and C of the General Permit prior to the commencement of soil disturbing activities. A NOI Receipt Letter assigning a Waste Discharger Identification number to the construction site will be issued after the State Water Resource Control Board (SWRCB) receives a complete NOI package (original signed NOI application, vicinity map, and permit fee); copies of the NOI Receipt Letter and SWPPP shall be forwarded to the Building and Land Development Engineering Divisions review. The SWPPP shall be made a part of the improvement plans. (SWRCB NPDES General Permit CA000002).

With the implementation of the above standard conditions, the project would not violate any water quality standards during construction. **(Less than Significant Impact)**

Post-Construction Water Quality

Stormwater runoff from urban uses such as the proposed project contains metals, pesticides, herbicides, and other contaminants such as oil, grease, lead, and animal waste. The project would add 417,740 square feet of impervious surface area, for a total of 468,270 square feet of impervious area on the project site. The project would, therefore, conform to the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements, which would ensure that increases in stormwater runoff pollutant loads, rates and volumes generated by the project's increase in impervious surface area on the site would be controlled through the implementation of pollutant source controls and low impact development (LID)-based treatment controls (see response to Impact HYD-3 for a further description of LID-based treatment controls). [64]

Conformance with the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements for implementing pollutant source controls and LID-based treatment controls would reduce impacts to post-construction water quality to a less than significant level. **(Less than Significant Impact)**

Impact HYD-2:	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. **(Less than Significant Impact)**

Since the site is mostly undeveloped, new development would substantially increase impervious surfaces, which could impact groundwater recharge. However, the project would be required to implement site design measures, LID, and best management practices (BMPs), which include infiltration features such as detention and retention basins, that would contribute to groundwater recharge and minimize stormwater runoff.

The highest depth to groundwater expected at the project site is 20 feet below the ground surface. The maximum depth of excavation, to install utilities building foundations, proposed is six feet

[64] City of Gilroy, City of Morgan Hill and County of Santa Clara. *Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements*. June 2015.

below the ground surface. The groundwater is deep enough such that ground disturbance during construction would not interfere with groundwater flow or expose any aquifers. The project site is not an aquifer recharge facility (i.e., streams or ponds); therefore, development of the project site would not substantially interfere with aquifer recharge. **(Less than Significant Impact)**

Impact HYD-3:	The project would not 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 addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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; or impede or redirect flood flows. **(Less than Significant Impact)**

The project site currently contains 806,295 square feet of pervious surfaces and 50,520 square feet of impervious surfaces. With implementation of the proposed project, the project site would have 384,199 square feet of pervious surfaces and 468,270 square feet of impervious surfaces. The proposed project would lead to an increase in impervious surfaces, which could lead to an increase in stormwater runoff and alter the existing drainage pattern of the site.

According to the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements, projects that create or replace 22,500 square feet or more of impervious surface area require the applicant to incorporate post-construction controls into the design of the project and to manage post-development peak flows discharged from the site (hydromodification management). Post-construction controls are permanent features 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).[65] The LID treatment systems are required to be designed to retain stormwater runoff generated by the 85th percentile 24-hour storm event.

The project applicant will implement the following condition of approval to manage post-development peak flows:

Standard Condition HYD-3: The Project Engineer shall provide a hydrology report demonstrating that post-development stormwater runoff peak flows discharged from the site do not exceed pre-project peak flows for the two (2) through 10-year storm events. Peak flow controls must also meet the flood control standards established by the Santa Clara County Drainage Manual.

With the implementation of Standard Conditions GEO-3, HYD-1, HYD-2, and HYD-3, the project would not result in substantial erosion during construction. For these reasons, the project would not

[65] City of Gilroy, City of Morgan Hill and Santa Clara County. *Stormwater Management Guidance Manual for Low Impact Development & Post-Construction Requirements.* June 2015.

have a significant impact on the City's drainage systems or water quality. The final drainage system design for the proposed development would be subject to review and approval by the City of Morgan Hill Land Development Engineering Division, which confirms that the proposed drainage system for the project is consistent with the City's Storm Drainage Master Plan and standard stormwater-related conditions of approval. **(Less than Significant Impact)**

Impact HYD-4:	The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(No Impact)**

The project site is located in Zone X designated by FEMA, which is not a 100-year flood hazard area. The project site is a flat parcel on the valley floor and is not in proximity to a large body of water. Additionally, the project site is not located within a designated tsunami inundation zone. The proposed project would, therefore, not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(No Impact)**

Impact HYD-5:	The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

As discussed in the responses to Impact HYD-1 and Impact HYD-3, the project would comply with the Central Coast RWQCB requirements and the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements. The project would not impact groundwater recharge and would not conflict with the SCVWD's 2016 Groundwater Management Plan. For these reasons, the project would not conflict with implementation of a water quality or groundwater management plan. **(Less than Significant Impact)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

South County Airport Comprehensive Land Use Plan

A small portion of Morgan Hill extends into the Airport Influence Area (AIA) of the South County Airport, which is located in the unincorporated community of San Martin between Morgan Hill and Gilroy. The airport is operated by Santa Clara County and is used for general aviation, which includes all aviation activities other than commercial passenger flights, commuter/air taxi, and military uses.

The AIA includes all areas surrounding the airport that are affected by noise, height, and safety considerations. All development projects within the AIA must be reviewed by the Santa Clara County Airport Land Use Commission (ALUC) to ensure consistency with the Comprehensive Land Use Plan (CLUP). A small portion of the Morgan Hill City limits near Llagas Creek is located within the AIA. The Morgan Hill City limits are located outside of the airport's noise contours and safety zones.

The CLUP also establishes height restrictions for structures, and the area subject to these height restrictions is slightly greater than the AIA. Per Figure 6, FAR Part 77 Surfaces, of the CLUP, structures in the southern portion of the Morgan Hill City limits should not exceed the height limits of between 481 feet and 631 feet above mean sea level depending on the location of the structure.

The proposed project site is not located within an AIA of the CLUP and is not located within an FAA height restriction area for new structures.

4.11.1.1 *Existing Conditions*

The 19.67-acre project site is located at 1 Juan Hernandez Drive in Morgan Hill and is bordered by streets, two-story attached single-family residences to the west, undeveloped land to the south, and an elementary school to the northeast, and U.S. Highway 101 to the east. The project site is currently undeveloped, with the exception of medical offices and associated parking lot on the southern corner of the site.

The site is designated as Service Commercial in the City's General Plan. The Service Commercial land use designation typically allows for retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers. The project proposes a General Plan Amendment and Zoning Amendment from Service Commercial and Planned Development to Mixed-Use Flex and Planned Development. The Mixed-Use Flex designation would allow for a mix of residential, commercial, and office uses.

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Physically divide an established community?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐

Impact LU-1: The project would not physically divide an established community. **(Less than Significant Impact)**

Examples of projects that have the potential to physically divide an established community are new freeways and highways, major arterial streets, and railroad lines. The project would construct multifamily residential, hospital, medical office, and retail/restaurant buildings. The mix of uses would provide convenient services to the surrounding residential community, as well as to the proposed residential uses and the medical offices/hospital uses. Therefore, the project is considered compatible with the existing uses and would not divide an established community. **(Less than Significant Impact)**

Impact LU-2: The project would not 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. **(Less than Significant Impact)**

The proposed project includes a General Plan and Zoning Amendment to change the site from a Service Commercial designation to a Mixed-Use Flex designation to allow for residential, commercial, and office uses. With approval of this change, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation. **(Less than Significant Impact)**

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

The project site is located in an urban area within the City of Morgan Hill. Mineral resource recovery activities do not occur on or near the project site, nor does the site contain any known mineral resources.

4.12.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

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 land classifications 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.

4.12.1.2 *Existing Conditions*

The project site is located in an urban area within the City of Morgan Hill. Mineral resource recovery activities do not occur on or near the project site, nor does the site contain any known mineral resources.

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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?	☐	☐	☐	☒
2) 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?	☐	☐	☐	☒

Impact MIN-1:	The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

Based on the United States Geological Survey (USGS) map of mines and mineral resources, the project site is not comprised of known mineral resources or mineral resource production areas.[66] The General Plan does not identify the project site or area as a mineral resource recovery site. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the residents in the state or region. **(No Impact)**

Impact MIN-2:	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. **(No Impact)**

See discussion for Impact MIN-1. **(No Impact)**

[66] United States Geological Survey. *Mineral Resources Online Spatial Data: Interactive maps and downloadable data for regional and global Geology, Geochemistry, Geophysics, and Mineral Resources.* Available at https://mrdata.usgs.gov/general/map-us.html#home. Accessed February 6, 2020.

4.13 NOISE

The following discussion is based in part on a Noise and Vibration Assessment completed by Illingworth and Rodkin, Inc. on April 8, 2020. This report is included as Appendix D.

4.13.1 Environmental Setting

4.13.1.1 *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}, DNL, or CNEL.[67] 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.

[67] 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}.

4.13.1.2 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 4.13-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 4.13-1: 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. *Transit Noise and Vibration Assessment Manual.* September 2018.

State and Local

California Building Standards Code

The CBC establishes uniform minimum noise insulation performance standards to protect persons within new buildings housing people, including hotels, motels, dormitories, apartments, and dwellings other than single-family residences. Title 24 mandates that interior noise levels attributable to exterior sources not exceed 45 L_{dn}/CNEL in any habitable room. Exterior windows must have a minimum Sound Transmission Class (STC) of 40 or Outdoor-Indoor Transmission Class (OITC) of 30 when the property falls within the 65 dBA DNL noise contour for a freeway or expressway, railroad, or industrial source.

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 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 $L_{eq(1\text{-}hr)}$ or less during hours of operation at a proposed commercial use.

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to reduce noise and vibration impacts from planned developments within the City of Morgan Hill.[68] The following goal and policies are applicable to the proposed project:

Goal SSI-8: *An adaptive and resilient community that responds to climate change.*

Policy SSI-8.1: **Exterior Noise Level Standards**. Require new development projects to be designed and constructed to meet acceptable exterior noise level standards (as shown in Table SSI-1) as follows:

- Apply a maximum exterior noise level of 60 dBA L_{dn} in residential areas where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). Where the City determines that providing a L_{dn} of 60 dBA or lower cannot be achieved after the application of reasonable and feasible mitigation, a L_{dn} of 65 dBA may be permitted.

Policy SSI-8.2: **Impact Evaluation**. The impact of proposed development project on existing land uses should be evaluated in terms of the potential for adverse community response based on significant increase in existing noise levels, regardless of compatibility guidelines.

Policy SSI-8.3: **Commercial and Industrial Noise Level Standards**. Evaluate interior noise levels in commercial and industrial structures on a case-by-case basis based on the use of the space.

Policy SSI-8.4: **Office Noise Level Standards**. Interior noise levels in office buildings should be maintained at 45 dBA L_{eq} (hourly average) or less, rather than 45 dBA L_{dn} (daily average).

Policy SSI-8.5: **Traffic Noise Level Standards**. Consider noise level increases resulting from traffic associated with new projects significant if: a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn}, or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.

Policy SSI-8.6: **Stationary Noise Level Standards**. Consider noise levels produced by stationary noise sources associated with new projects significant if they substantially exceed existing ambient noise levels.

[68] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

Policy SSI-8.7: **Other Noise Sources**. Consider noise levels produced by other noise sources (such as ballfields) significant if an acoustical study demonstrates they would substantially exceed ambient noise levels.

Policy SSI-8.9: **Site Planning and Design**. Require attention to site planning and design techniques other than sound walls to reduce noise impacts, including: a) installing earth berms, b) increasing the distance between the noise source and the receiver; c) using non-sensitive structures such as parking lots, utility areas, and garages to shield noise-sensitive areas; d) orienting buildings to shield outdoor spaces from the noise source; and e) minimizing the noise at its source.

Goal SSI-9: Protection from noise associated with motor vehicles and railroad activity.

Policy SSI-9.1: **Techniques to Reduce Traffic Noise**. Use roadway design, traffic signalization, and other traffic planning techniques (such as limiting truck traffic in residential areas) to reduce noise caused by speed or acceleration of vehicles.

Policy SSI-9.3: **Sound Wall Design**. The maximum height of sound walls shall be eight feet. Residential projects adjacent to the freeway shall be designed to minimize sound wall height through location of a frontage road, use of two sound walls or other applicable measures. Sound wall design and location shall be coordinated for an entire project area and shall meet Caltrans noise attenuation criteria for a projected eight-lane freeway condition. If two sound walls are used, the first shall be located immediately adjacent to the freeway right-of-way and the second shall be located as necessary to meet Caltrans noise requirements for primary outdoor areas. The minimum rear yard setback to the second wall shall be 20 feet.

Policy SSI-9.5: **Noise Studies for Private Development**: In order to prevent significant noise impacts on neighborhood residents which are related to roadway extensions or construction of new roadways, require completion of a detailed noise study during project-level design to quantify noise levels generated by projects such as the Murphy Avenue extension to Mission View Drive and the Walnut Grove Extension to Diana Avenue. The study limits should include noise sensitive land uses adjacent to the project alignment as well as those along existing segments that would be connected to new segments. A significant impact would be identified where traffic noise levels would exceed the "normally acceptable" noise level standard for residential land uses and/or where ambient noise levels would be substantially increased with the project. Project specific mitigation measures could include, but not be limited to, considering the location of the planned roadway alignment relative to existing receivers in the vicinity, evaluating the use of noise barriers to attenuate project-generated traffic noise, and/or evaluating the use of "quiet pavement" to minimize traffic noise levels at the source. Mitigation should be designed

to reduce noise levels into compliance with "normally acceptable" levels for residential noise and land use compatibility.

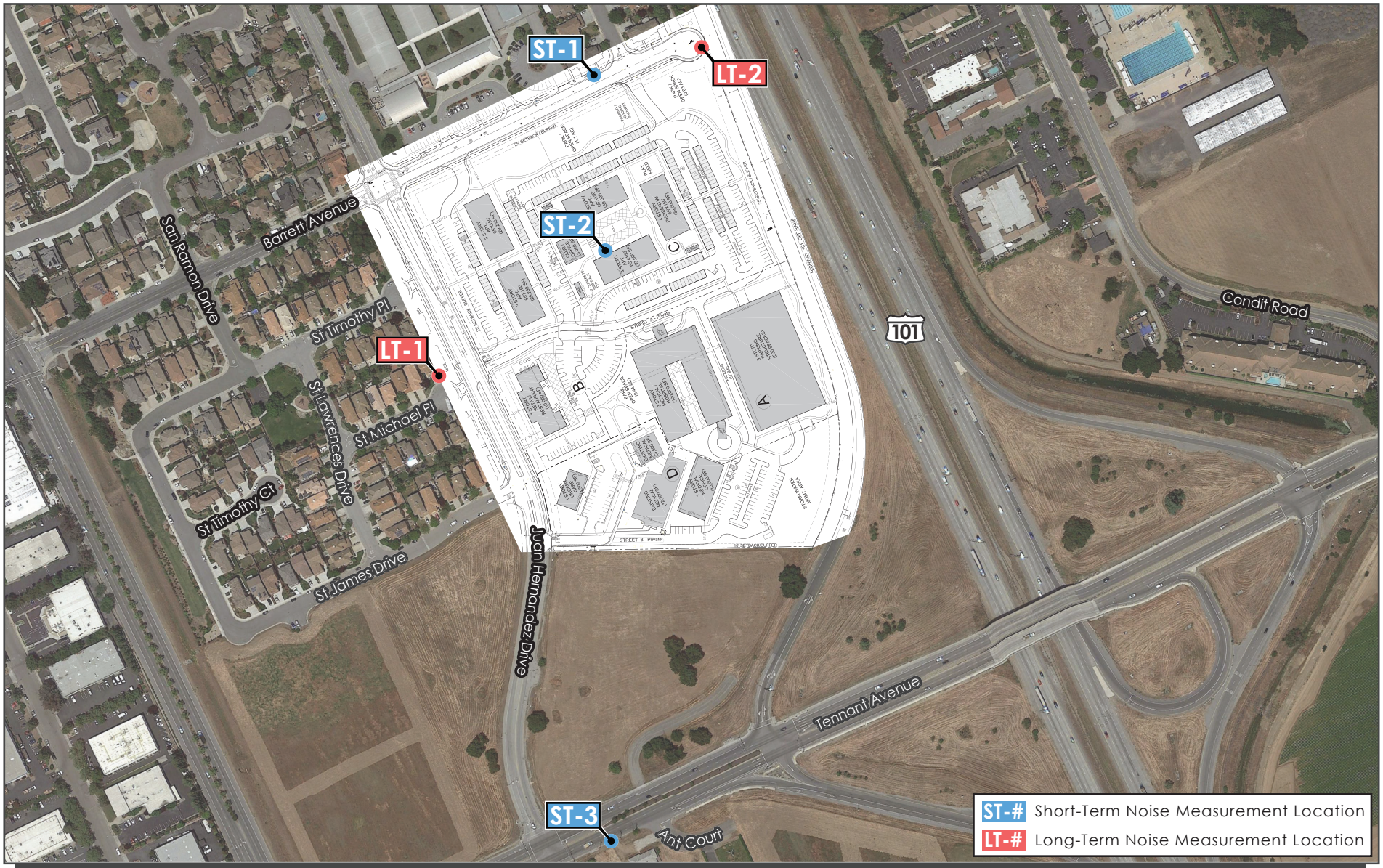
Policy SSI-9.6: **Earth Berms**. Allow and encourage earth berms in new development projects as an alternative to sound walls if adequate space is available.

Policy SSI-9.7: **Sound Barrier Design**. Require non-earthen sound barriers to be landscaped, vegetated, or otherwise designed and/or obscured to improve aesthetics and discourage graffiti and other vandalism.

4.13.1.3 *Existing Conditions*

The predominant noise source at the project site and surrounding area is vehicular traffic along U.S. Highway 101. Secondary noise sources include traffic along Tennant Avenue. Local traffic along Barrett Avenue and Juan Hernandez Drive would also affect the noise environment at the site and surrounding area. Occasionally, overhead aircraft associated with the San Martin Airport are audible at the project site.

A noise monitoring survey was completed at the project site between Tuesday, September 24, 2019 and Thursday, September 26, 2019. The monitoring survey included two long-term noise measurements (LT-1 and LT-2) and three short-term noise measurements (ST-1 through ST-3), which are shown in Figure 4.13-1.



NOISE MEASUREMENT LOCATIONS | FIGURE 4.13-1

4.13.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
1) 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?	☐	☒	☐	☐
2) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
3) 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, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Impact NOI-1: The project would not 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 Impact with Mitigation Incorporated)**

Temporary Noise Increases

Construction

Construction of the proposed project would include temporary noise impacts from site preparation, grading, trenching, building exterior and interior, and paving. The project is expected to be constructed in three phases starting January 2021 and ending August 2024. Noise impacts resulting from construction depend upon the noise generated by various pieces of equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g. early morning, evening, or nighttime hours), if the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

Construction activities generate considerable amounts of noise, especially during earth-moving activities and during the construction of the building's foundation when heavy equipment is used. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. The hauling of excavated materials and construction materials would generate truck trips on local roadways, as well. Table 4.13-2 shows

typical hourly average construction noise levels measured at a distance of 50 feet from the center of the active construction site. As shown in Table 4.13-2, typical hourly average construction-generated noise levels for residential buildings are about 81 to 88 dBA L_{eq}, as measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.). For office buildings and hospitals, typical hourly average noise levels would range from 78 to 89 dBA L_{eq}, and for a parking structure, hourly average noise levels would range from 77 to 89 dBA L_{eq}. The typical range of maximum instantaneous noise levels for construction equipment used at this site would be 77 to 90 dBA L_{max} at 50 feet, as shown in Table 4.13-3.

Table 4.13-2: Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)

	Domestic Housing		**Office Building, Hotel, Hospital, School, Public Works**		**Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station**		**Public Works Roads & Highways, Sewers, and Trenches**	
	I	**II**	**I**	**II**	**I**	**II**	**I**	**II**
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

I – All pertinent equipment present at site.

II – Minimum required equipment present at site.

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

Table 4.13-3: Construction Equipment 50-foot Noise Emission Limits		
Equipment Category	**L_{max} Level (dBA)1,2**	**Impact/Continuous**
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor[3]	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

1. Measured at 50 feet from the construction equipment, with a "slow" (1 sec.) time constant.
2. Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.
3. Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

Source: Mitigation of Nighttime Construction Noise, Vibrations and Other Nuisances, National Cooperative Highway Research Program, 1999.

Depending on the construction phasing for each parcel, on-site project buildings could potentially provide shielding for the surrounding residences. Further, if on-site parcels are completed and occupants reside while construction on other parcels is on-going, those on-site receptors would also be exposed to construction noise. However, details pertaining to the construction phasing were not available at the time of this study. Assuming worst-case conditions, no shielding effects were assumed for this analysis. Table 4.13-4 through Table 4.13-7 estimate noise levels for each of the parcels at the property lines of the nearest receiving land uses based on the hourly average noise levels shown in Table 4.13-2.

Table 4.13-4: Estimated Construction Noise Levels at Nearby Land Uses during the Construction of Parcel A

Proposed Project Construction	Estimated Noise Levels at Nearby Land Uses, dBA L_{eq}		
	West Residential (485 to 695 feet)	South Residential (770 to 1,085 feet)	North Residence and School (760 to 815 feet)
Ground Clearing	61 to 64	56 to 60	59 to 60
Excavation	48 to 69	44 to 65	47 to 65
Foundations	54 to 58	50 to 54	53 to 54
Erection	49 to 67	45 to 63	48 to 63
Finishing	51 to 69	47 to 65	50 to 65

Table 4.13-5: Estimated Construction Noise Levels at Nearby Land Uses during the Construction of Parcel B

Proposed Project Construction	Estimated Noise Levels at Nearby Land Uses, dBA L_{eq}		
	West Residential (150 feet)	South Residential (1,085 feet)	North Residence and School (660 feet)
Ground Clearing	75	57	62
Excavation	70 to 80	52 to 62	57 to 67
Foundations	69	51	56
Erection	66 to 78	48 to 60	53 to 65
Finishing	66 to 80	48 to 62	53 to 67

Table 4.13-6: Estimated Construction Noise Levels at Nearby Land Uses during the Construction of Parcel C			
Proposed Project Construction	**Estimated Noise Levels at Nearby Land Uses, dBA L_{eq}**		
	West Residential (470 feet)	**South Residential (1,445 feet)**	**North Residence and School (355 feet)**
Ground Clearing	64	54	67
Excavation	56 to 69	46 to 59	59 to 72
Foundations	62	52	65
Erection	46 to 62	36 to 52	49 to 65
Finishing	53 to 69	43 to 59	56 to 72

Table 4.13-7: Estimated Construction Noise Levels at Nearby Land Uses during the Construction of Parcel D			
Proposed Project Construction	**Estimated Noise Levels at Nearby Land Uses, dBA L_{eq}**		
	West Residential (160 feet)	**South Residential (840 feet)**	**North Residence and School (900 feet)**
Ground Clearing	74	60	59
Excavation	69 to 79	55 to 65	54 to 64
Foundations	68	54	53
Erection	65 to 77	51 to 63	50 to 62
Finishing	65 to 79	51 to 65	50 to 64

Construction noise levels at the nearby receptors would at times exceed the 60 dBA L_{eq} and would potentially exceed ambient noise levels by more than five dBA L_{eq} for a period of about three and a half years.

Construction activities would be completed in accordance with the provisions of the City's General Plan and Municipal Code, which limit temporary construction work to between the hours of 7:00 AM and 8:00 PM Monday through Friday, and between 9:00 AM to 6:00 PM on Saturday. Construction is prohibited on Sundays and federal holidays. Additionally, the following mitigation measure is required to reduce construction noise coming from the site and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity.

Mitigation Measure MM NOI-1.1:

Develop a noise construction control plan including but not limited to the following construction best management control:

- Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds);
- Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools; and
- Stationary noise sources shall be located as far from noise-sensitive receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or include other measures.
- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receptor and if the barrier is constructed in a manner that eliminates any cracks or gaps.
- Unnecessary idling of internal combustion engines shall be strictly prohibited.
- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.
- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- Where feasible, temporary power service from local utility companies should be used instead of portable generators.
- Locate cranes as far from noise-sensitive receptors as possible.
- During final grading, substitute graders for bulldozers, where feasible. Wheeled heavy equipment are quieter than track equipment and should be used where feasible.
- Substitute nail guns for manual hammering, where feasible.
- Avoid the use of circular saws, miter/chop saws, and radial arm saws near the adjoining noise-sensitive receptors. Where feasible, shield saws with a solid screen with material having a minimum surface density of two pounds per square foot (e.g., such as 0.75-inch plywood).
- Maintain smooth vehicle pathways for trucks and equipment accessing the site, and avoid local residential neighborhoods as much as possible.
- During interior construction, the exterior windows facing noise-sensitive receptors should be closed.
- During interior construction, locate noise-generating equipment within the building to break the line-of-sight to the adjoining receptors.
- The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.

- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

The implementation of the reasonable and feasible controls outlined above in MM NOI-1.1 would reduce construction noise levels emanating from the site by up to five dBA, minimizing disruption and annoyance. With implementation of this mitigation measure, as well as the Municipal Code limits on allowable construction hours, and recognizing that construction is temporary, construction would be a less than significant impact. **(Less than Significant Impact)**

Permanent Noise Increases

A significant permanent noise increase would occur if the project would substantially increase noise levels at existing sensitive receptors in the project vicinity. Based on General Plan Policy SSI-8.5, a substantial increase would occur if: a) the noise level increase is five dBA Ldn or greater, with a future noise level of less than 60 dBA Ldn at residences; or b) the noise level increase is three dBA Ldn or greater, with a future noise level of 60 dBA Ldn or greater at residences. Project-generated traffic noise was calculated by comparing the traffic volumes for all existing plus project scenarios along each roadway segment (included in the traffic study, which is found in Appendix E) to the existing volumes.

Traffic Noise

A traffic noise increase of two dBA L_{dn} or less was calculated along each roadway segment included in the traffic study except for the segments of Juan Hernandez Drive, north of Tennant Avenue, north and south of St. James Drive, and south of Barrett Avenue; and Barrett Avenue, east and west of San Ramon Drive where an increase of three dBA L_{dn} or more was calculated. However, the existing peak hour volumes along these segments are relatively low, and the high ambient noise levels in the vicinity range from 65 to 70 dBA L_{dn}. The noise level increase was estimated to be two dBA Ldn along Juan Hernandez Drive and Barrett Avenue after adding the measured day-night average noise level at LT-1 of 67 dBA Ldn to the Ldn noise level estimated from the Federal Highway Administration's Traffic Noise Model. Refer to Figure 4.13-1 above for the noise measurement locations. Therefore, the proposed project would not cause a substantial permanent noise level increase at noise-sensitive receptors in the project vicinity and would have a less than significant impact.

On-site Parking/Garage/Circulation

Noise sources within the proposed parking lots and garage parking structure would include vehicle circulation, engine starts, door slams, human voices, and occasional car alarms. The sound of slow-moving vehicles, engines starting, doors closing, and people talking in the parking lot would be expected to reach maximum levels of 50 to 60 dBA at a distance of 50 feet. The acoustic centers of the parking lots are assumed to be the center of the lots, as it is likely that most vehicles would be parked as close as possible to the project buildings. For this analysis, the distance from the center of

the nearest parking lot to the nearest surrounding noise-sensitive property line was used to estimate the parking lot noise impact.

Existing ambient noise levels at the nearest residential land uses to the west were measured to range from 60 to 67 dBA L_{eq} during daytime hours and from 56 to 63 dBA L_{eq} during nighttime hours (see LT-1), and the primary source of noise at this location was from traffic along U.S. Highway 101, with Juan Hernandez Drive being the secondary source. The estimated day-night average noise level at LT-1 was 67 dBA L_{dn}. These residences would have direct line-of-sight to residential parking lots and the restaurant parking lot. The distance from the nearest parking lot to residential property lines would be approximately 135 feet. At this distance, noise levels generated by parking and vehicle circulation would range from 41 to 51 dBA, which is below typical daytime and nighttime ambient noise levels. The day-night average noise level attributable to parking lot operations would be 59 dBA at the property line, conservatively assuming parking lot noise levels of 51 dBA L_{eq} every hour in the 24-hour period. Additionally, parking lot noise would meet the 60 dBA standard established in Table 18.76-1 of the City's Municipal Code. Thus, this is a less than significant impact.

The existing residences to the north of the site, opposite Barrett Avenue are located along U.S. Highway 101 and represented by LT-2, which has daytime hourly average noise levels ranging from 77 to 81 dBA L_{eq} and nighttime hourly average noise levels ranging from 73 to 79 dBA L_{eq}. The day-night average noise level at LT-2 was calculated to be 83 dBA L_{dn}. Additionally, the existing elementary school located north of Barrett Avenue, which operates during daytime hours only, is represented by ST-1. The daytime average noise level at ST-1 was measured to be 64 dBA L_{eq}, and the estimated day-night average noise level would be 67 dBA L_{dn}. The center of the nearest residential parking lot would be 205 feet from the nearest existing residential and elementary school property line. At this distance, the parking lot noise levels would range from 38 to 48 dBA L_{eq}, with a day-night average noise level of 54 dBA L_{dn}, assuming 48 dBA L_{eq} each hour in a 24-hour period. These noise levels would be below the ambient noise levels and below the Municipal Code limit of 60 dBA; therefore, this would be a less-than-significant impact.

The nearest single-family residences to the south of the project site, represented by ST-3, would have a direct line-of-sight to the existing and future medical office building parking lots on Parcel D. Daytime ambient noise levels at this location was measured at 76 dBA L_{eq}, and the estimated day-night average noise level would be 83 dBA L_{dn}. The center of the nearest parking lot would be approximately 820 feet from the nearest residential property line along Tennant Avenue. At this distance, parking lot noise levels would range from 26 to 36 dBA. These parking lots could be used each hour in a 24-hour period since one of the proposed medical buildings would be an urgent care facility. Assuming 36 dBA would occur each hour in a 24-hour period, the day-night average noise level at the nearest residential property line south of the project site would be 42 dBA L_{dn}. Parking lot noise would be below ambient noise levels and the 60 dBA limit for residences; therefore, this would be a less than significant impact.

Due to the location of the parking garage along U.S. Highway 101 and that it is planned to be located away from all surrounding noise-sensitive receptors, which would be shielded from parking garage noise by the other project buildings, noise from vehicles in the parking garage would not result in a significant impact at existing noise-sensitive receptors.

Truck Deliveries

The proposed restaurant and retail building would likely require weekly truck deliveries. The noise study assumed one to two vendor trucks would make deliveries per week, and that truck deliveries would take place between the hours of 7:00 AM and 7:00 PM. It is assumed that deliveries would occur in the parking lot to the south of the one-story restaurant building. Vendor delivery trucks typically generate maximum noise levels of 60 to 65 dBA L_{max} at a distance of 50 feet. Low speed truck noise results from a combination of engine, exhaust, and tire noise, as well as the intermittent sounds of back-up alarms and releases of compressed air associated with truck/trailer air brakes. The noise levels produced by backup alarms can vary depending on the type and directivity of the sound, but maximum noise levels are typically between 65 to 75 dBA L_{max} at a distance of 50 feet.

The nearest residential property line, west of the project site, is approximately 100 feet from the nearest potential delivery zone. At this distance, maximum noise levels would range from 56 to 61 dBA L_{max}, with backup alarms reaching levels up to 71 dBA L_{max}. Assuming a delivery would take about 15 to 20 minutes, the hourly average noise level would be about 63 dBA L_{eq}, and assuming this would occur during one daytime hour in a 24-hour period, the day-night average noise level would be 50 dBA L_{dn}. With ambient hourly average noise levels ranging from 60 to 67 dBA L_{eq} during daytime hours and a day-night average noise level of 67 dBA L_{dn}, the nearest residences would be exposed to delivery noise levels below ambient levels and below the 60 dBA threshold for residential land uses. This would be a less than significant impact.

Mechanical Equipment

The proposed project would be expected to include mechanical equipment for heating, ventilation, and air conditioning at the hospital and medical office building on Parcel A, at the restaurant on Parcel B, at each of the residential buildings on Parcel C, and at the urgent care facility on Parcel D. Additionally, emergency backup generator(s) are proposed for the site but the exact location and number of generators has not been finalized. At the time of this study, specific equipment, size, and any noise-suppressing features such as enclosures, mufflers, etc., were not available.

Typical mechanical equipment associated with hospital buildings produce total noise source levels ranging from about 63 to 67 dBA L_{eq} at a distance of 50 feet. The nearest residential property line is approximately 400 feet from the nearest hospital façade. While most of the hospital would be shielded by the intervening project buildings, the worst-case scenario would assume the equipment to be located at the façade with direct exposure to the receiving property lines. At 400 feet, mechanical equipment noise generated at the hospital would range from 45 to 49 dBA. Assuming this equipment would operate continuously during daytime and nighttime hours, the day-night average noise level would be 55 dBA L_{dn}. These levels would be below the LT-1 ambient noise levels of 60 to 67 dBA L_{eq} during daytime hours, and 56 to 63 dBA L_{eq} during nighttime hours. The maximum noise level threshold of 60 dBA for receiving residential land uses would also be met. This would be a less than significant impact.

Three locations have been proposed for the emergency generator. Option 1, which is to the south of the parking garage, would be 745 feet or more from the nearest residential land use surrounding the site. This location would also be at least partially shielded by intervening existing and proposed on-site buildings. Option 2, which would be located to the north of the existing medical building, would

be 315 feet or more from the nearest surrounding residential property lines. This option would have direct line-of-sight to the nearest residences located to the east. Option 3, which would be south of the parking lot in the southeastern corner of the project site. The residence to the east, which would be 670 feet or more from the generator, would be mostly shielded by intervening existing and proposed on-site buildings. The single-family residences along Tennant Avenue would be 650 feet or more from the generator with direct line-of sight.

For purposes of this analysis, it is assumed that at 1,500 kilowatt emergency generator would be used for this project. A 1,500-kilowatt generator would typically generate noise levels up to 89 dBA at a distance of 50 feet, assuming no enclosure or noise control features. With the inclusion of sufficient noise control features, noise levels could be reduced to 65 dBA at 50 feet from the generator. Emergency generators are typically tested monthly for a period of one hour between 7:00 AM and 10:00 PM. Table 4.13-8 summarizes the worst-case noise levels at the property line of the nearest residential land use for each location option.

Based on measurements, Options 1 and 3 with a noise suppressor would be at or below the ambient noise levels and below the 60 dBA noise threshold established in the Municipal Code. Option 2, however, would exceed both ambient and maximum noise thresholds without a noise suppressor. Daytime ambient noise levels at ST-3, which would represent the south residences, was 76 dBA L_{eq}, and the estimated day-night average noise level would be 83 dBA L_{dn}. All options with a noise suppressor would be below the ambient noise levels and the 60 dBA threshold. Additionally, if the project includes all three generators instead of one, noise impacts would be similar since generators would be tested one at a time during the monthly tests.

As shown in Table 4.13-8, noise-suppressing features would be required to not exceed ambient noise levels and the 60 dBA noise level threshold.

Table 4.13-8: Estimated Emergency Generator Noise Levels for All Location Options

Receptor		Option 1		Option 2		Option 3	
		L_{eq}	L_{dn}	L_{eq}	L_{dn}	L_{eq}	L_{dn}
East Residence	No suppressor[a]	66 dBA	52 dBA	73 dBA	59 dBA	67 dBA	53 dBA
	With suppressor[a]	42 dBA	28 dBA	49 dBA	35 dBA	43 dBA	29 dBA
South Residence	No suppressor[a]	64 dBA	50 dBA	64 dBA	50 dBA	67 dBA	53 dBA
	With suppressor[a]	40 dBA	26 dBA	40 dBA	26 dBA	43 dBA	29 dBA

[a] These values are based on manufacturer's noise level data for generators of 1500 kW capacity.

The medical office building on Parcel A, the restaurant on Parcel B, and the urgent care facility on Parcel D are one-story commercial buildings of similar size. Each of these would include ventilation systems, which would generate noise levels of 61 to 62 dBA at a distance of 20 feet. The medical office building would be more than 400 feet from the nearest residential land use and would be shielded by existing and proposed medical buildings. The restaurant/retail building would be 105 feet from the nearest residential property line, while the urgent care facility would be approximately 135

feet from the nearest residential property line. Therefore, the restaurant would represent the worst-case scenario. It is assumed that up to three ventilation units would operate simultaneously during daytime and nighttime hours. Under this assumption, mechanical equipment noise generated at the nearest façade of the restaurant/retail building would range from 51 to 52 dBA at 105 feet. The day-night average noise level, assuming 24-hour operations, would be 59 dBA L_{dn}. These levels would be below the LT-1 ambient noise levels of 60 to 67 dBA L_{eq} during daytime hours, 56 to 63 dBA L_{eq} during nighttime hours, and 67 dBA L_{dn}. The maximum noise level threshold of 60 dBA for receiving residential land uses would also be met. This would be a less than significant impact.

Typical residential HVAC units are anticipated to generate noise levels of 53 to 63 dBA at three feet from the equipment, depending on the equipment selected. Without knowing the specific locations for these units, the worst-case conditions were assumed for this analysis, which would be ground-level units located at either ends of each residential building. For multi-family residential buildings, it is typical for multiple HVAC units to operate simultaneously at any given time. Assuming up to eight units would operate simultaneously from the same relative location at the edge of the nearest residential building façade, the worst-case scenario was calculated by estimating HVAC noise levels to the property lines of the nearest existing land uses surrounding the site, which would be the residences to the east and the residences and elementary school to the north. The nearest surrounding property line would be approximately 170 feet from the nearest project building façade. At this distance, worst-case scenario HVAC equipment noise would range from 27 to 37 dBA. Assuming these noise levels would operate continuously during the daytime and nighttime hours, the day-night average noise level at the nearest receiving property line would be 43 dBA L_{dn}. These noise levels would be below daytime and nighttime ambient hourly average noise levels measured at LT-1, LT-2, and ST-1, as well as the day-night average noise levels estimated at these measurement locations. The mechanical equipment noise would also be below the noise level thresholds established in Table 18.76-1 of the City's Municipal Code.

Impact NOI-2: While the noise assessment determined that the mechanical equipment noise would be below the noise level thresholds established in Table 18.76-1 of the City's Municipal Code with implementation of MM NOI-1.1, the final location of the mechanical equipment has not been finalized. As a result, the following mitigation measure is included in the project.

Mitigation Measures: The following mitigation measure shall be implemented by the proposed project to avoid potential mechanical noise impacts to adjacent sensitive receptors:

MM NOI-2.1: A qualified acoustical consultant shall be retained to review mechanical equipment systems during final design of the proposed project. The consultant shall review selected equipment and determine specific noise reduction measures necessary to reduce noise to comply with the City's noise level requirements. Prior to the issuance of building permits for the project, the emergency generator must be selected and approved by the City planning department. The generator shall include adequate noise suppressing features to reduce impacts on surrounding uses to meet the City's exterior and interior noise level requirements of 60 dBA.

Implementation of mitigation measure MM NOI-1.2 would ensure compliance with the City's requirements, and therefore, the project would result in a less than significant permanent noise increase. **(Less than Significant Impact with Mitigation Incorporated)**

Impact NOI-2:	The project would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

The construction of the project may generate vibration when heavy equipment or impact tools are used. Construction activities would generally include site preparation work, foundation work, and new building framing and finishing. Pile driving, which can cause excessive vibration, is not anticipated as a foundation construction technique.

The California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards in order to reduce the potential for cosmetic damage to structures. Cosmetic damage is defined as hairline cracking in plaster, the opening of old cracks, the loosening of paint or the dislodging of loose objects. A vibration limit of 0.3 in/sec PPV has been used for buildings that are found to be structurally sound but where structural damage is a major concern. Groundborne vibration levels exceeding 0.3 in/sec PPV at nearby buildings would have the potential to result in a significant vibration impact because such levels would be capable of cosmetically damaging adjacent buildings.

Construction vibration levels would vary depending on soil conditions, construction methods, and equipment. Table 4.13-9 presents typical vibration levels from construction equipment at 25 feet and 60 ft, which represents the distance of the nearest residential structure to the property line of the project site.

Table 4.13-9: Vibration Levels for Construction Equipment at Various Distances

Equipment		**PPV at 25 ft. (in/sec)**	**PPV at 60 ft. (in/sec)**
Clam shovel drop		0.202	0.077
Hydromill (slurry wall)	in soil	0.008	0.003
	in rock	0.017	0.006
Vibratory Roller		0.210	0.080
Hoe Ram		0.089	0.034
Large bulldozer		0.089	0.034
Caisson drilling		0.089	0.034
Loaded trucks		0.076	0.029
Jackhammer		0.035	0.013
Small bulldozer		0.003	0.001

Source: Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, Office of Planning and Environment, U.S. Department of Transportation, September 2018, as modified by Illingworth & Rodkin, Inc., September 2019.

Calculations were also made to estimate vibration levels at a distance of 60 feet (to represent the nearest residential buildings) to the north and west. Vibration levels are highest close to the source, and then attenuate with increasing distance. Project-generated vibration levels would fall below the 0.3 in/sec PPV threshold when construction activities producing the highest vibration levels (e.g., vibratory roller) are 20 feet or more from the project site. Neither cosmetic, minor, or major damage would occur at conventional buildings located 60 feet or more from the project site. For all these reasons, the project would have a less than significant impact. **(Less than Significant Impact)**

Impact NOI-3:	The project would not be 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. The project would not expose people residing or working in the project area to excessive noise levels. **(Less than Significant Impact)**

Reid-Hillview Airport and Mineta San José International Airport are located approximately 18 and 23 miles northwest of the project site, respectively. The San Martin Airport is located approximately 2.8 miles southeast of the project site. The site is located outside of each airport's planning boundary and 60 dBA CNEL noise contour. Noise levels resulting from aircraft are insignificant at the site and would be compatible with the proposed land uses. Therefore, this is a less-than-significant impact. **(Less than Significant Impact)**

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *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.[69]

Regional and Local

Plan Bay Area 2040

Plan Bay Area 2040 is a long-range transportation, land-use, and housing plan intended to 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 2040 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).[70]

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 2040 (upon which Plan Bay Area 2040 is based).

Housing Crisis Act of 2019

The Housing Crisis Act of 2019, or Senate Bill (SB) 330, prohibits local agencies from disapproving or conditioning approval in a manner that renders infeasible a housing development project for very low, low-, or moderate- income households.

[69] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed March 18, 2020. http://hcd.ca.gov/community-development/housing-element/index.shtml.
[70] Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." http://projectmapper.planbayarea.org/.

City of Morgan Hill 2035 General Plan

The following goals and policies related to population and housing is applicable to the proposed project:

Goal CNF-3: A growth management system that maintains a population cap, a metered pace of development, and high level of community amenities, and that is clear, fair, flexible, and streamlined.

Policy CNF-3.4: **Population Limit.** Plan for a January 1, 2035 population of 58,200 residents.

Policy CNF-3.5: **Rate of Growth.** Maintain steady and predictable annual growth consistent with the population limit.

Policy CNF-3.6: **Adequate Services and Infrastructure.** Allow residential growth only if it is within the ability for the City to provide adequate public services and infrastructure for new development and the community at large.

Policy CNF-3.7: **Jobs/Housing Balance.** Plan for residential growth that supports a healthy balance between residents and jobs located within Morgan Hill.

Goal CNF-10: A variety of housing types and densities available to all residents.

Policy CNF-10.3: **Adequate Supply of Multi-Family Housing.** Provide for an adequate supply of multi-family housing, located convenient to shopping, services, and transportation routes.

Policy CNF-10.6: **Density Near Infrastructure.** Encourage higher residential densities at locations where convenient access and adequate infrastructure is readily available.

Goal CNF-11: High quality, aesthetically pleasing, livable, sustainable, well-planned residential neighborhoods, well-connected to neighborhood services.

Policy CNF-11.2: **Well-Designed Residential Neighborhoods.** Design residential neighborhoods so they are distinct and buffered from conflicting non-residential uses.

Policy CNF-11.5: **Outside Connections.** Require new subdivisions to provide multiple connections to the surrounding community. Methods to achieve this may include:

- Providing multiple points of entry into the project for motorists, bicyclists and pedestrians.
- Extending the existing street pattern at the edges of the subdivision into the site. Extended streets should match the type and scale of streets to which they connect.

- Installing landscaping and street improvements at the edge of subdivisions that appear as common amenities shared with adjacent neighborhoods.
- Minimizing the use of gates, fences, and walls that separate the subdivision from the surrounding community.
- Planning for future connections to adjacent undeveloped property.

Policy CNF-11.8: **Multi-Modal Transportation System.** Require new subdivisions to contain a network of streets, sidewalks, trails, and transit facilities that accommodate all modes of transportation. Methods to achieve this may include:

- Incorporating complete streets designed for low vehicle speeds.
- Planting trees along both sides of streets.
- Installing bus stops, shelters, and benches in or adjacent to the project.
- Providing safe walking and bicycling routes to schools, parks, and other youth destinations.

Goal CNF-13: Mixed use flex developments that include a variety of uses and forms to foster a dynamic urban environment.

Policy CNF-13.1: **Mixed Use Flex Development.** Encourage a mix of uses, either vertically or horizontally, to allow residents and employees to meet daily needs without the use of the private automobile.

4.14.1.2 *Existing Conditions*

Based on the California Department of Finance population estimates, the City's total population was approximately 45,724 in January 2019 and the average persons per household was an estimated 3.15.[71] The City grew in population by 2.4 percent from January 2018 to January 2019. Assuming the City's population would continue to grow at a rate of 2.4 percent now that SB 330 has superseded the City's RDCS growth control ordinance for the next five years, the forecasted 2020 population would be 46,821. By 2030, the population would potentially be 62,493.

[71] California Department of Finance. *E-1: City/County Population Estimates with Annual Percent Change - January 2018 and 2019*. Accessed March 19, 2020. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/.
California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark. Table 2: E-5 City/County Population and Housing Estimates, 1/1/2019.* Accessed March 19, 2020. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

4.14.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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)?	☐	☐	☒	☐
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact POP-1: The project would not 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 Impact)**

A project can induce substantial population growth by: 1) proposing new housing beyond projected or planned development levels, 2) generating demand for housing as a result of new businesses, 3) extending roads or other infrastructure to previously undeveloped areas, or 4) removing obstacles to population growth (i.e., expanding capacity of a wastewater treatment plant beyond that necessary to serve planned growth).

The existing general plan land use designation is Service Commercial, which does not allow for residential uses. The proposed project includes a General Plan Amendment to Mixed-Use Flex, which would allow a mix of residential, commercial, and office uses on the site. The project would construct 200 multi-family residential units and would lead to a net increase in local population by approximately 1,102 residents. A population increase of 1,102 persons would not be considered substantial unplanned population growth. Additionally, housing is considered a critical need in the Bay Area, and the proposed multi-family residential units would provide a housing option for employees of the proposed retail or hospital uses. Therefore, the project would have a less than significant impact. **(Less than Significant Impact)**

Impact POP-2: The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

Currently the site does not have existing residences, nor do the existing medical offices support residents. As mentioned under Impact POP-1, the proposed project would introduce 200 new multi-family residential units to the site, which would lead to an increase in approximately 1,102 residents.

Therefore, the proposed project would not displace people or necessitate the construction of replacement housing elsewhere. **(No Impact)**

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *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.

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.

Regional and Local

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.

City of Morgan Hill 2035 General Plan

The following goal and policy related to public services is applicable to the proposed project:

Goal SSI-11: Efficient police, fire, and emergency medical response and services, and access to local medical facilities.

Policy SSI-11.2: **Prevention through Design**. Promote police and fire security considerations in all structures by ensuring that crime and fire prevention concepts are considered in development and design.

4.15.1.2 *Existing Conditions*

Fire Protection

The City of Morgan Hill contracts with the California Department of Forestry and Fire Protection (CalFire) for fire and emergency medical services. The City is served by three stations at the following locations: 1) El Toro Fire Station, located at 18300 Old Monterey Road (approximately 2.7 miles northwest of the site), 2) Dunne Hill Fire Station, located at 2100 East Dunne Avenue (approximately 2.6 miles east of the project site), and 3) 15670 Monterey Street (approximately 1.4 miles south of the project site). In general, the response time meets the current standard of eight minutes 95 percent of the time. Based on estimated driving times provided by Google Maps, the project site is located within three minutes driving distance of the 15670 Monterey Street Fire Station.

Police Protection

Police service is provided to the project site by the City of Morgan Hill Police Department (MHPD). The MHPD facility is located at 16200 Vineyard Boulevard, approximately one mile west of the project site. The department employs 27 sworn officers, six reserve offices and four civilian officers.[72] The Police Department's goal is to respond to Priority One calls within five minutes and Priority Two calls within eight minutes.[73] Priority One calls are reports of a crime in progress or where an injury has occurred and Priority Two calls are reports of felonies and other major calls.

Schools

The project site is located within the Morgan Hill Unified School District. The District has eight elementary schools, two middle schools, two comprehensive high schools, one continuation high school, and a community adult school, as well as a home-schooling program. The nearest school to the site is Barrett Elementary School, located immediately north of the project site, across Barrett Avenue.

Parks

The City owns 70 acres of developed park land and 59 acres of recreation facilities. The City maintains two community parks, five neighborhood parks, two neighborhood/school parks, and 15 mini-parks, in addition to its public trail system and open space. In addition to publicly owned park land, there is also a substantial amount of recreational land and open space in the City that is privately owned and maintained. The nearest park to the project site is Morgan Hill Community Park, located 1.5 miles to the west.

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[72] Morgan Hill Police Department. *Annual Report 2018*. Accessed March 19, 2020. http://www.morgan-hill.ca.gov/DocumentCenter/View/25376/2018-MHPD-Annual-Report.

[73] City of Morgan Hill. *Morgan Hill 2035 General Plan DEIR, Section 4.13.2 Police Protection Services.* January 2016.

The City also owns and operates special use facilities for recreational purposes. These facilities include the Morgan Hill Aquatics Center, Community and Cultural Center, the Centennial Recreation Center, the 38-acre Outdoor Sports Center, and Skateboard/BMX park. Many sports leagues and teams use Morgan Hill School District facilities after school hours and on weekends. These facilities include 12 baseball/softball fields, two football fields, two tracks, and four swimming pools. The nearest park and recreational facilities to the project site are the Morgan Hill Aquatics Center (16200 Condit Road) and the Morgan Hill Outdoor Sports Center (located at 16500 Condit Road). Both are located less than one mile east of the project site, across U.S. Highway 101.

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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:				
1) Fire Protection?	☐	☐	☒	☐
2) Police Protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☒	☐
4) Parks?	☐	☐	☒	☐
5) Other Public Facilities?	☐	☐	☒	☐

Impact PS-1: The project would not 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 fire protection services. **(Less than Significant Impact)**

Development of the project would be completed in conformance with current building and fire codes, including features that would reduce potential fire hazards. The project would result in an estimated increase in the local population of approximately 630 persons. As a result, there would be an incremental increase in demand on the Morgan Hill Fire Department. However, response times for fire protection services would not be substantially lowered as a result of the proposed project, due to its location in an urban area of Morgan Hill, nor would the project require construction of new facilities to ensure adequate service to the surrounding areas. The development would be reviewed by Morgan Hill Fire Department/CAL FIRE to ensure appropriate safety features to reduce fire hazards are included in the project. Given that the proposed project is surrounded by existing development, the proposed project would not substantially increase the demand for fire protection, or otherwise require construction or expansion of fire facilities. **(Less than Significant Impact)**

Impact PS-2:	The project would not 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 police protection services. **(Less than Significant Impact)**

The development of the project site with 200 multi-family residential units would incrementally increase the need for police and protection services. However, this increase is not expected to be substantial. The Morgan Hill Police Department would review the development plans to ensure safety features to reduce the risk of criminal activity are incorporated into the project design. Therefore, the proposed project would not result in a significant increase in demand for police services or require the expansion or construction of police facilities. The project's potential impact on police services would be less than significant and would not require new or physically altered police facilities. **(Less than Significant Impact)**

Impact PS-3:	The project would not 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 schools. **(Less than Significant Impact)**

The proposed project would add 200 multi-family residential units and would result in a population growth of approximately 1,102 persons, which would likely increase the need for school capacity. School impact fees would be paid to the affected school districts prior to the issuance of a building permit by the City. School districts would then be responsible for implementing the specific methods for mitigating school impacts under the Government Code. The responsibility for payment of school impact fees would lie with the project applicant. By law, payment of the school impact fee is deemed adequate mitigation for school impacts from development. Fulfillment of this requirement would reduce the project's impacts to schools to a less than significant level. **(Less than Significant Impact)**

Impact PS-4:	The project would not 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 parks. **(Less than Significant Impact)**

The City of Morgan Hill provides and maintains parkland and open space within the City for residents and visitors to enjoy. It is estimated that the project would generate approximately 1,102 net new residents. The project residents would be served by existing parks in the project area and other

open space and recreational facilities in the region. Additionally, the project proposes open space, passive park, and recreational areas within the project area for residents.

It is not anticipated that the project's incremental demand for park and recreational facilities in the area would result in the substantial, physical deterioration of existing park and recreational facilities or require the expansion or construction of new facilities. The developer would be required to pay applicable park in-lieu fees; thus, the impact is considered less than significant. **(Less Than Significant Impact)**

Impact PS-5:	The project would not 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 other public facilities. **(Less than Significant Impact)**

It can be reasonably expected that new residents of the proposed project would utilize nearby libraries and community centers. The demand on libraries and community centers in the area would be marginally increased as a result of the projected 1,102 new residents. However, demand for these facilities would not necessitate the construction of new facilities, or expansion of existing facilities, to accommodate future residents of the project. The existing libraries and community centers in Morgan Hill would be equipped to provide services to new residents of the proposed project. **(Less than Significant Impact)**

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *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.

Local

City of Morgan Hill 2035 General Plan

The following goal and policies related to recreation is applicable to the proposed project:

Goal HC-3: Usable, complete, well-maintained, safe, and high-quality activities and amenities, including active and passive park and recreational facilities, community gardens, and trails that are accessible to all ages, functional abilities, and socio-economic groups.

Policy HC-3.3: **Park Land Fees.** Continue to require park land dedication or in-lieu fees from all new development to meet the recreation and open space needs of the residents of Morgan Hill.

Policy HC-3.9: **Open Space Requirements.** Require multi-family residential developments to include common open space suitable for group gatherings. Common open space shall be funded and maintained by Homeowners Associations or property owners

4.16.1.2 *Existing Conditions*

The City owns 70 acres of developed park land and 59 acres of recreation facilities. The City maintains two community parks, five neighborhood parks, two neighborhood/school parks, and 15 mini-parks, in addition to its public trail system and open space. In addition to publicly owned park land, there is also a substantial amount of recreational land and open space in the City that is privately owned and maintained. The nearest park to the project site is Morgan Hill Community Park, located 1.5 miles to the west.

The City also owns and operates special use facilities for recreational purposes. These facilities include the Morgan Hill Aquatics Center, Community and Cultural Center, the Centennial Recreation Center, the 38-acre Outdoor Sports Center, and Skateboard/BMX park. Many sports leagues and

teams use Morgan Hill School District facilities after school hours and on weekends. These facilities include 12 baseball/softball fields, two football fields, two tracks, and four swimming pools. The nearest park and recreational facilities to the project site are the Morgan Hill Aquatics Center (16200 Condit Road) and the Morgan Hill Outdoor Sports Center (located at 16500 Condit Road). Both are located less than one mile east of the project site, across from U.S. Highway 101.

4.16.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) 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?	☐	☐	☒	☐
2) 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?	☐	☐	☐	☒

Impact REC-1: The project would not 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 Impact)**

As discussed in *Section 4.15 Public Services*, the proposed project would result in a population growth of 630 people and would incrementally increase the use of existing neighborhood parks, regional parks, and other recreational facilities. However, the project proposes open space, passive park, and recreational areas within the project area for residential uses. Additionally, the developer would pay applicable park in-lieu fees. For these reasons, the project would not increase the use of park and recreational facilities such that substantial physical deterioration would occur. **(Less than Significant Impact)**

Impact REC-2: The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **(No Impact)**

The project would not result in the increase in use of recreational facilities such that the facilities would need to be expanded or newly constructed. **(No Impact)**

4.17 TRANSPORTATION

The following discussion is based in part on a Transportation Impact Analysis completed by Hexagon Transportation Consultants, Inc. on March 30, 2020. This report is included as Appendix E.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara 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 ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (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 analysis of VMT in determining the significance of transportation impacts. Local jurisdictions are required by Governor's Office of Planning and Research (OPR) to evaluate VMT on July 1, 2020.

Regional and Local

Congestion Management Program

VTA oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. 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 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.

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to reduce noise and vibration impacts from planned developments within the City of Morgan Hill.[74] The following goal and policies are applicable to the proposed project:

Goal TR-3: *A coordinated, continuous network of streets and roads.*

Policy TR-3.2: **Safe and Complete Improvements**. Avoid creating incomplete public improvements that create public safety hazards.

Policy TR-3.4: **Level of Service Standards**. As the Level of Service (LOS) policy and design criteria for roadway improvements, use a Tiered LOS Standard as follows:

- LOS F in the Downtown at Main/Monterey, along Monterey Road between Main and Fifth Street, and along Depot Street at First through Fifth Streets. This LOS standard in the Downtown recognizes the unique nature of and goals for Downtown Morgan Hill as the transit hub of the City and as a center for shopping, business, entertainment, civic and cultural events, and higher-density, mixed-use living opportunities. This standard does not preclude the City, developers, and property owners from voluntarily implementing improvements and employing operational strategies to improve level of service, especially at the Main/Monterey intersection, if and when land uses redevelop.

- LOS D for intersections and segments elsewhere; except:

    - Allow LOS E for identified freeway ramps/zones, road segments and intersections that (1) provide a transition to and are located on the periphery of downtown; (2) are freeway zone intersections; and/or (3) where achieving LOS D could result in interim intersection improvements which would be "over-built" once the City's circulation network has been completed, and/or would involve unacceptable impacts on existing buildings or existing or planned transportation facilities, including roads, sidewalks, bicycle and transit facilities; and/or would involve extraordinary costs to acquire land and existing buildings, and build the improvement in relation to benefits achieved; and/or the facility would be widened beyond requirements to serve local traffic, in that the facility accommodates a significant component of peak-hour sub-regional and regional through-traffic.

- In order to reduce the incentive for regional travel to be drawn off the

[74] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

freeway and onto local neighborhood streets, protect neighborhoods, avoid overbuilding intersections, and to create an incentive for using alternate modes of travel, LOS E during peak hours of travel is acceptable for the following identified freeway ramps, road segments, and intersections:

- Main Avenue and Del Monte Avenue
- Main Avenue and Depot Street
- Dunne Avenue and Del Monte Avenue
- Dunne Avenue and Monterey Avenue
- Dunne Avenue and Church Street; also, until closed: Dunne Avenue and Depot Street
- Cochrane Road and Monterey Road
- Tennant Avenue and Monterey Road
- Tennant Avenue and Butterfield Boulevard
- Cochrane Road Freeway Zone: from Madrone Parkway/Cochrane Plaza to Cochrane/DePaul Drive
- Dunne Avenue Freeway Zone: from Walnut Grove/East Dunne to Condit/East Dunne
- Tennant Avenue Freeway Zone: from Butterfield/Tennant to Condit/Tennant Freeway Ramps

Projects shall pay the City's standard traffic impact fees imposed on new developments in accordance with the adopted impact fee schedule.

Morgan Hill LOS Guidelines and Methodology

The City of Morgan Hill level of service methodology is TRAFFIX, which is based on the 2000 Highway Capacity Manual (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersections operations based on average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersections level of service methodology, the City of Morgan Hill methodology employs the CMP defaults values for the analysis parameters, which include adjusted saturation flow rates to reflect conditions in Santa Clara County. All intersections within the City of Morgan Hill are required to meet the City's LOS standard of LOS D, with the exception of intersections and freeway zones listed in General Plan Policy TR-3.4.

According to the City of Morgan Hill level of service guidelines, a development would create an adverse effect on traffic conditions at a signalized intersection if for either peak hour:

- The level of service at the intersection degrades from an acceptable level (LOS D or LOS E as identified above) under existing conditions to an unacceptable level (LOS E or F) under project conditions, or

- The level of service at the intersection is an unacceptable level (LOS E or F as identified above) under existing conditions and the addition of project trips causes the average critical

delay to increase by four (4) or more seconds and the volume-to-capacity ratio (V/C) to increase by 0.01.

An exception to this rule applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by 0.01 or more.

4.17.1.2 *Existing Conditions*

Existing Roadway Network

Regional access to the project site is provided via U.S. Highway 101. Local access to the site is provided by Tennant Avenue, Barrett Avenue, San Pedro Avenue, Dunne Avenue, Monterey Road, Butterfield Boulevard, Juan Hernandez Drive, and Condit Road. These facilities are described below.

U.S. Highway 101 is a north-south freeway extending northward to San Francisco and southward through Gilroy. U.S. Highway 101 is an eight-lane freeway (three mixed-flow lanes and one high-occupancy vehicle [HOV] lane in each direction) north of Cochrane Road. South of Cochrane Road, it is a six-lane freeway with no HOV lanes. Access to and from the project area is provided via a full interchange at Tennant Avenue.

Tennant Avenue is a four to six lane major arterial road. Tennant Avenue extends from Monterey Road eastward to the east foothills, terminating at a T-intersection with Carey Avenue. West of Monterey Road, Tennant Avenue changes designation to Edmunson Avenue. Tennant Avenue provides regional access to the project site via its full interchange with US Highway 101.

Barrett Avenue is an east-west two-lane undivided roadway that extends from Railroad Avenue eastward to just west of U.S. Highway 101. East of U.S. Highway 101, Barrett Avenue continues eastward from west of Murphy Avenue to Trail Drive, in the east foothills, where it terminates. The posted speed limit on Barrett Avenue is 30 miles per hour (mph) and reduces to 25 mph in the vicinity of the Barrett Elementary School when children are present. Sidewalks on both sides of the street are found along Barrett Avenue, west of U.S. Highway 101, with the exception of two short segments along two undeveloped parcels located just east of Railroad Avenue. No sidewalks are found along Barrett Avenue, east of U.S. Highway 101. Barrett Avenue is the northern project site boundary and would provide emergency access to the project site via two driveways.

San Pedro Avenue is an east-west two-lane undivided roadway that extends from Monterey Road eastward to just west of U.S. Highway 101, then it continues again on the east side of U.S. Highway 101 to its terminus point at Hill Road. West of U.S. Highway 101, San Pedro Avenue has a posted speed limit of 35 mph. San Pedro Avenue would provide access to the project site via Butterfield Boulevard and via the future Juan Hernandez Drive extension.

Dunne Avenue is classified as a four-lane major arterial road, with the exception of the two-lane arterial segment between Del Monte Avenue and Peak Avenue. Dunne Avenue transverses the City extending from the east part of town to the west with a posted speed limit of 35 to 50 mph and sidewalks along both sides of the street. Bike lanes are found along both sides of Dunne Avenue

between Peak Avenue and Gallop Drive (east of U.S. Highway 101). Dunne Avenue would provide access to the project site via Butterfield Boulevard and Walnut Grove Avenue.

Monterey Road is classified as a four-lane major arterial road that runs directly through Morgan Hill. Monterey Road extends from Market Street in downtown San José to U.S. Highway 101 south of the City of Gilroy. Monterey Road has posted speed limits ranging from 25 to 50 mph. Within the downtown area (between Main Avenue and Dunne Avenue), sidewalks are present along both sides of the street. However, north and south of the downtown area, segments of sidewalks are missing along one or both sides of Monterey Road. The segment of Monterey Road between Main Avenue and Dunne Avenue is designated as a Class III facility bike route, while the segments of Monterey Road north of Main Avenue and south of Dunne Avenue provide Class II bike lanes along both sides of the street. Monterey Road would provide access to the project site via Tennant Avenue and Butterfield Boulevard.

Butterfield Boulevard is a north-south four-lane divided arterial roadway that begins in the northern part of town at its intersection with Cochrane Road and extends southward to its intersection with Monterey Road where it changes designation to Watsonville Road. Butterfield Boulevard has a posted speed limit of 45 mph. Along with Monterey Road, Butterfield Boulevard serves as a primary north-south route within the City of Morgan Hill. Butterfield Boulevard is planned to be extended north of Cochrane Road as a two-lane arterial to connect to Madrone Parkway. Bike lanes are currently provided along the entire length of Butterfield Boulevard. Butterfield Boulevard would provide access to the project site via Barrett Avenue and Tennant Avenue.

Juan Hernandez is a two-lane north-south undivided roadway that begins at Tennant Avenue and extends northward to north of San Vicente Drive where it currently terminates. Juan Hernandez Drive is planned to be extended northward from is current terminus point to connect to San Pedro Avenue. The posted speed limit on Juan Hernandez is 35 mph and reduces to 25 mph in the vicinity of Barrett Elementary School when children are present. Juan Hernandez Drive has sidewalks on both sides of the street, with the exception of the west side of the street between Tennant Avenue and St. James Drive. Being the western project site boundary, Juan Hernandez Drive would provide direct access to the project site via two driveways.

Condit Road is a two-lane north-south undivided roadway that extends from Tennant Avenue northward to Half Road (north of Main Street) where it currently terminates. Condit Road runs parallel to and east of U.S. Highway 101 with a posted speed limit of 45 mph. Condit Road would provide access to the project site via Tennant Avenue.

Pedestrian and Bicycle Facilities

Pedestrian Facilities

Pedestrian facilities in the area consist of sidewalks and crosswalks. Crosswalks with pedestrian signal heads and American Disabilities Act (ADA) compliant ramps are located at all nearby signalized intersections. The project site is located within an area that is highly undeveloped. Residential neighborhoods are located both north and west of the project site, while parcels south of the project site are mainly undeveloped. Tennant Avenue, east of Butterfield Boulevard, is lined with

predominantly undeveloped parcels. As such, continuous sidewalks along some roadway segments in the vicinity of the project site are not available, particularly along undeveloped areas.

Bicycle Facilities

Class I Trail or Path is an off-street path with exclusive right-of-way for non-motorized transportation used for commuting as well as recreation. Class I bikeways are currently provided at the following locations:

- Along the west bank of Little Llagas Creek, extending from Watsonville Road and La Crosse Drive north to Spring Avenue.
- Along the east side of Butterfield Boulevard, between San Pedro Avenue and Central Avenue.
- An unpaved bike path, the Madrone Channel Trail, running along the east side of U.S. Highway 101, between Tennant Avenue and Cochrane Road.

Class II Bike Lanes are on-street striped bike lanes. Within the project vicinity, Class II bikeways are present along the following roadways:

- Tenant Avenue, from Olympic Drive to east of U.S. Highway 101
- Butterfield Boulevard, along its entire length
- Monterey Road, nearly its entire length within City of Morgan Hill limits, with the exception of the segment that runs through downtown between Dunne Avenue and Main Avenue
- Dunne Avenue, from Peak Avenue to east of Hill Road
- Main Avenue, from Peak Avenue to east of U.S. Highway 101

Class III Bike Routes are signed bike routes that provide a connection through residential, downtown, and rural/hillside areas to Class I and Class II facilities. Bike routes serve as transportation routes within neighborhoods to parks, schools, and other community amenities. The segment of Monterey Road between Main Avenue and Dunne Avenue is designated as a bike route.

Transit Service

Transit service within the City of Morgan Hill is provided by the VTA. Currently, no bus routes exist that provide direct service between the project site and other pedestrian destinations in Morgan Hill. The nearest bus stop (Route 87) is located 1.5 miles northwest of the project site.

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	☐	☒	☐	☐
2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☐	☒
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
4) Result in inadequate emergency access?	☐	☐	☐	☒

Impact TRN-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. **(Less than Significant Impact with Mitigation Incorporated)**

The City of Morgan Hill does not currently have an adopted vehicle miles traveled (VMT) policy. The City's adopted transportation policy utilizes LOS as the metric by which the City determines the functionality of the roadway system and the effect of new development on the roadway network. The following discussion of LOS is provided as it pertains to consistency with the City's adopted LOS policy described in the General Plan.

The Transportation Impact Analysis (TIA) analyzed 14 signalized intersections, four unsignalized intersections, and one planned future intersection, as presented below in Table 4.17-2. Traffic conditions were analyzed for the weekday AM and PM peak hours of traffic. The weekday AM peak hour of traffic generally falls within the 7:00 to 9:00 AM period and the weekday PM peak hour is typically in the 4:00 to 6:00 PM period. It is during these times that the most congested traffic conditions occur on a typical weekday.

Traffic conditions were evaluated under the following conditions:

Scenario 1: *Existing Conditions.* Existing peak-hour traffic volumes were obtained from recently completed traffic studies and supplemented with new manual turning-movement counts at study intersections for which recent counts were unavailable.

Scenario 2: *Existing Plus Project Conditions.* Existing plus project conditions were evaluated relative to existing conditions in order to determine potential project impacts.

Scenario 3: *Year 2035 General Plan No Project Conditions.* The conditions of this scenario include land use growth and transportation improvements associated with buildout of the City's General Plan.

Scenario 4: *Year 2035 General Plan with Project Conditions.* Year 2035 General Plan with Project conditions consists of General Plan traffic conditions with the addition of traffic due to the proposed project and its associated land use amendment for the project site.

Project Trip Generation

Trip generation estimates are based on trip generation rates from the Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, Tenth Edition. The estimates for the proposed project are shown in Table 4.17-1 below.

Table 4.17-1: Project Trip Generation Estimates

Land Use	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Multifamily Housing (Mid-Rise)	15	43	**58**	44	28	**72**
High-Turnover (Sit-Down) Restaurant	46	42	**88**	45	23	**63**
Hospital	73	28	**101**	29	75	**104**
Medical-Dental Office Building	56	16	**72**	25	65	**90**
Urgent Clare Clinic	11	3	**14**	3	9	**12**
Total	201	132	**133**	146	200	**346**
Existing Medical Office Driveway Counts	17	3	**20**	4	15	**19**
Net Project Trips (Proposed – Existing Driveway Counts)	184	129	**313**	142	185	**327**

Intersection Level of Service Analysis

Existing Plus Project Conditions

The results of the intersection level of service analysis under existing plus project conditions are summarized in Table 4.17-2.

Table 4.17-2: Study Intersections Level of Service – Existing Plus Project Conditions

No.	Intersection	Peak Hour	Existing		Existing Plus Project		
			Average Delay	LOS	Average Delay	LOS	Increase in Critical V/C
1	Tennant Avenue and Juan Hernandez Drive	AM	10.5	B	10.9	B	0.072
		PM	10.2	B	10.9	B	0.070
2	Juan Hernandez Drive and St. James Drive	AM	8.8	A	9.4	A	N/A
		PM	8.7	A	9.2	A	N/A

Table 4.17-2: Study Intersections Level of Service – Existing Plus Project Conditions							
			Existing		Existing Plus Project		
No.	Intersection	Peak Hour	Average Delay	LOS	Average Delay	LOS	Increase in Critical V/C
3	Juan Hernandez Drive and Barrett Avenue	AM PM	8.4 7.5	A A	8.6 7.8	A A	N/A N/A
4	Monterey Road and Watsonville Road/Butterfield Boulevard	AM PM	29.9 45.6	C D	29.9 45.8	C D	0.007 0.005
5	Butterfield Boulevard and Tennant Avenue	AM PM	29.8 33.9	C C	29.9 34.1	C C	0.016 0.015
6	Butterfield Boulevard and Barrett Avenue	AM PM	11.1 10.3	B B	12.3 10.8	B B	0.053 0.009
7	Butterfield Boulevard and San Pedro	AM PM	13.0 13.2	B B	13.0 13.2	B B	0.009 0.013
8	Butterfield Boulevard and Dunne Avenue	AM PM	35.5 31.7	D C	35.3 31.9	D C	0.016 0.014
9	Butterfield Boulevard and Main Avenue	AM PM	27.6 29.8	C C	27.7 30.3	C C	0.008 0.015
10	Monterey Road and Tennant Avenue/Edmunson Avenue	AM PM	23.3 35.2	C D	23.5 35.3	C D	0.005 0.002
11	Tennant Avenue and Vineyard Avenue	AM PM	16.4 19.4	B B	16.5 19.5	B B	0.003 0.004
12	Barrett Avenue and San Ramon Drive	AM PM	10.4 9.4	B A	11.0 11.0	B B	N/A N/A
13	Dunne Avenue and Walnut Grove Drive	AM PM	18.4 28.5	B C	18.4 28.5	B C	0.001 0.001
14	Tennant Avenue and Condit Road	AM PM	14.7 14.6	B B	15.1 15.2	C C	N/A N/A
15	US 101 NB Ramps and Tennant Avenue	AM PM	11.6 11.1	B B	12.4 11.4	B B	0.018 0.025
16	US 101 SB Ramps and Tennant Avenue	AM PM	21.5 19.7	C B	22.2 20.2	C C	0.037 0.041
17	US 101 NB Ramps and Dunne Avenue	AM PM	5.3 11.8	A B	5.3 11.8	A B	0.001 0.001
18	US 101 SB Ramps and Dunne Avenue	AM PM	20.9 11.8	C B	20.9 18.8	C B	0.000 0.000
19	Juan Hernandez Drive and San Pedro Avenue (Future Intersection for 2035)	AM PM	-- --	-- --	-- --	-- --	-- --

The project would not cause any intersections to degrade below acceptable level of service, therefore, no physical improvements are needed to maintain acceptable LOS.

Year 2035 General Plan Conditions

The Year 2035 General Plan conditions were analyzed with and without implementation of the proposed project.

Table 4.17-3: Study Intersections Level of Service – Year 2035 General Plan Conditions								
No.	**Intersection**	**Year 2035 Control**	**2035 General Plan No Project**		**2035 General Plan Plus Project**			
			Delay	**LOS**	**Average Delay**	**LOS**	**Increase in Critical Delay**	**Increase in Critical V/C**
1	Tennant Avenue and Juan Hernandez Drive	Signal	19.0 20.7	B C	19.7 19.5	B B	1.1 -1.4	0.015 -0.023
2	Juan Hernandez Drive and St. James Drive	OWSC	9.6 9.3	A A	10.0 10.0	B B	N/A N/A	N/A N/A
3	Juan Hernandez Drive and Barrett Avenue	AWSC	9.0 8.2	A A	9.2 8.1	A A	N/A N/A	N/A N/A
4	Monterey Road and Watsonville Road/Butterfield Boulevard	Signal	41.5 48.8	D D	41.4 48.4	D D	-0.2 -0.5	0.000 -0.005
5	Butterfield Boulevard and Tennant Avenue	Signal	51.6 38.3	D D	50.1 38.0	D D	-2.8 -0.9	-0.015 -0.012
6	Butterfield Boulevard and Barrett Avenue	Signal	12.9 11.9	B B	13.2 11.9	B B	0.4 0.0	0.011 -0.003
7	Butterfield Boulevard and San Pedro	Signal	13.6 14.8	B B	13.6 14.9	B B	0.0 0.2	0.006 0.004
8	Butterfield Boulevard and Dunne Avenue	Signal	38.9 34.6	D C	39.0 34.6	D C	0.5 0.0	0.009 0.001
9	Butterfield Boulevard and Main Avenue	Signal	30.8 36.3	C D	30.7 35.7	C D	-0.3 -0.8	-0.002 -0.007
10	Monterey Road and Tennant Avenue/Edmunson Avenue	Signal	23.9 36.4	C D	24.0 36.4	C D	0.1 0.1	0.001 -0.001
11	Tennant Avenue and Vineyard Avenue	Signal	17.2 20.2	B C	17.3 20.2	B C	0.1 0.0	0.003 0.002
12	Barrett Avenue and San Ramon Drive	TWSC	11.3 10.2	B B	11.5 10.3	B B	N/A N/A	N/A N/A
13	Dunne Avenue and Walnut Grove Drive	Signal	20.1 28.1	C C	20.4 28.1	C C	0.4 0.1	0.010 0.002
14	Tennant Avenue and Condit Road	OWSC	24.2 76.0	C F	24.2 77.3	C F	N/A N/A	N/A N/A
15	US 101 NB Ramps and Tennant Avenue	Signal	12.1 10.4	B B	11.8 10.4	B B	-0.2 0.0	-0.012 0.002
16	US 101 SB Ramps and Tennant Avenue	Signal	31.2 31.1	C C	31.2 31.0	C C	-0.1 -0.2	0.000 -0.003
17	US 101 NB Ramps and Dunne Avenue	Signal	7.4 10.7	A B	6.7 10.8	A B	-0.7 0.1	0.008 -0.006

Table 4.17-3: Study Intersections Level of Service – Year 2035 General Plan Conditions								
No.	**Intersection**	**Year 2035 Control**	**2035 General Plan No Project**		**2035 General Plan Plus Project**			
			Delay	**LOS**	**Average Delay**	**LOS**	**Increase in Critical Delay**	**Increase in Critical V/C**
18	US 101 SB Ramps and Dunne Avenue	Signal	21.7 22.8	C C	21.9 22.4	C C	0.3 -0.8	0.010 -0.015
19	Juan Hernandez Drive and San Pedro Avenue (Future Intersection for 2035)	OWSC	9.6 9.7	A A	9.7 9.7	A A	N/A N/A	N/A N/A

The results shown in Table 4.17-3 show that the Tennant Avenue and Condit Road intersection is projected to operate at an unacceptable level of service (LOS F) and have peak-hour traffic volume levels that warrant installation of a traffic signal during PM peak-hour under both Year 2035 General Plan without and with project conditions.

Mitigation Measures: The following mitigation measure shall be implemented by the proposed project to reduce impacts to a less-than-significant level.

MM TRN-1.1: Improvements to mitigate the impact at this intersection consist of the implementation of a traffic signal. However, the decision to install a traffic signal is not be based solely on satisfying one traffic signal warrant. Instead, intersections that meet the peak-hour signal warrant shall be subject to further analysis before determining that a traffic signal is necessary. Thus, the project impact at this intersection shall be mitigated with payment of the traffic impact fee, as determined by City staff.

Impacts to Pedestrian, Bicycle and Transit Facilities

Pedestrian Facilities

The proposed project would generate new pedestrian traffic. The existing sidewalks along both sides of Barrett Avenue and crosswalks at the Juan Hernandez Drive/Barrett Avenue intersection, in conjunction with proposed on-site sidewalks would provide a connection between the project's residential area and the sidewalks on Barrett Avenue. These improvements would provide a continuous and safety-enhanced access between the project site and Barrett Elementary School.

Pedestrian destinations along Butterfield Boulevard could be accessed via the continuous sidewalks on Barrett Avenue. Pedestrian access to the commercial areas along Tennant Avenue, however, would be challenging due to the discontinuous pedestrian network, forcing pedestrians to walk along the edge of undeveloped parcels. The lack of a continuous pedestrian network off-site would affect pedestrian access to and from the project site. The lack of connectivity between the project site and

nearby pedestrian destinations could potentially discourage pedestrian activity, or force pedestrians to walk along undeveloped roadway shoulders and/or within the street. The following Condition of Approval would lessen the impact.

Condition of Approval:

- Ensure all existing and proposed curb ramps along the project site frontage, and at intersections providing direct access to the project site, are upgraded to comply with ADA standards.

Bicycle Facilities

The proposed project could increase the demand on bicycle facilities in the vicinity of the project site. The TIA estimated that the project would generate no more than three new bicycle trips during peak hours, based on an assumption that bicycle trips would comprise no more than one percent of the total project-generated trips. The potential increase in bicycle trips would not have an adverse effect on the existing or future bicycle facilities and would not require new off-site bicycle facilities; therefore, this is a less than significant impact.

Transit Facilities

The proposed project is estimated to result in three to four new transit riders during AM and PM peak hours. However, no bus routes currently exist that provide direct service between the project site and other pedestrian destinations in Morgan Hill. There is currently only one local bus route serving the City of Morgan Hill with the nearest bus stop to the project site located approximately 1.5 miles away. This does not have a significant impact; however, future development provides an opportunity for VTA to expand the existing service area to include the project site.

Implementation of the mitigation measure described above, and adherence to City of Morgan Hill standards and requirements, would reduce impacts to less-than-significant levels. **(Less than Significant Impact with Mitigation Incorporated)**

Impact TRN-2:	The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(No Impact)**

VMT is identified in CEQA Guidelines Section 15064.3 as the most appropriate measure of transportation impacts. Per the CEQA Guidelines Section 15064.3, agencies are required to evaluate VMT starting July 1, 2020. The City has not yet adopted a standard approach or guidelines to evaluate a project's VMT impact. Therefore, the proposed project is not in conflict with CEQA Guidelines Section 15064.3, Subdivision (b). **(No Impact)**

Impact TRN-3:	The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Less than Significant Impact)**

The proposed development would be accessed by two driveways along Juan Hernandez Drive. Driveway 1 is currently located along the southern project site boundary, approximately 100 feet south of St. James Drive and 700 feet north of Tennant Avenue and is the existing driveway that provides access to the current uses on the site. The City Department of Public Works recommends Driveway 1 to be relocated and aligned with St. James Drive to the north. Driveway 1 would continue to provide access to the existing buildings on site, in addition to the proposed urgent care building, additional medical office space, second hospital drop-off area, and secondary access to the hospital parking structure. The potential relocation of Driveway 1 would not result in any secondary environmental impacts, such as tree removal.

The main driveway, Driveway 2, would be located in the middle of the project site frontage, approximately 500 feet south of Barrett Avenue and 300 feet north of St. James Drive. Driveway 2 would include an inbound southbound left-turn lane along Juan Hernandez Drive and two outbound lanes plus one receiving lane on site. Driveway 2 would provide access to the residential units, the retail/restaurant space, the hospital drop-off area, and the hospital parking structure. Based on the City of Morgan Hill Street Design Standards, a minimum width of 16 feet and maximum width of 36 feet is allowed for the project driveways.[75] The project would comply with the City's design standards. The project driveways would provide adequate width for site access and not result in hazards. The project does not include sharp curves or incompatible uses. Therefore, the project would not increase hazards due to its geometric design. **(Less Than Significant Impact)**

Impact TRN-4:	The project would not result in inadequate emergency access. **(No Impact)**

The two proposed driveways along Barrett Avenue would provide adequate emergency access to the site. These two emergency access only driveways, in conjunction with the other two driveways proposed along Juan Hernandez Drive, would provide a total of four access points for emergency vehicles to access any part of the project site. By adhering to the City of Morgan Hill's standards and requirements for emergency access, the proposed site access points and layout of the surface parking areas would be adequate to accommodate circulation of both passenger and emergency vehicles. **(No Impact)**

[75] City of Morgan Hill. *Street Design Standards*. Accessed April 2, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/805/3-Street-Design-Standards?bidId=

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

4.18.1.1 *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.

Senate Bill 18

The intent of SB 18 is to aid in the protection of traditional tribal cultural places through local land use planning by requiring city governments to consult with California Native American tribes on projects which include adoption or amendment of general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.). SB 18 requires local governments to consult with tribes prior to making certain planning decisions, including General Plan Amendments, and to provide notice to tribes at certain key points in the planning process.

Local

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to tribal cultural resources within the City of Morgan Hill.[76] The following goal and policies are applicable to the proposed project:

[76] City of Morgan Hill. *City of Morgan Hill 2035 General Plan.* Adopted July 27, 2016. Accessed February 12, 2020. https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId.

Goal HC-8: *Historic identity and cultural resources that are preserved for future generations.*

Policy HC-8.4: **Tribal Consultation.** Consult with Native American tribes that have ancestral ties to Morgan Hill regarding proposed new development projects and land use policy changes.

Policy HC-8.5: **Mitigation.** Require that if cultural resources, including tribal, archaeological, or paleontological resources, are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented.

4.18.1.2 *Existing Conditions*

AB 52 requires lead agencies to conduct formal consultations with California Native American tribes during the CEQA process to identify tribal cultural resources that may be subject to significant impacts as a result of a project. This consultation requirement applies only if the tribes have sent written requests for notification of projects to the lead agency. The City of Morgan Hill has not been contacted for notification and consultation by a tribe pursuant to AB 52.

SB 18 requires the City to consult with culturally-affiliated tribes regarding the proposed General Plan Amendment. The SB 18 consultation process is independent of CEQA, and must be completed prior to the City Council's consideration of the General Plan Amendment.

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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:				
1) 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)?	☐	☐	☒	☐

2) 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.	☐	☐	☒	☐

Impact TCR-1:	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). **(Less than Significant Impact)**

As described in Section 4.18.1, no tribes have requested notice under AB 52 and no known tribal cultural resources are present on-site. The City initiated the SB 18 consultation process on January 29, 2020. No responses or requests for consultation have been received by the City.

However, in the event of the unintentional discovery of undocumented human remains, measures listed under Standard Condition CUL-1 would be implemented. For these reasons, the project would not cause an adverse change in the significance of tribal cultural resources listed on the California Register or City of Morgan Hill historic properties inventory. **(Less than Significant Impact)**

Impact TCR-2:	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 Impact)**

As discussed in the response to Impact TCR-1, there are no known tribal cultural resources on-site. The project would, therefore, have a less than significant impact in the significance of a tribal cultural resource. **(Less than Significant Impact)**

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

4.19.1.1 *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 of Morgan Hill adopted its most recent UWMP in August 2016.

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, 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 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.

Local

City of Morgan Hill 2035 General Plan

The following goals and policies to reduce impacts to utilities are applicable to the proposed project:

Goal SSI-14: High quality water resources, managed effectively.

Policy SSI-14.5: **Water Supply**. Routinely evaluate the impact of new development proposals in Morgan Hill and require appropriate measures (fees, water supply assessments, etc.) to ensure long-term water supplies are available.

Policy SSI-14.8: **Sufficient Supply**. Ensure that new development does not exceed the water supply.

Goal SSI-16: Minimized adverse effects on property, natural resources, and ground and surface water quality from stormwater runoff.

Policy SSI-16.2: **Drainage System Capacity**. Ensure that the level of detention or retention provided on the site of any new development is compatible with the capacity of the regional storm drainage system.

4.19.1.2 *Existing Conditions*

Water Service

The City of Morgan Hill provides potable water service to its residential, commercial, industrial, and institutional customers within the City limits. The City's water system facilities include 17 groundwater wells, 12 potable water storage tanks, 10 booster stations, and over 180 miles of pressured pipes ranging from two to 14 inches in diameter. The City's water distribution system meets the needs of existing customers. In anticipation of future growth, the City has planned and constructed water projects in conjunction with new street construction.

The City of Morgan Hill relies on groundwater as its sole source of supply. The City relies on water imports from the State Water Project and the federal Central Valley Project for the purpose of groundwater recharge of the sub-basins that supply water to the City (Coyote Valley sub-area of the Santa Clara sub-basin and the Llagas sub-basin). The City's 2015 Urban Water Management Plan (UWMP) identified potential shortages which may occur during prolonged years of drought, however, upon implementation of water shortage contingency actions these shortages in supply can be mitigated in dry-year and multiple dry-year scenarios.[77]

The project site contains medical offices and associated landscaping that utilizes approximately 6,500 gallons per day (gpd) of the City's water supply.[78] The project would connect to an existing 10-inch water pipe located in Juan Hernandez Drive.

Wastewater

The City of Morgan Hill sewer collection system consists of approximately 160 miles of four-inch through 30-inch diameter sewers, three miles of force mains, and 14 sewage lift stations. The "backbone" of the system consists of the trunk sewers, generally 12-inches in diameter and larger, that convey the collected wastewater flows south to the South County Regional Wastewater

[77] City of Morgan Hill. *2015 Urban Water Management Plan.* August 2016.

[78] CalEEMod. Appendix D: Default Data Tables. Table 9.1: Water Use Rates. October 2017.
Medical office land use
Indoor water use: 125,481 gal / 1000 sf X 15,900 sf = 1,995,148 gal/yr = 5,466 gpd
Outdoor water use: 23,901 gal / 1000 sf X 15,900 sf = 380,026 gal/yr = 1,041 gpd

Authority (SCRWA) Wastewater Treatment Plant.[79,80] The treatment plant provides service to the cities of Morgan Hill and Gilroy. The treatment plant has capacity to treat an average dry weather flow (ADWF) of 8.5 million gallons per day (mgd) and is currently permitted by the Central Coast RWQCB to treat up to 8.5 mgd.[81] Currently, Morgan Hill is allocated 42 percent of the treatment plant's 8.5 mgd capacity, amounting to 3.6 mgd. In 2016, the ADFW in the City was 2.35 mgd, leaving approximately 1.2 mgd of allowable growth within the City's General Plan before capacity at the plant is reached.[82]

Storm Drainage

The City of Morgan Hill is divided into several hydrologically distinct drainage areas. Each drainage area has a system of curb and gutter facilities, inlets, conveyance facilities, pumps, and detention basins to collect and dispose of runoff. The stormwater runoff from these areas is ultimately discharged into creeks that flow through the City and are tributary to either Monterey Bay or San Francisco Bay. The drainage areas include Coyote Creek, Fisher Creek, Tennant Creek, Madrone Channel, Butterfield Channel, West Little Llagas Creek, and Llagas Creek.

The project site is located in the Butterfield Channel storm drainage basin, which drains to Monterey Bay.[83] There is an existing 27-inch storm drain on Juan Hernandez Drive and an 18-inch storm drain on Barrett Avenue. These are designed to handle a 10-year storm event.

Solid Waste

Recology South Valley provides solid waste and recycling services to the residents and businesses of the City. Recology South Valley is contracted with the Salinas Valley Solid Waste Authority for the disposal of municipal solid waste at Johnson Canyon Sanitary Landfill. Johnson Canyon Sanitary Landfill is expected to reach capacity in 2055.[84] Currently, the project site generates approximately 171 tons of solid waste per year (0.47 tons per day or 940 pounds per day).[85]

[79] City of Morgan Hill. *Sewer System Master Plan.* October 2017.
[80] City of Morgan Hill. *City Council State Report 2163: Accept Report Regarding Wastewater System Needs and Rate Study Schedule*. May 18, 2019.
[81] Santa Clara Valley Water District. *US Bureau of Reclamation WaterSMART Title XVI Water Reclamation and Reuse Program Funding FY 2017, FOA BOR-DO-17-F002. South Santa Clara County Recycled Water Project (Phases 1B and 2A)*. December 15, 2016. Accessed May 18, 2019. https://www.usbr.gov/watersmart/title/docs/applications/authorized/2017/F002-007santaclara.pdf
[82] City of Morgan Hill. *Madrone Parkway Carpenters Training Center Project: IS/MND.* September 2019.
[83] City of Morgan Hill. *2018 Storm Drainage System Master Plan.* September 2018.
[84] CalRecycle. *SWIS Facility Detail: Johnson Canyon Sanitary Landfill (27-AA-0005)*. Accessed March 18, 2020. https://www2.calrecycle.ca.gov/swfacilities/Directory/27-AA-0005.
[85] CalEEMod. Appendix D: Default Data Tables. Table 10.1: Solid Waste Disposal Rates. October 2017. Medical land use: 0.0108 tons X 15,900 square feet existing = 171.72 tons per year

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
4) 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?	☐	☐	☒	☐
5) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact UTL-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(Less than Significant Impact)**

The proposed project would install new water lines, sanitary sewer lines, and storm drains that would connect to existing utility lines on Juan Hernandez Drive and Barrett Avenue. The proposed project would utilize existing utility connections to connect to the electric power, natural gas lines, and telecommunication facilities.

Storm Drainage

The on-site storm drains would connect to the existing storm drain on Juan Hernandez Drive, and the project proposes a stormwater management area on the southwest corner of the project site. The project would be consistent with the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements and Storm Drainage Master Plan, and,

therefore, would not cause the City's storm drainage system to exceed capacity. The on-site retention would be designed to convey a 10-year storm event. The City's existing storm drainage system has the capacity to serve the site. The proposed project would not require expansion of the City's existing storm drainage system. **(Less Than Significant Impact)**

Electric Power, Natural Gas, and Telecommunications

The project would connect to existing electric power, and telecommunication lines in the project area. The project does not propose relocation of these utilities. Therefore, the project would not result in a significant environmental effect from the construction or relocation of electricity or telecommunication utilities. In response to the growing climate crisis, the City has determined that natural gas use in local buildings, which accounts for approximately one-third of the community's carbon footprint, represents the City's greatest opportunity to reduce future greenhouse gas emissions. Requiring all new buildings to be constructed without natural gas will dramatically reduce future emission growth as electricity procured by Silicon Valley Clean Energy is 100% carbon free. The City Council adopted Ordinance No. 2306 on November 6, 2019, which prohibits natural gas infrastructure in new buildings. **(Less than Significant Impact)**

Impact UTL-2:	The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Less than Significant Impact)**

The proposed project would demand approximately 88,845 gallons of water per day for indoor use and 31,577 gallons of water per day for outdoor use, for a total demand of 120,422 gpd.[86] Water demand was calculated using standard water use rates from the California Emissions Estimator Model (CalEEMod). Per CEQA Guidelines Section 15155, a Water Supply Analysis would be required for projects that demand an amount of water equivalent to the amount of water required by a 500-unit residential development. A 500-unit development would have a water demand of approximately 53 million gallons of water per year (approximately 145,500 gpd).[87]

Furthermore, the UWMP determined that there was sufficient water to accommodate buildout of the uses identified in the general plan. The proposed site was considered for commercial development in

[86] CalEEMod. Appendix D: Default Data Tables. Table 9.1: Water Use Rates. October 2017.
Apartment land use
Indoor water use: 65,146 gallons X 200 dwelling units = 13,030,800 gallons/year = 35,700 gpd
Outdoor water use: 41,075 gallons X 200 dwelling units = 8,215,000 gal/yr = 22,507 gpd
Hospital land use
Indoor water use: 125,481 gal / 1000 square feet X 104,500 square feet = 13,112,660 gal/yr = 35,925 gpd
Outdoor water use: 23,901 gal / 1000 sf X 104,500 sf = 2,497,655 gal/yr = 6,843 gpd
Medical office land use
Indoor water use: 125,481 gal / 1000 sf X 25,900 sf = 3,429,958 gal/yr = 8,904 gpd
Outdoor water use: 23,901 gal / 1000 sf X 25,900 sf = 619,036 gal/yr = 1,696 gpd
Quality restaurant land use
Indoor water use: 303,534 gal / 1000 sf X 10,000 sf = 3,035,350 gal/yr = 8,316 gpd
Outdoor water use: 19,374 gal / 1000 sf X 10,000 sf = 193,740 gal/yr = 531 gpd

[87] CalEEMod. Appendix D: Default Data Tables. Table 9.1: Water Use Rates. October 2017.
Apartment land use
Indoor water use: 65,146 gallons X 500 dwelling units = 32,573,000 gallons/year = 89,241 gpd
Outdoor water use: 41,075 gallons X 500 dwelling units = 20,537,500 gal/yr = 56,267 gpd

the general plan. The proposed project includes a General Plan Amendment to allow for the development of 200 residential units, hospital and medical offices, and restaurant/commercial uses. These uses would not significantly increase water demand compared to the water demand of the originally anticipated commercial development. Therefore, the project would have sufficient water supplies available to serve the site. **(Less than Significant Impact)**

Impact UTL-3:	The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **(Less than Significant Impact)**

The proposed project would generate approximately 75,520 gallons of wastewater per day.[88] As discussed in Section 4.19.1, the ADFW in the City is approximately 2.35 mgd, leaving approximately 1.2 mgd of allowable growth within the City's General Plan before capacity at the plant is reached. The City's General Plan EIR determined that the wastewater generated at buildout would be 5.31 mgd by 2035. According to these projections, future wastewater flows from buildout would exceed the current design of permitted treatment capacity. However, the SCRWA is planning to fund, design, and construct expansion of the facility by 2025. Therefore, after expansion of the SCRWA, the project would not adversely affect the functionality or the capacity of the existing wastewater treatment system. **(Less Than Significant Impact)**

Impact UTL-4:	The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

The City of Morgan Hill is contracted with Recology South Valley to provide solid waste disposal and recycling service within the City. Recology South Valley would dispose of solid waste from the City at Johnson Canyon Sanitary Landfill, which has a projected permitted capacity of approximately 13,830,000 cubic yards and is expected to remain open through 2055.[89]

Solid waste generation was calculated using standard solid waste rates from the California Emissions Estimator Model (CalEEMod). The proposed project would generate approximately 92 tons (184,000 pounds) of solid waste per year from 200 multi-family residential units; 1,129 tons (2,258,000 pounds) of solid waste per year from the hospital and urgent care building; 108 tons (216,000 pounds) per year from the new medical offices; and 9.1 tons (18,200 pounds) per year from the restaurant.[90] This totals up to approximately 1,338 tons per year or 7,330 pounds per day.

[88] Assumes wastewater is equal to 85 percent of the potable water use on-site.
[89] CalRecycle. *SWIS Facility Detail: Johnson Canyon Sanitary Landfill (27-AA-0005)*. Accessed March 18, 2020. https://www2.calrecycle.ca.gov/swfacilities/Directory/27-AA-0005.
[90] CalEEMod. Appendix D: Default Data Tables. Table 10.1: Solid Waste Disposal Rates.
Apartment land use: 0.46 tons X 200 proposed dwelling units = 92 tons per year
Hospital land use: 0.0108 tons X 104,500 square feet proposed = 1,129 tons per year
Medical office land use: 0.0108 tons X 10,000 square feet proposed = 108 tons per year
Quality restaurant: 0.00091 X 10,000 square feet proposed = 9.1 tons per year

Despite the increase in annual solid waste production, the proposed development would be served by a landfill with adequate capacity to serve the project site. The Morgan Hill General Plan EIR indicates that at full buildout, the City's solid waste generation would result in less than three percent of the total capacity of the landfill facilities. Additionally, the proposed project uses would be required to direct and recycle waste consistent with federal, state, and local requirements. Thus, the project would not impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

Impact UTL-5:	The project would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste. **(Less than Significant Impact)**

As mentioned under Impact UTL-4, the proposed project would comply with regulations related to solid waste. **(Less than Significant Impact)**

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Existing Conditions*

The California Department of Forestry and Fire Protection (CAL FIRE) is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZ), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. The project site is not located in a FHSZ.[91]

4.20.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
1) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
2) 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?	☐	☐	☐	☒
3) 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?	☐	☐	☐	☒
4) 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?	☐	☐	☐	☒

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts. **(No Impact)**

[91] California Board of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed February 6, 2020. http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact MFS-1: The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. **(Less than Significant Impact with Mitigation Incorporated)**

As discussed in the previous sections of this Initial Study, the proposed project would not degrade the quality of the environment with implementation of identified Standard Permit Conditions and mitigation measures. As discussed in Section 4.4, Biological Resources, with implementation of the identified mitigation measures (**MM BIO-1.1** and **MM BIO-1.2**, and **MM BIO-5.1** and **MM BIO-5.2)**, the project would not significantly impact sensitive habitats or species. As discussed in Section 4.5, Cultural Resources, with implementation of the identified standard measures, the project would result in a less than significant impact on archaeological resources. The project would have no impact on historic or tribal cultural resources. The project would not result in new or more significant impacts than identified in the General Plan EIR. **(Less Than Significant Impact with Mitigation)**

Impact MFS-2:	The project does not have impacts that are individually limited, but cumulatively considerable. **(Less than Significant Impact with Mitigation Incorporated)**

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." This Initial Study evaluates the environmental impacts of the proposed mixed-use project. This Initial Study also takes into account other past, pending, and probable future projects whose impacts could combine to produce cumulative impacts.

Resource Topics not Impacted by the Project

The project would result in no wildfire hazards and would have no impact on agricultural resources, mineral resources, recreational facilities or tribal cultural resources; therefore, the project has no potential to combine with other projects to result in cumulative impacts to those resources. **(No Cumulative Impact)**

Cumulative Air Quality Impacts

By its very nature, air pollution is largely a cumulative impact. The geographic area for cumulative air quality impacts is the San Francisco Bay Area Air Basin. 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. The project would emit criteria air pollutants and contribute to the overall regional emissions of these pollutants. The project-level thresholds identified by BAAQMD (which the project's impacts were compared to in Section 4.3, Air Quality) are the basis for determining whether a project has a cumulatively considerable contribution to the existing cumulatively significant air quality impact. The project's construction and operational criteria air pollutant emissions would be below BAAQMD thresholds for these pollutants. Additionally, the project would implement mitigation measure MM AIR-3.1 and Standard Condition AIR-1 to reduce impacts to sensitive receptors to a less-than-significant level. Therefore, the project would result in a less than cumulatively considerable contribution to significant regional air quality impact. **(Less Than Cumulatively Considerable Contribution to a Significant Cumulative Impact)**

Cumulative GHG Impacts

The proposed project and past, present, present and future development projects worldwide contribute to global climate change. No single project is sufficient in size to, by itself, change the global average temperature. Therefore, due to the nature of GHG impacts, a significant project impact is a significant cumulative impact. As discussed in Section 4.8, Greenhouse Gas Emissions, the project's operational emissions would exceed the 660 MT of CO_2e per year bright-line threshold (for 2030). However, implementation of MM GHG-1.1 would reduce impacts to less-than-significant levels. The project would, therefore, not result in significant GHG impact. For these reasons, the

project would not result in a cumulatively considerable contribution to a significant cumulative GHG impact. **(Less Than Significant Cumulative Impact with Mitigation Incorporated)**

Cumulative Cultural Resources and Geology Impacts

The project would have no impact on historic resources and, therefore, would not combine impacts to these resources with other projects or contribute to any cumulative impacts to these resources. **(No Cumulative Impact).**

The geographic area for cumulative archaeological resources and human remains impacts are locations with approximately 1,000 feet of the site. Any proposed projects would be required to implement standard permit conditions to reduce potential impacts to archaeological resources and human remains during construction to less than significant. The combined project would, therefore, have a less than significant cumulative impact on archaeological resources and human remains. **(Less Than Significant Cumulative Impact)**

The geographic area for cumulative geological impacts would be locations adjacent to the site, since geological impacts are limited to the project site and adjacent properties. There are no other current or future projects immediately adjacent to the project site. Therefore, the project has no potential to combine impacts to geological resources or soils with other projects. **(No Cumulative Impact)**

Cumulative Hydrology and Utilities Impacts

The geographic area for cumulative hydrology and water quality impacts is the Butterfield Channel drainage basin. Cumulative developments near the project would be subject to similar hydrological and urban runoff conditions. All projects occurring within Morgan Hill would be required to implement the same standard conditions and measures related to construction water quality as the proposed project (including preparation of a SWPPP if disturbance if greater than one acre). In addition, all current and probable future projects that would disturb more than one acre of soil or replace/add more at least 10,000 square feet of impervious surfaces would be required to meet applicable Central Coast RWQCB requirements and the City's Storm Drainage Manual requirements on a project-specific basis. For these reasons, the cumulative projects, including the proposed project, would not result in significant cumulative hydrology or water quality impacts. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative utility and service systems is the City boundaries. The project would contribute to cumulative demands on utilities and service systems (water, sewer, solid waste, storm drainage). Implementation of the proposed project would not cause the City to exceed water demand projections, which are primarily based on population and employment growth disclosed in the City's most recent Urban Water Management Plan.

The City's share of the South County Regional Wastewater Authority Wastewater Treatment Plant's treatment capacity is 3.6 mgd. The ADFW in the City is approximately 2.35 mgd, leaving approximately 1.2 mgd of allowable growth within the City before capacity at the plant is reached. The City's General Plan EIR determined that the wastewater generated at buildout would be 5.31 mgd by 2035. According to these projections, future wastewater flows from buildout would exceed the current design of permitted treatment capacity. However, the SCRWA is planning to fund,

design, and construct expansion of the facility by 2025. Therefore, the combined projects would not result in a significant cumulative impact to the Wastewater Treatment Plant.

The final drainage system design for each of the cumulative projects would be subject to review and approval by the City of Morgan Hill Land Development Engineering Division, who would confirm that the proposed drainage system for each project is consistent with the City's stormwater-related conditions of approval and NPDES regulations. Therefore, the combined projects would not result in a significant cumulative impact to storm drainage systems.

As discussed in the Section 4.19, Utilities and Service Systems, the landfills serving the project site and the City as a whole, have remaining capacity to serve the region through 2055. Based on the above reasons, the combined projects would not result in significant cumulative impacts to the City's water, sewer, solid waste and storm drainage facilities. **(Less Than Significant Cumulative Impact)**

The project would not relocate natural gas, electricity or telecommunications lines. The project would not combine impacts to these utility lines with other projects, therefore, no cumulative impacts to these utilities would result from the combined projects. **(No Cumulative Impact)**

Cumulative Biological Resources Impacts

The geographic area for cumulative impacts to trees includes the project site and adjacent parcels. There are no current or reasonably foreseeable projects adjacent to the project site. Therefore, the project would not have the potential to result in combined impacts to trees. **(No Cumulative Impact)**

The geographic area for cumulative impacts to sensitive habitats such as wetland, riparian habitats, and serpentine habitats, and special-status species would be Santa Clara County. The project would have no impact on riparian, wetland habitats or special-status species, and therefore, would not combine impacts to these habitats with other projects elsewhere. **(No Cumulative Impact)**

The project applicant would pay applicable Habitat Plan fees to offset the cumulative effects of nitrogen deposition from new vehicle trips to serpentine habitats protected by the Habitat Plan. **(Less Than Significant Cumulative Impact)**

The geographic area for cumulative impacts to migratory wildlife would be Santa Clara County. Construction of projects throughout the County, including the proposed project, could result in a significant cumulative impact on nesting birds. Each project is subject to federal, state, and local regulations (including the MBTA, Fish and Game Code, and CEQA), which would avoid and/or minimize impacts to nesting birds. The project, with the implementation of mitigation measure **MM BIO-1.1 and MM BIO-1.2** to comply with the MBTA and Fish and Game Code, would not result in a cumulatively considerable contribution to a significant cumulative impact to nesting birds. **(Less Than Cumulatively Considerable Contribution to Significant Cumulative Impact)**

Cumulative Population and Housing Impacts

The geographic area for cumulative population and housing impacts is defined as the City of Morgan Hill. As discussed in Section 4.14 Population and Housing, the proposed project would increase population growth by approximately 1,102 persons. The proposed project includes General Plan and

Zoning Amendments to allow for the residential and medical uses. The proposed project would not cause the City to exceed planned growth projections. Assuming the City's population would continue to grow at a rate of 2.4 percent now that SB 330 has superseded the City's RDCS growth control ordinance for the next five years, the forecasted 2020 population would be 46,821. By 2030, the population potentially would be 62,493. Therefore, there would not be significant cumulative population impacts. (**Less Than Significant Cumulative Impact)**

Cumulative Public Services Impacts

The geographic area for cumulative public services and recreation facilities is the City's boundaries. The proposed project would accommodate approximately 1,102 residents, in addition to pedestrians, visitors, and 472 employees of the medical and commercial uses. The project would, therefore, result in an incremental demand for fire protection and police services. The project would be built to applicable fire code standards. The City would review plans and conduct construction inspections to ensure that new development complies with existing building and fire code requirements and public safety requirements for all of the cumulative projects. The cumulative projects would comply with General Plan policies pertaining to public safety. For these reasons, the combined effects of police and fire service demands by the cumulative projects (including the proposed project) would result in a less than significant cumulative impact on police and fire services and facilities. **(Less Than Significant Cumulative Impact)**

Cumulative Land Use Impacts

The project would not physically divide a neighborhood; therefore, it would not combine impacts to a neighborhood with other projects. The proposed project includes General Plan and Zoning amendments. The proposed project would conform with applicable land use plans, policies, and regulations for the purpose of avoiding or mitigating environmental impacts. For these reasons, the combined projects would result in a less than significant cumulative land use impact. (**Less Than Significant Cumulative Impact)**

Cumulative Hazards and Hazardous Materials and Impacts

The geographic area for cumulative hazardous materials impacts would be within 1,000 feet of the project site. Pesticide chemicals and metals could be present on-site based on previous agricultural activities conducted at the site. With the implementation of required mitigation measures and compliance with state and federal regulations, the combined projects would not result in a significant cumulative impact related to hazardous materials. **(Less Than Significant Cumulative Impact)**

The project would not result in an aircraft hazard given the project site is not located within an AIA of a Comprehensive Land Use Plan and is not located within an FAA height restriction area for new structures. The project would, therefore, not result in cumulative impacts due to aircraft hazards when combined with the impacts of other projects. **(No Cumulative Impact)**

Cumulative Noise Impacts

The geographic area for cumulative noise impacts is approximately a 1,000 feet radius from the site.

Construction

While cumulative projects could be constructed at the same time as the proposed project and result in a temporary construction noise increase, all projects would be required to implement best management practices discussion in Section 4.13, *Noise*. Construction of the proposed project would take approximately 48 months, and there could be an overlap in construction with any potential nearby projects. However, with implementation of standard conditions and mitigation measures identified in Section 4.13, *Noise*, the cumulative projects would have a less than significant cumulative construction noise impact on noise sensitive receptors near the site. **(Less Than Significant Cumulative Impact with Mitigation Incorporated)**

Operation

A significant cumulative traffic noise impact would occur if two criteria are met: 1) if the cumulative traffic noise level increase was 3 dBA L_{dn} or greater for future levels exceeding 60 dBA L_{dn} or was 5 dBA L_{dn} or greater for future levels at or below 60 dBA L_{dn}; and 2) if the project would make a "cumulatively considerable" contribution to the overall traffic noise increase. A "cumulatively considerable" contribution would be defined as an increase of 1 dBA L_{dn} or more attributable solely to the proposed project.

Cumulative traffic noise level increases were calculated by comparing the cumulative traffic volumes and the cumulative plus project volumes to existing traffic volumes. FHWA's TNM was used to model the cumulative and cumulative plus project scenarios along Juan Hernandez Drive, north of Tennant Avenue, north and south of St. James Drive, and north and south of Barrett Avenue; along St. James Drive, west of Juan Hernandez Drive; along Barrett Avenue, west of Juan Hernandez Drive, and east and west of San Ramon Drive. Using the same energy summation methodology as described above, the estimated noise level increase under both cumulative scenarios (with and without the project) for all segments would be 2 dBA L_{dn} or less when compared to the existing peak hour traffic volumes. The increase would be less than 3 dBA L_{dn} and would be the same for both cumulative and cumulative plus project scenarios. Therefore, the project would result in a less than cumulatively considerable contribution to a significant cumulative traffic noise impact. **(Less Than Significant Cumulative Impact)**

Cumulative Traffic Impacts

The geographic area for cumulative transportation resource impacts includes the project site and its surrounding area. The proposed project and any future projects would be consistent with applicable General Plan policies regarding circulation and, therefore, would not result in a cumulative conflict with those policies. All cumulative projects (including the project) would comply with current building and fire codes and be reviewed by the Fire Department to ensure adequate emergency access. For these reasons, the cumulative projects would not result in a significant cumulative impact to emergency access. **(Less than Significant Cumulative Impact)**

Impact MFS-3:	The project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. **(Less than Significant Impact with Mitigation Incorporated)**

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Pursuant to this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air quality, hazardous materials, and noise. Implementation of the best management practices, standard permit conditions, mitigation measures, and adherence to General Plan, City Code, and state and federal regulations described in these sections of the report, would avoid significant impacts. No other direct or indirect adverse effects on human beings have been identified. **(Less Than Significant Impact with Mitigation Incorporated)**

SECTION 5.0 REFERENCES

The analysis in this Initial Study is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

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SECTION 7.0 ACRONYMS AND ABBREVIATIONS

2017 CAP	Bay Area 2017 Clean Air Plan
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos containing material
ADFW	average dry weather flow
AIA	Airport Influence Area
ALUC	Airport Land Use
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Water Quality Control Plan for the San Francisco Bay Basin
BMP	Best Management Practice
Btu	British thermal units
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CalARP	California Accidental Release Prevention
CARB	California Air Resources Board
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	Methane
CLUP	Comprehensive Land Use Plan
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	CO_2 equivalents
CRHR	California Register of Historical Resources

CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
DNL	Day-Night Level
DPM	Diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAR Part 77	Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace
FEMA	Federal Emergency Management Agency
FHSZ	Fire hazard severity zone
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Authority
GHG	Greenhouse gas
GPA	General Plan Amendment
GWh	gigawatt hours
GWP	Global warming potential
Habitat Plan	Santa Clara Valley Habitat Plan/Natural Community Conservation Plan
HFCs	Hydrofluorocarbons
HOV	High occupancy vehicle
L_{eq}	Average energy level intensity
L_{max}	Maximum A-weighted noise level
LID	Low Impact Development
LOS	Level of service
MBTA	Migratory Bird Treaty Act
mgd	Million gallons per day
MHPD	City of Morgan Hill Police Department
MLD	Most Likely Descendant
$MMTCO_2e$	Million metrics tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
mpg	miles per gallon
MTC	Metropolitan Transportation Commission

NAHC	Native American Heritage Commission
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOD	Notice of Determination
NOI	Notice of Intent
N_2O	Nitrous oxide
NO_x	Nitrogen oxides
NO_2	Nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	Ground-level ozone
OITC	Outdoor-Indoor Transmission Class
OPR	Office of Planning and Research
PDAs	Priority Development Areas
PFCs	Perfluorocarbons
PG&E	Pacific Gas and Electric Company
PM	Particulate matter
$PM_{2.5}$	Fine particulate matter
PM_{10}	Coarse particulate matter
PPV	Peak Particle Velocity
RHNA	Regional Housing Need Allocation
ROG	Reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCCDEH	Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division
SCS	Sustainable Communities Strategy
SCRWA	South County Regional Wastewater Authority
SCVWD	Santa Clara Valley Water District
SHMA	Seismic Hazards Mapping Act
SF_6	Sulfur hexafluoride
SFHAs	Special Flood Hazard Areas
SMARA	Surface Mining and Reclamation Act

SMGB	State Mining and Geology Board
SO_x	Sulfur oxides
SR	State Route
STC	Sound Transmission Class
SVCE	Silicon Valley Clean Energy
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	Toxic air contaminants
TCRs	Tribal Cultural Resources
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban water management plan
VTA	Santa Clara Valley Transportation Authority
ZNE	Zero Net Carbon Emissions