

Initial Study/Addendum to the  
Citywide Agriculture Preservation Program and Southeast  
Quadrant Land Use Plan Environmental Impact Report  
(SCH#2010102010)

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**Southeast Quadrant Ball Fields**

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July 2015

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Appendix E	Traffic Technical Memorandum, <i>Hatch Mott MacDonald</i> , May 2014.

## SECTION 1.0 INTRODUCTION AND PURPOSE

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In November 2014, the City of Morgan Hill adopted the Citywide Agricultural Lands Preservation Program and Southeast Quadrant Land Use Plan for a 1,290 acre area east of Highway 101 in the City of Morgan Hill, California. The key goal of the Plans was to encourage the preservation and enhancement of agriculture while also identifying certain properties for compatible development with sport, recreation, and leisure uses. In addition to establishing a program for permanent preservation of agricultural land, the Plan included adjustment of the City limits (i.e. annexation), the Urban Growth Boundary, and the Urban Service Area; establishment of a *Sports/Recreation/Leisure* General Plan designation and Zoning District; programmatic project applications; and project-level review for a new 1,600 student high school.

The *Final Environmental Impact Report for the Citywide Agriculture Preservation Program and Southeast Quadrant Land Use Plan* (SEQ EIR), certified in November 2014 in conformance with California Environmental Quality Act (CEQA) Guidelines Section 15168, identifies the impacts of the Southeast Quadrant Land Use Plan (SEQ Plan) in order to streamline the later environmental review of projects and approvals required to implement the Plan. The intent was for the SEQ EIR to be a program-level document from which subsequent development consistent with the Plan could tier (in conformance with CEQA Guidelines Section 15168(c)). The SEQ EIR is available for viewing at the City of Morgan Hill Community Development Department, located at 17575 Peak Avenue, Morgan Hill, CA 95037, as well as on the City's website at: <http://www.morganhill.ca.gov/965/Southeast-Quadrant>

The specific project addressed within this EIR Addendum is the City's acquisition of 26-acres of land from a private property owner for the eventual construction of six ball fields with supporting facilities and parking on 22.6 acres of the site. The remaining 3.4 acres would be conveyed back to the owner for future commercial/retail development.

The City of Morgan Hill is the Lead Agency under CEQA and has prepared this Addendum to address the impacts of implementing the currently proposed project. This Addendum is being prepared to conform to the requirements of the CEQA, the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Morgan Hill. The Addendum evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

The development assumptions for the proposed project are consistent with the assumptions in the SEQ Plan. As discussed in the following analysis, the proposed project is within the SEQ Plan Area, is consistent with the development assumptions in the SEQ Plan and related EIR, and no new significant impacts, nor a substantial increase in the severity of previously-identified impacts, are expected to occur from the implementation of the proposed project.

## **SECTION 2.0 PROJECT INFORMATION**

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### **2.1 PROJECT TITLE**

Southeast Quadrant Ball Fields

### **2.2 PROJECT LOCATION**

The 26-acre site is located east of and adjacent to the northbound U.S. 101/Tennant Avenue off-ramp in the City of Morgan Hill. The site is bound by Fisher Avenue to the south, the Madrone Channel to the west, Tennant Avenue to the north, and other private properties to the east. See Figures 2.0-1, 2.0-2, and 2.0-3 for the project location.

### **2.3 LEAD AGENCY CONTACT**

Andrew Crabtree  
Community Development Director  
City of Morgan Hill, Community Development Agency  
17575 Peak Avenue  
Morgan Hill, CA 95037  
(408) 778-6480

### **2.4 PROJECT PROPONENT**

Anthony Eulo  
Program Administrator  
Community Services Department, City of Morgan Hill  
100 Edes Ct.  
Morgan Hill, CA 95037  
(408) 310-4179

### **2.5 ASSESSOR'S PARCEL NUMBERS**

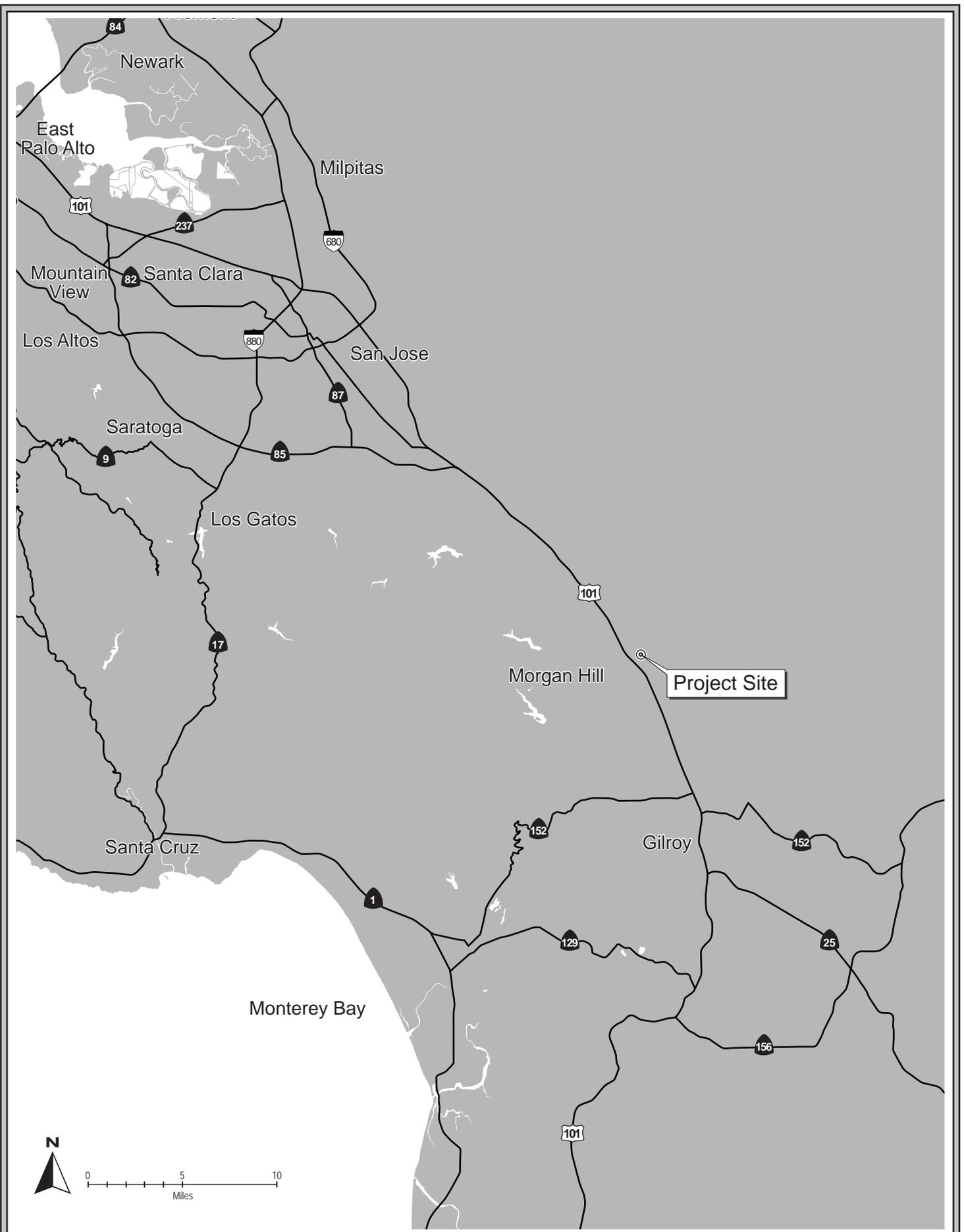
817-14-004, 817-14-005, 817-14-009

### **2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT**

General Plan Designation: *Sports/Recreation/Leisure*  
Zoning District: *A-20Ac-sr (Exclusive Agriculture with Scenic Roads Combining District)*

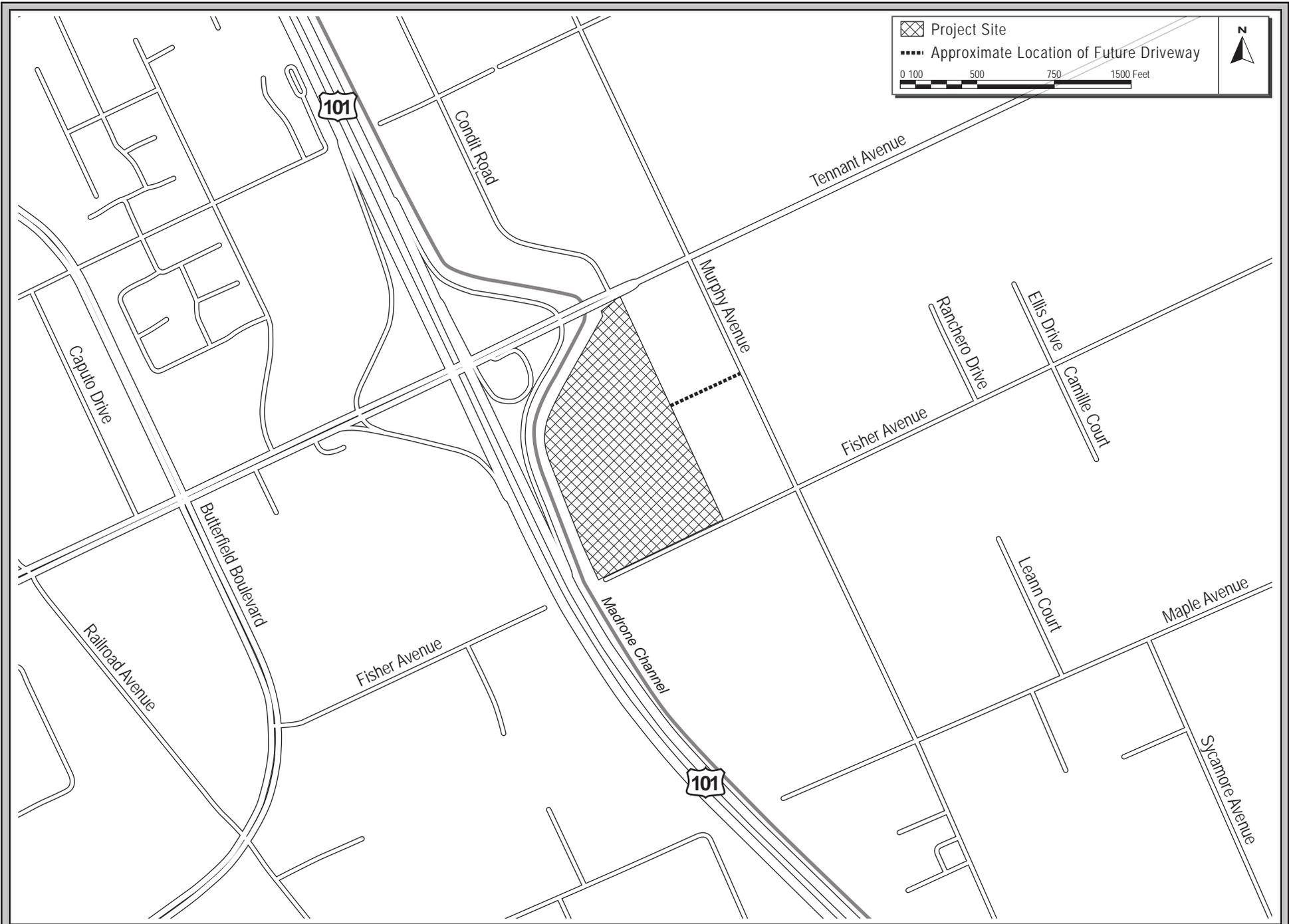
### **2.7 SANTA CLARA VALLEY HABITAT PLAN LAND COVERS**

Land Cover: *Orchard*  
Land Cover Fee Zone: *Fee Zone B (Agricultural and Valley Floor Lands)*  
Private Development Area: *Rural Development Not Covered*



REGIONAL MAP

FIGURE 2.2-1



VICINITY MAP

FIGURE 2.2-1

- - - Project Boundary  
 ..... Approximate Location of Future Driveway  
 0 100 300 600 Feet  
 Aerial Source: Google Earth Pro, Feb. 13, 2015. Photo Date: Feb. 2014



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.2-3

## **SECTION 3.0 PROJECT DESCRIPTION**

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### **3.1 PROJECT OVERVIEW**

The City of Morgan Hill proposes to acquire an approximately 26-acre property (APNs 817-14-004, 817-14-005, 817-14-009) adjacent to the northbound U.S. 101/Tennant Avenue off-ramp. The ultimate purpose of this land acquisition is to develop 22.6 acres of the site with a total of six baseball and softball fields along with supporting facilities and surface parking. Following acquisition, the schedule for development of the ball fields complex is currently unknown.

In 2014, the City certified the *Final Environmental Impact Report for the Citywide Agriculture Preservation Program and Southeast Quadrant Land Use Plan* (SEQ EIR), which evaluated as part of a broader development plan the use of the subject property for a combination of sports fields and commercial recreation/retail uses.

### **3.2 PROJECT DESCRIPTION**

#### **3.2.1 Site Development**

The proposed project would include a total of six ball fields, four of which would be suitable for youth softball and baseball, and two of which would be large enough for teen baseball as well as youth softball and baseball. Along with the six ball fields, the project would include batting cages, bleachers, drinking fountains, restrooms, and a concession stand. In addition to attracting local sports organizations, the proposed fields would also be intended to host regional baseball and softball tournaments.

The six fields would either be grass or synthetic turf (i.e. some may be grass, some may be turf). The City intends to provide overhead lighting for the fields in order to allow nighttime games and practices, though the size and type of lighting is yet to be determined. The anticipated schedule of use would be from 8:00 AM to 10:00 PM. It is expected that the fields would be used primarily on weekends, with afternoon and evening use for 2-3 weekdays each week. A public address system for game announcers may also be included.

Approximately 3.4 acres fronting Tennant Avenue at the north end of the 26-acre property would be conveyed back to the seller to be developed for retail and commercial uses under separate privately-initiated applications to the City, which will be subject to subsequent environmental review as appropriate. That land would not be affected by the proposed ball fields other than the opportunity for shared use parking and ingress. The Conceptual Site Plan is shown on Figure 3.2-1.

#### **3.2.2 Site Access, Parking, and Circulation**

Access to and from the project site would be available from Fisher Avenue along the southern site boundary. Entrance to the site from eastbound Tennant Avenue would be allowed, but vehicles would not be able to exit the site onto Tennant Avenue. An alternative access driveway from Murphy Avenue to the east, roughly halfway between Fisher Avenue and Tennant Avenue, may be constructed as part of the project through an adjacent parcel to the east. The access driveway from

Murphy Avenue is assumed to be 500 feet long and 30 feet wide, consisting solely of two 15-foot wide travel lanes. No sidewalks, curbs, or gutters would be constructed as part of the access driveway.

The project would include approximately 542 parking stalls provided in paved surface parking lots along the north, east, and south site boundaries, including the site of the future commercial development at the north end of the property. The future commercial development would be served by 99 of the parking stalls at the north end of the site, and an additional 91 would be shared between the commercial development and the ball fields. These areas are indicated in red and blue in the Figure 3.2-1. Excluding the shared parking and the parking ultimately intended for the retail portions of the site, the project provides 352 parking spaces solely for the ball fields users. At least 16 of those stalls would be ADA-compliant.

To facilitate safe pedestrian access to and from the site, the project is anticipated to ultimately include a below-grade pedestrian crossing extending from the project site beneath Tennant Avenue to Condit Road. This pedestrian crossing was not envisioned as part of the original SEQ Plan and the design is currently unknown. The undercrossing will be subject to subsequent environmental review along with other elements of the ball fields.

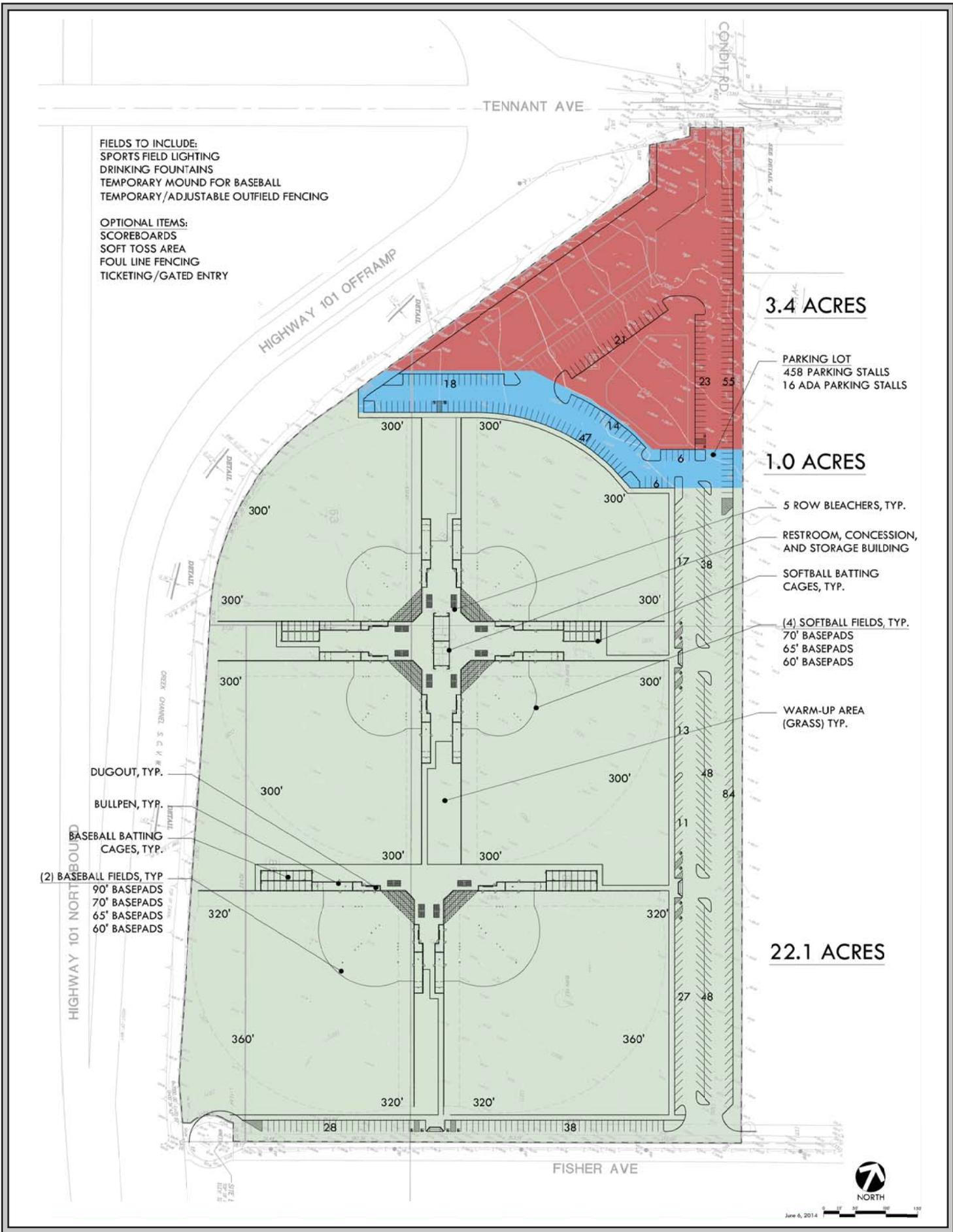
### **3.2.3 Site Remediation**

Based on a soil sample analysis completed for the site, soils in the vicinity of the barn structure fronting Tennant Avenue are contaminated with small amounts of motor oil and other petroleum hydrocarbons. The proposed land transaction would require the seller to perform remedial activities and remove contaminants from the site prior to selling the property to the City. The seller would also need to receive documentation from the Santa Clara County Department of Environmental Health to certify that contamination has been removed from the site.

In the worst case scenario, cleanup of the site would entail removing the top 12-18 inches of soil in the vicinity of the small barn for a rough total of 185 cubic yards. This effort may necessitate demolition of the barn prior to the City's acquisition of the property.

### **3.2.4 Subsequent Environmental Review**

Given that not all project details are yet known or reasonably foreseeable at the time the City is considering property acquisition, the implementation of the ball fields project will be subject to further environmental analysis, as appropriate, once the full design and operational details are fully known. The analysis completed as part of this environmental review has been based on several assumptions about how the future ball fields would be constructed and utilized, and this document's analysis and conclusions will need to be confirmed in the future at the time the City commits to the implementation of a final design and schedule for use.



CONCEPTUAL SITE PLAN

FIGURE 3.2-1

## **SECTION 4.0     SETTING, ENVIRONMENTAL CHECKLIST AND IMPACTS**

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*This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.*

*The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of this section. Mitigation measures are identified for all significant project impacts. “Mitigation Measures” are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines §15370).*

### **4.1             AESTHETICS AND VISUAL RESOURCES**

#### **4.1.1           Existing Setting**

The 26-acre project site is flat and consists primarily of agricultural land with a small barn structure fronting Tennant Avenue. The barn adjoins an active water well/pump house which is connected to a surface irrigation system on the project site. Panoramic views of the project site are provided in Figure 4.1-1, and the barn and irrigation pump house are shown in Photos 1-3.

Surrounding land uses are primarily agricultural. There are single-family rural residences on row crop and orchard properties to the south across Fisher Avenue as well as adjacent to the eastern site boundary. There is a hotel north of the site across Tennant Avenue, and beyond that there are a mix of land uses including multiple hotels, the Morgan Hill Aquatics Center, the Outdoor Sports Center, and agricultural land with single-family residences. The western edge of the site is bounded by the Santa Clara Valley Water District’s (SCVWD) Madrone Channel and U.S. 101. See Photos 4-6 below for land uses surrounding the project site.

Visually, the project area is defined by flat agricultural land with the Diablo Mountain Range foothills to the east and El Toro Mountain to the west. Trees of varying sizes and species line the landscape, though with the exception of oak trees adjacent to the barn structure, the project site is mostly devoid of trees. There are no rock outcroppings or established scenic vistas in the area. U.S. 101 is not considered a scenic highway at this location.<sup>1</sup>

#### **4.1.1.1         *Light and Glare***

There are currently no sources of light and glare on the project site. In the vicinity of the site, the main sources of light are the vehicles traveling on U.S. 101 and Tennant Avenue. Additional light sources include the hotel north of Tennant Avenue, as well as street lights along Tennant Avenue and the northbound U.S. 101/Tennant Avenue off-ramp. Lights from the residences on Fisher Avenue east of the site are generally shielded by trees.

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<sup>1</sup> California Department of Transportation. *California Scenic Highway Mapping System*. N.d. Accessed February 11, 2015. Available at: [http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm)



PANORAMIC VIEWS OF THE PROJECT SITE

FIGURE 4.1-1



**Photo 1 On-Site Barn Structure Fronting Tennant Avenue**



**Photo 2 Side View of On-Site Barn Structure**



**Photo 3** Irrigation System Behind On-Site Barn Structure



**Photo 4** Hotel North of the Project Site Across Tennant Avenue



**Photo 5 Highway 101, Madrone Channel, and SCVWD Road Along West Site Boundary**



**Photo 6 Eastward View of Fisher Avenue Along South Site Boundary**

**4.1.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1-3
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,5
3. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1-3
4. Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1-4

**4.1.2.1 Prior Impact Evaluation in SEQ EIR**

The SEQ EIR found that commercial and sports field development near U.S. 101 and Tennant Avenue would have less than significant visual and aesthetic impacts. The rationale for this conclusion was that such development would be similar in character to existing development in the western portion of the SEQ Plan Area (e.g. the Outdoor Sports Center on Condit Road north of Tennant Avenue), and would not allow structures over 35 feet in height. Sports and recreation land uses were found to be visually compatible with agricultural and highway-serving land uses such as lodging and gas stations. With regard to lighting and glare, the SEQ EIR found that sources of light resulting from development in the Plan Area would be similar in intensity to existing sources, but that project-level review including evaluation for compliance with City standards would be required.

**4.1.2.2 Visual and Aesthetic Impacts From the Proposed Project**

With the exception of fencing, bleacher seats, and outbuildings (e.g. bathrooms, field supply storage, concession stand), the proposed sports fields would be flat and unobtrusive to regional views from surrounding properties. Aside from the native oak trees on the northern portion of the site, the project site does not contain any scenic resources such as rock outcroppings which would be lost due to development on the site. Trees removed due to the project would be replaced on the site as set forth in MM BIO-3.3, therefore scenic impacts associated with tree removal would be less than significant (see *Section 4.4, Biological Resources* for more information on tree replacement).

The visual character of the project area is a blend of rural residences with associated farmland and urban development dominated by the north-south U.S. 101 adjacent to the western project site boundary. Development along Condit Road to the north of Tennant Avenue lends itself to the urban character of the western portion of the SEQ Plan Area within which the project site is located. Since the project site is located at the transition of urban development to rural agricultural land, the proposed ball fields would not be out of character with the surrounding environment. They would not visually dominate the landscape, block views, or introduce large structures in an area that is otherwise relatively open. Therefore impacts to scenic vistas, scenic resources, and visual character resulting from the proposed project would be less than significant. **(Less Than Significant Impact [Same Impact as Approved Project])**

### **Light and Glare**

The proposed project would include field lighting for all six fields to allow nighttime use of the facilities. At this time the exact number, location, height, and specifications of the field light standards are unknown. The SEQ EIR assumed that outdoor field facilities in the western portion of the SEQ Plan Area near U.S. 101, would be illuminated with new sources of light and glare.

Section 18.48.045 of the City of Morgan Hill Zoning Ordinance states the following with regard to lighting and glare:

*Glare. No direct or sky-reflected glare, whether from floodlights or from high-temperature processes such as combustion or welding or otherwise, shall emanate from any establishment or use so as to be visible at a distance of five hundred feet from such establishment or use. This restriction shall not apply to signs otherwise permitted by the provisions of Chapter 18.76 of this title.*

There are multiple residences along Murphy Avenue over 500 feet east of the project site. It is possible that lighting from the project would be visible from those uses in violation of the City's Zoning Ordinance. In addition, northbound U.S. 101 is approximately 200 feet from the west side of the project site where three fields will be located. If not designed properly, lighting and glare could cause hazards to drivers on the highway. Since the height, location, design, and types of bulbs used for the field lighting are not known at this time, the project may have a significant effect related to light and glare.

**Impact AES-1:** Nighttime lighting of the proposed fields could cause an adverse effect on views in the project area, including for nearby residences and drivers on U.S. 101. **(Significant Impact)**

**Mitigation Measures:** The following measure was included in the SEQ EIR for the evaluation of a high school identified in the Plan and has been adapted for the proposed ball fields. Implementation of this measure would reduce to a less than significant level the potential for field lighting to cause a significant adverse effect on views in the vicinity of the site.

**MM AES-1.1:** Prior to approval of a Site Development Permit that includes outdoor lighting, the City shall prepare an outdoor lighting plan (which includes a photometric

analysis) that includes a foot-candle map illustrating the amount of light from the project site at adjacent light sensitive receptors. All exterior parking lot lights and building-mounted lights shall be low-pressure sodium or light-emitting diode (LED), and shall employ full-cutoff fixtures or directional shielding. Athletic field lighting may use high-pressure sodium lighting but must employ timed automatic shutoff devices to ensure that facilities are not illuminated through the night unless desired. Lighting levels and design shall comply with the City's lighting standards as contained in the Morgan Hill Municipal Code and Design Handbook. The approved plan shall be incorporated into the final project design.

There are no scenic views in the vicinity and U.S. 101 is not considered a scenic highway at this location. Nearby residences are partially shielded by trees. Therefore, with implementation of these mitigation measures, the proposed project would not have a substantial adverse light and glare impact on surrounding uses. **(New Less Than Significant Impact With Mitigation)**

#### **4.1.3            Conclusion**

Potentially significant light and glare impacts resulting from the proposed field lighting would be mitigated to less than significant levels with the implementation of **MM AES-1.1**. **(New Less Than Significant Impact With Mitigation)**

Impacts to scenic vistas, scenic resources, and visual character resulting from the proposed project would be less than significant. **(Less Than Significant Impact [Same Impact as Approved Project])**

**4.2 AGRICULTURAL AND FOREST RESOURCES**

**4.2.1 Setting**

According to the California Department of Conservation Important Farmland Maps, 24 acres of the project site are designated as *Prime Farmland*, which is defined as land that has been used for irrigated agriculture during the four years prior to the Important Farmland Map date.<sup>2</sup> Soils on the site must also meet physical and chemical criteria as determined by the U.S. Department of Agriculture, Natural Resources Conservation Service. Approximately two acres of the project site near Fisher Avenue are designated as *Farmland of Statewide Importance*, which is similar to *Prime Farmland* but with minor shortcomings in soil characteristics. Therefore, all 26 acres on the site are considered agricultural land under CEQA.

Existing development on the site consists of a small barn and water pump house on the north side of the site fronting Tennant Avenue. The remainder of the site is agricultural land, though there were no crops planted on the site at the commencement of environmental review.

The project site is not subject to a Williamson Act contract.<sup>3</sup> The project site is not used for forestry and there are no forest resources within the vicinity of the site.

**4.2.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4,7

<sup>2</sup> California Department of Conservation. *Santa Clara County Important Farmland 2012*. August 2014. Accessed February 11, 2015. Available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/sc112.pdf>

<sup>3</sup> County of Santa Clara, Planning Office. *Williamson Act and Open Space Easement Programs, ArcGIS Interactive Map*. Last Updated November 4, 2014. Accessed February 11, 2015. Available at: <http://www.sccgov.org/sites/planning/PlansPrograms/Williamson/Pages/WA.aspx>

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4
4. Result in a loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,6

**4.2.2.1 Prior Impact Evaluation in SEQ EIR**

The SEQ EIR assumed that the 26-acre project site would be developed with 13 acres of commercial recreation/retail uses and 13 acres of sports fields. As mitigation for conversion of farmland, MM AG-1a from the SEQ EIR requires project applicants that propose to convert agricultural land to a nonagricultural use to either participate in the City of Morgan Hill Agricultural Lands Preservation Program (if operational) or to preserve agricultural land elsewhere at a minimum ratio of 1:1. The Preservation Program allows applicants to permanently preserve land via use of an irrevocable instrument such as property acquisition or conservation easement, or to pay fees to the City for permanent preservation of agricultural land. The SEQ EIR found that the impacts to agricultural resources in the SEQ Plan area would be less than significant with implementation of MM AG-1a.

**4.2.2.2 Agricultural and Forestry Resource Impacts from the Proposed Project**

Although the SEQ EIR assumed the project site would be half commercial and half ball fields, rather than the 22.6 acres currently proposed for ball fields, both scenarios would have the same effect of converting the entire 26-acre project site to non-agricultural uses. Future commercial development on the 3.4-acre northern portion of the site to be conveyed back to the current seller would be subject to separate environmental review, which would include mitigation for impacts to farmland. The proposed ball fields would impact approximately 22.6 acres of the site. In addition, depending on the final alignment, construction of a 30-foot wide and 500-foot long driveway from Murphy Avenue to

the project site would impact approximately 0.34 acres of land designated as *Prime Farmland* and *Farmland of Statewide Importance* on the two adjacent properties, 1175 Fisher Avenue and 1280 Tennant Avenue (APNs 817-14-014 and 817-14-011). The driveway would likely be located along the boundary between the two parcels and would not split either of the parcels into two smaller plots of land. The potentially affected parcels are anticipated to remain viable for their current uses after construction of the driveway because not only would each parcel remain undivided, but each parcel is approximately nine acres in size and the driveway would require approximately 0.17 acres from each.

**Impact AG-1:** The proposed project would convert approximately 23 acres of *Prime Farmland* and *Farmland of Statewide Importance* to non-agricultural uses. **(Significant Impact)**

**Mitigation Measures:** The following measures were identified in the SEQ EIR as MM AG-1a to mitigate impacts to farmland in the SEQ Plan Area.

**MM AG-1.1:** Project applicants that propose to convert agricultural land to a non-agricultural use shall implement one of the following options to mitigate the conversion of agricultural land:

- (1) Participate in the City of Morgan Hill Agricultural Lands Preservation Program (provided that the program is adopted and operational). Under the auspices of the program, the applicant shall (a) permanently preserve agricultural land via the use of an irrevocable instrument (property acquisition, deed restriction, agricultural conservation easement, etc.) within the Morgan Hill Sphere of Influence, if possible, or within the County of Santa Clara, or (b) pay fees to the City of Morgan Hill for the permanent preservation of agricultural land via the use of an irrevocable instrument.
- (2) Permanently preserve agricultural land at no less than a 1:1 ratio elsewhere in Santa Clara County if the City of Morgan Hill Agricultural Lands Preservation Program is not operational at the time grading/site development permit or building permits are sought. Preservation shall be accomplished via the use of an irrevocable instrument (property acquisition, deed restriction, agricultural conservation easement, etc.). The applicant shall include documentation verifying the completion of this mitigation measure no later than the date of submittal of a building permit application.

The project applicant, the City of Morgan Hill Community Services Department, proposes to pay fees to the City of Morgan Hill Agricultural Lands Preservation Program to mitigate impacts to agricultural land from the proposed project (i.e. 22.6 acres plus 0.34 acres for the driveway). This is consistent with the evaluation of agricultural impacts in the SEQ EIR, and would reduce potentially significant agricultural impacts to a less than significant level. **(Less Than Significant Impact With Mitigation Incorporated [Same Impact as Approved Project])**

There are no Williamson Act contracts for the site and the site is zoned *Sports/Recreation/Leisure (Subdistrict B)*. The proposed ball fields and future commercial areas are consistent with this zoning district and would not conflict with zoning for agricultural or forestry land uses. The project site is not a forest resource and there are no forest resources in the vicinity of the site. **(No Impact [Same Impact As Approved Project])**

#### **4.2.3            Conclusion**

With participation in the Citywide Agricultural Lands Preservation Program to compensate the loss of agricultural land, as described in **MM AG-1.1**, the proposed project would result in a less than significant impact to agricultural resources. **(Less Than Significant Impact With Mitigation Incorporated [Same as Approved Project])**

### **4.3 AIR QUALITY**

The following discussion is based in part upon a Community Health Risk Assessment prepared by *Illingworth & Rodkin, Inc.* in February 2015. This report is available in Appendix A of this Initial Study/Addendum.

#### **4.3.1 Setting**

A brief summary of air quality and pollution is provided below. For additional information on criteria air pollutants, toxic air contaminants (TACs), and the regulatory standards governing emissions of those pollutants, please refer to the SEQ EIR.

Air quality and the concentration of a given pollutant in the atmosphere are determined by the amount of pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major factors affecting transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sunlight.

The project site is located at the south end of the Santa Clara Valley within the San Francisco Bay Area Air Basin. The region typically has moderate ventilation and frequent inversions that restrict vertical dilution. Located on either side of the Santa Clara Valley, the Santa Cruz Mountains and Diablo Range restrict horizontal dilution. The surrounding terrain results in a prevailing wind that follows along the valley's northwest-southeast axis. The combined effects of these geographical and meteorological factors make air pollution potential in the Santa Clara Valley quite high.

##### **4.3.1.1 *Existing Uses***

Existing uses on the project site emit small quantities of air pollutants. Earthwork on the agricultural land can cause localized dust emissions, and vehicle travel to and from the site generates minimal volumes of criteria pollutants and TACs. The pump at the on-site well is an electric pump and indirectly generates air pollution through the use of electricity.

##### **4.3.1.2 *Sensitive Receptors***

The Bay Area Air Quality Management District (BAAQMD) defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, school playgrounds, child care centers, retirement homes, convalescent homes, hospitals and medical clinics. The nearest sensitive receptor is the residence located along Fisher Avenue approximately 200 feet east of the eastern site boundary.

**4.3.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
<b>Would the project:</b>						
1. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,8
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,8
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,8
4. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,8,9
5. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

**4.3.2.1 Prior Impact Evaluation in SEQ EIR**

The SEQ EIR concluded that the increase in vehicle miles travelled (VMT) that would result from the Plan would result in significant and unavoidable conflicts with the Bay Area 2010 Clean Air Plan. Criteria air pollution impacts were also found to be significant and unavoidable because the increase in VMT would exceed the BAAQMD’s significance criteria for this measure. Mitigation measures were not included to reduce VMT due to a lack of project-specific detail and due to the lack of a land-use policy document which might contain mitigating land use policies. Mitigation was included to require evaluation of potential TAC health risks to sensitive receptors in the vicinity of U.S. 101 and existing stationary sources of TACs. Impacts related to carbon monoxide (CO) hotspots or fugitive dust were identified as less than significant.

**4.3.2.2 Clean Air Plan Consistency**

The 2010 Clean Air Plan contains several measures to reduce regional air pollution caused by land use development. Many of these measures do not apply to the proposed project simply due to the

nature of the project. Table 4.3-1 below contains a consistency evaluation of the project with the applicable measures taken from the 2010 Clean Air Plan.

<b>Table 4.3-1 Consistency with Bay Area 2010 Clean Air Plan Applicable Control Measures</b>			
<b>Control Measures</b>	<b>Applicable to Project</b>		<b>Consistency</b>
	<b>Yes</b>	<b>No</b>	
<b>Transportation Control Measures</b>			
TCM C-1: Voluntary Employer Based Trip Reduction Program <i>Support voluntary efforts by Bay Area employers to encourage their employees to use alternative commute modes, such as transit, ridesharing, bicycling, walking, telecommuting, etc.</i>		X	Ball fields would not be direct sources of employment and as such could not provide employer-based trip reduction programs. Future commercial uses of the site would be small, high-turnover retail and restaurant uses, which would not be conducive to telecommuting. In addition there is no transit in the vicinity of the site for which employers could provide incentives.
TCM C-3: Rideshare Services & Incentives <i>Promote ridesharing services and incentives through the implementation of ridesharing programs.</i>	X		The project is not anticipated to include rideshare services and incentives. This may change at the time of final project design.
TCM D-1: Bicycle Access & Facilities Improvement <i>Reduce emissions by expanding bicycle facilities serving employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers.</i>	X		There are existing bicycle paths west of Condit Road along Tennant Avenue. The proposed project is a land acquisition with the intent of future development. At the time of final project design, bicycle access to the project site from these bicycle lanes should be provided along with bicycle racks.
TCM D-2: Pedestrian Access & Facilities Improvement <i>Improve pedestrian facilities and encourage walking by funding projects that improve pedestrian access to transit, employment and major activity centers. Improvements may include sidewalks/paths, benches, reduced street width, reduced intersection turning radii, crosswalks with activated signals, curb extensions/bulbs, buffers between sidewalks and traffic lanes and streets trees.</i>	X		There are existing sidewalks along Tennant Avenue west of Condit Road, but there are no sidewalks on Fisher Avenue at the southern site boundary. Ultimate construction of the ball fields would include upgrading Fisher Avenue with parking, curb, and gutter along the north side of Fisher Avenue within the project limits. A pedestrian undercrossing beneath Tennant Avenue is also envisioned for the project.
TCM D-3: Local Land use Strategies <i>Support and promote land use patterns, policies, and infrastructure investments that support higher density mixed-use, residential, and employment development near transit in order to facilitate walking, bicycling, and transit use.</i>	X		The proposed use is not among those identified for this TCM. The project site is not in proximity to transit, but there are bicycle lanes and pedestrian infrastructure along Tennant Avenue at the north end of the project site.
<b>Mobile Source Measures</b>			
MSM A-2: Zero Emission Vehicles & Plug-in Hybrids	X		The project will likely include charging stations for plug-in vehicles. This may change at the time of final project design.

<b>Table 4.3-1 Consistency with Bay Area 2010 Clean Air Plan Applicable Control Measures</b>			
<b>Control Measures</b>	<b>Applicable to Project</b>		<b>Consistency</b>
	<b>Yes</b>	<b>No</b>	
<i>The Air District, in cooperation with local businesses, city and county governments, and state and federal agencies, will expand the use of Zero Emission (ZEV) and Plug-in Hybrid (PHEV) passenger vehicles and light-duty trucks within the Bay Area.</i>			
<b>Energy &amp; Climate Measures</b>			
ECM 1: Energy Efficiency  <i>Decrease the amount of energy consumed in the Bay Area through increased efficiency and conservation in residential and commercial buildings and industrial and school facilities; provide technical assistance to local governments to adopt and enforce energy efficiency building codes.</i>	X		New buildings built on the project site such as a building for restrooms or concessions would be constructed to the 2013 California Building Code and 2013 California Green Building Standards (CalGreen), both of which have been adopted by the City.
ECM 2: Renewable Energy  <i>Promote incorporation of renewable energy sources into new developments and redevelopment projects, and foster innovative renewable energy projects through provision of incentives.</i>	X		The conceptual site plan for the project does not include any on-site renewable energy generation (e.g. solar panels). This may change at the time of final project design.
ECM 3: Urban Heat Island Mitigation  <i>Mitigate the "urban heat island" effect by promoting the implementation of cool roofing, cool paving in parking lots, and other strategies.</i>	X		The Conceptual Site Plan does not include any cool paving techniques. Landscaping and trees could incrementally reduce the heat caused by asphalt surface parking lots, but would not entirely avoid the urban heat island effect. Landscaping and other design elements will be determined at during final project design.
ECM 4: Shade Tree Planting  <i>Promote planting of low-VOC emitting shade trees to reduce urban heat island effects, save energy, and absorbs CO2 and other pollutants.</i>	X		A landscape plan has not yet been developed for the future development of the project site. Development on the site will likely include some landscaping and tree planting, which could provide shade in common spaces on the project site. Landscaping and other design elements will be determined at during final project design.

The proposed project is consistent with the land use development assumptions made for the site in the SEQ EIR, which concluded that the increase in VMT associated with development of the SEQ Plan Area would cause significant and unavoidable conflicts with the Clean Air Plan. As discussed in **Section 4.16, Transportation**, the ball fields and commercial development ultimately built on the site will result in approximately 3,382 weekday daily vehicle trips, and approximately 4,336 Saturday daily vehicle trips. The SEQ EIR estimated that development consistent with the SEQ Plan would generate approximately 21,652 daily vehicle trips, excluding the high school project evaluated in the EIR.

**Impact AQ-1:** The proposed project would generate approximately 3,382 weekday vehicle trips and 4,336 Saturday vehicle trips, the emissions of which would contribute to the significant and unavoidable air quality impacts identified in the SEQ EIR. **(Significant Impact)**

**Mitigation Measures:** Implementation of the following measures would reduce vehicle miles travelled to and from the project site.

**MM AQ-1.1:** The project applicant shall be required to submit an Air Quality and Transportation Demand Management (AQ-TDM) Plan as part of Site Development Permit application for review and approval by the Community Development Director. The AQ-TDM Plan will incorporate appropriate measures to reduce vehicle-related air pollution. Examples of such measures include:

- Provide bicycle lanes, sidewalks, and/or paths connecting the project site to the nearest transit stop and nearby commercial areas.
- Provide secure and conveniently placed bicycle parking and storage facilities at parks and other facilities.
- Construct transit amenities such as bus turnouts/bus bulbs, benches, shelters, etc., as appropriate.
- Provide direct, safe, and attractive pedestrian access from project land uses to transit stops and adjacent development.
- Provide transit information kiosks and bicycle parking at commercial facilities.
- Provide secure and conveniently located bicycle parking and storage for workers and patrons.

Implementation of **MM AQ-1.1** will help reduce vehicle trips associated with future development on the project site, but would not be expected to reduce the previously-identified significant impacts to less than significant levels.

The project is consistent with some of the applicable measures in the 2010 Clean Air Plan, but more detail will be needed once the City develops complete plans for project construction. The proposed ball fields and commercial development would not cause more vehicle trips than originally estimated for *Sports/Recreation/Leisure* uses, and would contribute to the significant and unavoidable conflicts with the Clean Air Plan caused by increases in VMT in the SEQ Plan Area. **(Significant and Unavoidable Impact [Same Impact As Approved Project])**

#### **4.3.2.3**      *Regional and Local Air Quality Impacts*

The proposed project is consistent with the SEQ Plan and the development assumptions made for *Sports/Recreation/Leisure* land uses in the SEQ Plan Area. The SEQ EIR concluded that increased VMT resulting from the SEQ Plan would cause significant and unavoidable regional air quality impacts. There were no feasible mitigation measures identified.

Implementation of **MM AQ-1.1**, would require development of an AQ-TDM plan for the proposed project as part of the Site Development Permit application process. By providing bicycle, pedestrian, and transit facilities or incentives, the project would reduce its impact to regional air quality from what was assumed in the SEQ EIR. Nevertheless, the increased VMT resulting from the proposed ball fields and commercial development would contribute to the previously-identified significant and unavoidable regional air quality impacts. (**Significant and Unavoidable Impact [Same Impact As Approved Project]**)

### Local Air Quality Impacts

Carbon monoxide (CO) emissions from traffic generated by the project would be the pollutant of greatest concern at the local level. The SEQ EIR did not evaluate localized CO emissions due to a lack of detailed land use plans or schedule for submittal of detailed land use plans. Congested intersections with a large volume of traffic have the greatest potential to cause high concentrations of CO. The BAAQMD screening criteria indicate that a project would have a less than significant impact due to CO emissions if project-related traffic would not increase traffic volumes at any affected intersection to more than 44,000 vehicles per hour, or 24,000 vehicles per hour when vertical mixing is limited (e.g. by a tunnel).

Based on the traffic analysis prepared for the project (see Exhibit 8C of Appendix E), the most congested intersection affected by the project in the cumulative condition, Condit Road and Tennant Avenue, would support fewer than 4,000 vehicles per hour. Therefore localized air quality impacts from the proposed project would be less than significant. (**Less Than Significant Impact [Same Impact as Approved Project]**)

#### 4.3.2.4 Toxic Air Contaminant and Odor Impacts

Based on an inquiry to BAAQMD regarding odor complaints, the SEQ EIR found that there are no sources of odor with the potential to affect future users of the SEQ Plan Area, including the project site. Therefore the proposed project would not expose anyone to objectionable odors.

U.S. 101 along the western site boundary is the primary source of TACs in the project vicinity. The SEQ EIR identified exposure to these emissions as a potentially significant human health impact and included the following measure to mitigate that potential impact:

*MM AIR-4b: SEQ Area. Prior to the final discretionary approval for any recreational use that is proposed pursuant to the Morgan Hill SEQ General Plan Amendments, the City of Morgan Hill shall determine the area of impact from toxic emissions from US 101 and existing stationary sources that may potentially exceed the BAAQMD significance criteria for cancer or non-cancer toxic air contaminant exposure. Emissions from US 101 shall be estimated using the BAAQMD roadway screening tool. In addition, distance to stationary sources near the project shall be compared with the distance threshold recommended by California Air Resources Board's Land Use Handbook distance guidance. If recreational projects are proposed within an area exceeding the screening threshold, the City shall require a Health Risk Assessment to*

*determine the potential health risk level and to identify design features that shall be installed to reduce the impact to less than significant levels. No construction of any sensitive receptor land use within the area of impact of US 101 or stationary source as described above shall be allowed unless the risk is first determined to be less than the BAAQMD's significance criteria for toxic air contaminant exposure.*

Emissions of TACs from U.S. 101 traffic were estimated by BAAQMD using various emissions models and results are reported using the District's *Highway Screening Analysis Tool*. A project-specific human health risk assessment was prepared and is contained in its entirety in Appendix A of this Initial Study/Addendum.

Health impacts from TAC exposure typically arise from exposure of sensitive individuals (e.g. children or the elderly) over long periods of time. The cancer risk associated with continuous exposure to U.S. 101 vehicle emissions at a distance of 200 feet from the highway over a period of 70 years is approximately 66 cancer cases per one million people. This exposure scenario does not resemble the type of uses proposed for the project site, however, because ball field users would only be at the site temporarily. A worst-case exposure scenario for the project site would be an individual who spends 10 hours per week and 40 weeks per year at the ball fields over a period of 40 years. In that conservative scenario, the increased cancer risk would be just two cases per one million, which is well below the threshold of significance identified by BAAQMD (an increase of 10 cancer cases per one million people).

In addition, although concentrations of fine particulate matter (PM<sub>2.5</sub>) on the project site are between 0.262 and 0.459 µg/m<sup>3</sup>, which exceeds the BAAQMD standard of 0.3 µg/m<sup>3</sup>, human exposure would be temporary and no health effects would result. Acute health risk, or short-term exposure health risk, was found to be well below the significance threshold. Therefore, potential TAC impacts to human health are less than significant. **(Less Than Significant Impact [Same Impact as Approved Project])**

### **Impacts to Nearby Sensitive Receptors**

The additional project-related traffic on local roads would not create a potential health hazard from TACs because roads such as Fisher Avenue and Murphy Avenue, which have residences along them, do not support high volumes of traffic. A road needs to have 30,000 – 40,000 daily vehicle trips before human health hazards from TAC exposure become a serious concern, and the project would add 3,382 daily trips on weekdays and 4,336 daily trips on weekends (see *Section 4.16, Transportation* for more information on project-generated traffic).<sup>4</sup> As shown in Exhibit 8C of Appendix E of this Initial Study, even in the worst-case cumulative condition, a road such as Murphy Avenue would only support 700 vehicle trips during the peak hour and would not support 30,000 – 40,000 daily vehicle trips on a regular basis.

Construction equipment used for the proposed project would emit TACs, mainly diesel particulate matter, in the vicinity of sensitive receptors such as the residences along Fisher Avenue. Since

<sup>4</sup> Bay Area Air Quality Management District. *Santa Clara County PM<sub>2.5</sub> Concentrations and Cancer Risks Generated from Surface Streets*. December 2011. Available at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>

specific construction plans have not yet been developed for the project, it is not possible to quantify the community risk impacts from construction activity at this time. Though the SEQ EIR did not evaluate construction-related TAC impacts, construction of the proposed project has the potential to result in a significant health risk impact to nearby residences.

**Impact AQ-2:** Demolition, grading, and other construction activities could result in excess cancer risk and non-cancer health hazards at nearby residences. **(Significant Impact)**

**Mitigation Measures:** The following measure shall be implemented at the time of final project review to reduce construction-related TAC impacts to a less than significant level:

**MM AQ-2.1:** The project proponent shall prepare an evaluation that estimates Community Risk impacts associated with construction following guidance provided by the BAAQMD. This analysis shall be submitted to the Community Development Director for review and approval prior to issuance of a Site Development Permit. The analysis shall identify any necessary requirements to reduce community risk impacts such that significant impacts (i.e. exceeding the BAAQMD thresholds of significance) would not occur. Requirements to minimize significant impacts could include:

- Develop a plan to ensure that diesel-powered equipment greater than 50 horsepower and operating on the site for more than two days consecutively shall meet U.S. EPA particulate matter emissions standards for Tier 2, 3 or 4 engines or equivalent; or the construction contractor shall use other measures to minimize construction period diesel particulate matter emissions to reduce the predicted cancer risk below the threshold. Such measures may include the use of alternative-powered equipment (e.g., LPG-powered forklifts), alternative fuels (e.g., biofuels), added exhaust devices, or a combination of measures, provided that these measures are approved by the lead agency;
- If necessary, all generators, welders, compressors, and pumps shall be alternatively fueled or meet U.S. EPA particulate matter standards for Tier 4 engines; and
- Minimize the number of hours that equipment will operate including the use of idling restrictions.

Implementation of these measures would ensure that construction of the proposed project does not result in a significant health hazard for nearby sensitive receptors from construction TAC emissions. **(New Less Than Significant Impact with Mitigation)**

#### **4.3.2.5 Short-Term Construction Impacts**

In addition to emitting TACs, demolition, grading, and construction activities also emit fugitive dust and particulate matter. Given the proximity of sensitive receptors, dust emissions during construction could result in significant impacts.

**Standard Measure:** The following BAAQMD-recommended basic dust control measures were not included in the SEQ EIR but were incorporated by reference, and are standard measures required by the City for all construction projects to reduce potential fugitive dust impacts to a less than significant level:

- 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 mph;
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used;
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes. 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; and
- 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.

Implementation of these standard dust control measures would avoid potentially significant fugitive dust impacts. **(Less Than Significant Impact [Same Impact as Approved Project])**

#### **4.3.2.6**      *Odor Impacts*

The SEQ EIR found less than significant impacts due to odors. Operation of the fields is not expected to generate any objectionable odors. Construction of the project will generate localized emissions of diesel exhaust during equipment operation and truck activity. These emissions may be noticeable from time to time by adjacent receptors, but emissions would be localized and are not likely to adversely affect people off-site such that the emissions would result in confirmed odor complaints. **(Less Than Significant Impact [Same Impact Than Approved Project])**

#### **4.3.3**      Conclusion

The proposed project is consistent with the SEQ Plan and would contribute to significant regional air quality impacts associated with the increase in VMT from development of the SEQ Plan Area. Mitigation measures have been included to require an AQ-TDM plan to reduce vehicle trips to the project site. **[Significant and Unavoidable Impact (Same Impact As Approved Project)]**

Mitigation measures have been included to avoid construction TAC impacts to nearby residences and standard BAAQMD-recommended measures have been incorporated to minimize fugitive dust emissions during construction. **(New Less Than Significant Impact With Mitigation)**

The SEQ EIR found less than significant impacts due to odors. The proposed project would not introduce any new sources of odors in operation and would not expose users to adverse odors. **(Less Than Significant Impact [Same Impact as Approved Project])**

## 4.4 BIOLOGICAL RESOURCES

The following discussion is based in part upon site-specific data from the Santa Clara Valley Habitat Agency Geobrowser, which was queried in February 2015. This data is attached as Appendix B to this report.

### 4.4.1 Setting

The project site is developed as agricultural land and contains a small barn structure and irrigation pump at the north end of the site fronting Tennant Avenue. There are Coast live oak and Valley oak trees surrounding the barn, as well as a few trees interspersed about the west half of the site. The project site is not currently under cultivation and has 1-2 foot tall grasses growing on it. The site may support locally-occurring wildlife species, though the habitat value of agricultural land is minimal compared to native habitat.

During a site visit on February 13, 2015, an approximately 4,600 square foot area of ponded water was observed at the southern corner of the project site just north of the Fisher Avenue cul-de-sac (see Figure 4.1-1). There were multiple mallards and birds (likely killdeer) observed in the pond. There was no vegetation indicative of wetlands observed in or near the pond, and it was likely a temporary water feature that was caused by a combination of heavy precipitation the week prior to the site visit and poor site drainage. The SEQ EIR did not identify any sensitive natural communities on the project site.

This water feature is not connected to the Madrone Channel along the western site boundary, which is owned and operated by the SCVWD and conveys stormwater runoff water from the surrounding areas southward to the Monterey Bay watershed. The Madrone Channel is earthen bottom at this location and also doubles as a groundwater recharge facility for the Water District.

#### 4.4.1.1 *Regulatory Background*

A complete discussion of the federal, state, and regional regulations of biological resources can be found in the SEQ EIR.

### **Santa Clara Valley Habitat Plan**

The Santa Clara Valley Habitat Plan (VHP) was developed through a partnership between Santa Clara County, the Cities of San Jose, Morgan Hill, and Gilroy, the SCVWD, the Santa Clara Valley Transportation Authority (VTA), the U.S. Fish and Wildlife Service, and the California Department of Fish and Wildlife. The VHP is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of Santa Clara County. The VHP has been approved by the local partners and took effect on October 14, 2013.

**Morgan Hill Tree Removal Controls**

The City of Morgan Hill Municipal Code Section 12.32.020 (Restrictions On Removal Of Significant Trees) defines a tree as:

*Any live woody plant rising above the ground with a single stem or trunk of a circumference of 40 inches or more for non-indigenous species, and 18 inches or more for indigenous species measured at four and one-half feet vertically above the ground or immediately below the lowest branch, whichever is lower... All commercial tree farms, nonindigenous tree species in residential zones and orchards (including individual fruit trees) are exempted from the definition of tree for the purpose of this chapter...*

Tree species that are indigenous to the City of Morgan Hill include but are not limited to Valley oak, Coast live oak, Madrone, and Sycamore. Prior to the removal of any tree protected by the Restrictions On Removal Of Significant Trees ordinance, a Tree Removal Permit is required from the Community Development Director. The Permit sets forth a tree replacement program and identifies any conditions imposed by the City. The oak trees on the northern portion of the project site are indigenous and would be covered by the City’s tree removal restrictions.

**4.4.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact Than “Approved Project”	Checklist Source(s)
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 or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,10
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 California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,10

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact Than "Approved Project"	Checklist Source(s)
Would the project:						
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3
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, impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,4
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3,10

**4.4.2.1 Prior Impact Evaluation in SEQ EIR**

There were no significant and unavoidable impacts to biological resources identified in the SEQ EIR. Reviews of special-status wildlife and plant species databases found no known occurrences within the SEQ Plan Area, however multiple special-status species occurred within a five mile radius. The SEQ EIR concluded that development of land in the Plan Area with the *Sport/Recreation/Leisure* General Plan designation would have the potential to impact biological resources, but that without specific project details it would be speculative to predict impacts to biological resources. The EIR thus called for site-specific analysis during project-level environmental review.

**4.4.2.2 Impacts to Habitat**

**Direct Impacts**

The agricultural land on the project site does not support high biological diversity, provide important wildlife habitat, or support unusual or regionally-restricted habitat types. The temporary pooling of freshwater at the southern corner of the project site provides seasonal habitat for local wildlife such

as mallards and killdeer, but is not a seasonal or permanent wetland that has the potential to support special-status species.

The proposed development of the project site would not directly affect wetlands, riparian habitat, or other sensitive natural communities. Impacts to habitat provided by trees and the existing barn structure are described in detail below. Since it is bounded on three sides by U.S. 101, Tennant Avenue, and Fisher Avenue, and by an orchard on the east side, the site provides minimal dispersal habitat for native wildlife and does not function as a wildlife movement corridor. The proposed project would not result in any direct impacts to the adjacent Madrone Channel.

### **Indirect Impacts**

Section 18.74.060 of the Morgan Hill Municipal Code gives the Community Development Director authority to require design permit approval for projects located on “sensitive sites” where review normally would not be required. The Code states that a site shall be considered sensitive if it is within 50 feet of a watercourse or adjacent to mapped riparian habitat. In addition, the VHP establishes 50 foot minimum riparian setbacks for covered activities.

The Madrone Channel is an engineered drainage channel that is conveyed via culverts underneath Tennant Avenue. There is also a berm constructed through the channel adjacent to the end of Fisher Avenue, which allows the SCVWD to regulate the flow of the channel using slide gates and culverts. The SEQ EIR discusses three riparian corridors along three creeks in the SEQ Plan Area and does not consider the Madrone Channel to be a riparian corridor. This was confirmed on a February 13, 2015 site visit during which minimal riparian vegetation was observed in and adjacent to the channel. Therefore the project site is not adjacent to a riparian corridor and is not subject to riparian setback requirements.

Runoff from the project site both during and after construction could reach the City’s storm drainage system and adversely affect aquatic life in local waterways (e.g. the Madrone Channel). Implementation of appropriate mitigation measures would ensure that impacts to aquatic organisms would be avoided or minimized. As discussed in *Section 4.9, Hydrology and Water Quality*, the proposed project would implement best management practices (BMPs) to reduce impacts to water quality downstream of the project site. These BMPs would be identified in the Storm Water Pollution Prevention Plan (SWPPP) prepared by the project. **(Less Than Significant Impact [Same Impact As Approved Project])**

#### **4.4.2.3      *Impacts to Special-Status Species***

### **Plants**

Due to the lack of adequate habitat and highly disturbed condition of the project site from past agricultural use, special-status plant species that are known to occur in the region are not expected to occur on the site. Therefore, development of the project site would not impact special-status plant species.

## Wildlife

### Burrowing Owls

There were no ground squirrels or squirrel burrows observed on the site during a February 13, 2015 site visit. Given that no squirrels were observed and that the land on the site is currently covered with 1-2 feet of grasses and weeds, the project site does not provide nesting habitat for burrowing owls. As demonstrated in Appendix B of this Initial Study/Addendum, the site is not mapped as burrowing owl habitat in the VHP. Though the site may provide foraging habitat because it can support small birds, rodents, and reptiles, it is highly unlikely that project construction could directly harm a foraging owl. The loss of foraging habitat would incrementally reduce the overall availability of foraging habitat for burrowing owls, but there is an abundance of similar habitat in the area and the incremental loss of habitat resulting from the proposed project would not cause a significant adverse effect to burrowing owls.

### Nesting Raptors and Migratory Birds

Nesting raptors and migratory birds are protected under state and federal regulations. At the time of construction, 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 the reproductive effort.

**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)**

**Mitigation Measures:** The following mitigation measures will reduce potential impacts to nesting raptors and migratory birds to a less than significant level.

**MM BIO-1.1:** Construction activities including but not limited to grading, demolition, tree removal, grubbing, and building shall be scheduled to avoid the nesting season to the extent feasible. If construction can be scheduled to occur between September 1<sup>st</sup> and January 31<sup>st</sup> (inclusive) to avoid the raptor nesting season, no impacts will be expected. If construction will take place between February 1<sup>st</sup> and August 31<sup>st</sup>, then pre-construction surveys for nesting birds shall be completed by a qualified biologist to ensure that no nests will be disturbed during project implementation. Surveys will be completed within 30 days of the on-set of site clearing or construction activities. During this survey, the biologist will inspect all trees and other potential nesting habitats (e.g., trees, shrubs, buildings) within 250 feet of the site for nests. The applicant shall prepare a pre-construction survey report to document the findings of the study.

**MM BIO-1.2:** If an active nest is found sufficiently close to areas to be disturbed by the project, the biologist will 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 will remain off limits to construction until the nesting season is over. This would ensure that no nests of species protected by the Migratory Bird Treaty Act and California Fish and Game Code will be disturbed during project implementation. A report indicating the result of the survey and any designated buffer zones shall be prepared prior to any ground disturbance activities.

Implementation of these measures would reduce potentially significant impacts to nesting birds or raptors to a less than significant level. **(New Less Than Significant Impact with Mitigation)**

### Bats

The barn structure on the north side of the project site has the potential to serve as roosting/nesting habitat for Pallid bats and Hoary bats. In the event the barn is present on the site at the time of project construction (see *Section 4.8, Hazards and Hazardous Materials* for more detail on the potential for the barn to be removed by others prior to City's acquisition), demolition of the structure could result in harassment of bats and a violation of the California Fish and Game Code.

**Impact BIO-2:** Demolition of the existing barn structure could result in impacts to bats. **(Significant Impact)**

**Mitigation Measures:** If the barn is still present on the site when the City acquires the property, the following mitigation measures will reduce impacts from construction on the project site to bats to a less than significant level:

**MM BIO-2.1:** Prior to demolition, a detailed bat survey shall be conducted to determine if bats are roosting or breeding in the vacant residence. A qualified biologist shall survey the structure on the site using suitable methods to enable detection of bats. A minimum of one survey shall occur no more than 30 days prior to demolition. If no bats are observed to be roosting or breeding in these structures, then no further action will be required and demolition can proceed. The City shall prepare a pre-demolition report documenting the findings of the survey.

**MM BIO-2.2:** If a non-breeding bat colony is found in the structure to be demolished, the individuals shall be humanely evicted via the partial dismantlement of the buildings prior to demolition under the direction of a qualified bat specialist to ensure that no harm or "take" would occur to any bats. If a maternity colony is detected in the buildings, then a construction-free buffer will be established around the structure and remain in place until it has been determined by a qualified bat specialist that the nursery is no longer active. Demolition shall be done between March 1 and April 15 or between August 15 and October 15 to avoid interfering with an active nursery. A report documenting the results of this mitigation measure shall be prepared prior to the start of demolition.

Implementation of these measures would reduce potentially significant impacts to bats a less than significant level. **(New Less Than Significant Impact with Mitigation)**

**4.4.2.4 Consistency with Plans, Policies, Ordinances, and the VHP**

**Tree Removal**

There are five large trees surrounding the barn structure, including two Coast live oaks and one Valley oak tree, both of which are considered native to the Santa Clara Valley. Additional trees are scattered throughout the west portion of the project site and there are large trees on the adjacent site that may be impacted by a driveway from Murphy Avenue. Removal of any tree protected by the City of Morgan Hill’s Municipal Code shall be reviewed and approved as part of the consideration of the Site Development Permit required for the project.

Ultimately, development of the ball fields, the driveway from Murphy Avenue, and the 3.4 acres of commercial retail space could result in the removal of trees from the project site, many of which are protected by the City of Morgan Hill Tree Removal Controls. In addition, development on the project site would alter the drainage patterns in the project area, and construction activities may result in soil compaction and/or physical damage the roots, trunks or canopies of any trees that are intended to remain on the site.

**Impact BIO-3:** The proposed project could result in tree removal or irreversible damage to any trees that are intended to remain. **(Significant Impact)**

**Mitigation Measures:** The following measures would be incorporated into the project to mitigate potentially significant impacts to trees:

**MM BIO-3.1:** Prior to approval of a Site Development Permit for the project, a tree survey of the site shall be prepared by an arborist certified by the International Society of Arboriculture to determine which trees on the project site are protected by the City’s Tree Removal ordinance.

**MM BIO-3.2:** If any trees would be retained on-site as part of the project, a Tree Protection Plan that outlines specific procedures to ensure that retained trees and off-site trees are adequately protected during development activities shall be developed by a Certified Arborist. This plan shall be reviewed and approved by the Community Development Director prior to any ground disturbing activities. Measures included in the plan shall include, but not be limited to:

- Locate structures, grade changes, etc. as far as feasible from the `dripline' area of the tree.
- Avoid root damage through grading, trenching, compaction, etc., at least within an area 1.5 times the `dripline' area of trees. Where root damage cannot be avoided, roots encountered (over one inch diameter) should be exposed approximately 12 inches beyond the area to be disturbed

(towards tree stem), by hand excavation, or with specialized hydraulic or pneumatic equipment, cut cleanly with hand pruners or power saw, and immediately back-filled with soil. Avoid tearing, or otherwise disturbing that portion of the root(s) to remain.

- Construct a temporary fence as far from the tree stem (trunk) as possible, completely surrounding the tree, and six- to eight- feet in height. Post no parking or storage signs around the outside of the fencing. Do not attach posting to the main stem of the tree.
- Do not allow vehicles, equipment, pedestrian traffic; building materials or debris storage; or disposal of toxic or other materials inside of the fenced off area.
- Avoid pruning immediately before, during, or immediately after construction impact. Perform only that pruning which is unavoidable due to conflicts with proposed development. Aesthetic pruning should not be performed for at least one- to two- years following completion of construction.
- Trees that will be impacted by construction may benefit from fertilization, ideally performed in the fall, and preferably prior to any construction activities, with not more than 6 pounds of actual nitrogen per 1,000 square feet of accessible `drip line' area or beyond.
- Mulch `rooting' area with an acidic organic compost or mulch.
- Arrange for periodic (Biannual/Quarterly) inspection of tree conditions, and treatment of damaging conditions (insects, diseases, nutrient deficiencies, etc.) as they occur, or as appropriate.

**MM BIO-3.3:** Protected trees removed from the project site shall be replaced at a 2:1 ratio on the project site or within the vicinity with minimum 24-inch box specimens that are indigenous to Morgan Hill, and shall be noted as replacement trees on the landscape plans submitted for design permit and building permit reviews. The species and location of replacement trees shall be reviewed and approved by the City of Morgan Hill Community Development Director prior to issuance of building permits.

Implementation of these measures to study, protect, and compensate for the loss of any trees on the project site would reduce potentially significant impacts to trees to less than significant levels. **(New Less Than Significant Impact With Mitigation)**

### **Santa Clara Valley Habitat Plan**

The project site is located in land designated by the VHP as *Rural Development Not Covered* and is therefore not covered by the VHP. The SEQ EIR states that land use activities in the SEQ Area would be subject to the provisions of Chapter 2.3.7 Rural Development from the VHP, and MM BIO-6a requires projects in the SEQ Area to apply for coverage under the VHP.

The proposed project does not meet the criteria of the Rural Development category because that category provides for *residential* development in the SEQ Area. In compliance with MM BIO-6a

from the SEQ EIR, however, the project will apply for coverage under the VHP and pay applicable land cover fees to the Santa Clara Valley Habitat Agency.

The project does not have the potential to directly impact any sensitive habitats or special-status species. Potential effects to roosting bats, nesting birds, and trees would be mitigated with implementation of the measures included in this chapter. Since the project would apply for coverage under the VHP and since any potential impacts to biological resources from the project would be mitigated, the proposed ball fields would not conflict with the provisions of the VHP.

### Nitrogen Deposition

The VHP 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 VHP 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.

If the project ultimately receives incidental take authorization after applying for coverage under the VHP per MM BIO-6a from the SEQ EIR, payment of Nitrogen Deposition Impact Fees will be required. Therefore the project will pay nitrogen deposition fees commensurate with the vehicle trips generated by the project. These fees are collected by the Habitat Agency and are used to restore serpentine habitat in the Santa Clara Valley. **(New Less Than Significant Impact)**

### **4.4.3**        **Conclusion**

With the implementation of the mitigation measures included in this chapter, the project would have a less than significant impact on trees and nesting bats or birds. **(New Less Than Significant Impacts With Mitigation)**

The project would pay nitrogen deposition fees for project-related vehicle emissions and would not otherwise conflict with the VHP. **(New Less Than Significant Impact)**

Impacts to wetlands, riparian areas, and other sensitive habitats would be less than significant. **(Less Than Significant Impact [Same Impact As Approved Project])**

## **4.5 CULTURAL RESOURCES**

### **4.5.1 Setting**

The project site contains agricultural land and a wood barn structure fronting Tennant Avenue. There is a pump and irrigation system adjacent to the barn. Much of the area east of the project site consists of rural residences and orchards.

#### **4.5.1.1 *Archaeological Resources***

The majority of prehistoric archaeological sites in the Morgan Hill area have been found along fresh water sources (such as creeks and springs), in valley areas near water, at the base of the hills and along a major north/south trail. Potential Historic era archaeological sites also follow this pattern and often directly occupy prehistoric sites or are located at their periphery. Historic sites also are often sited along trails, roads, railroad tracks, and along urban and regional street grids.<sup>5</sup>

According to the City's Archaeological Sensitivity Map, the project site is not sensitive for archaeological resources.<sup>6</sup> The adjacent Madrone Channel is an engineered stormwater drainage channel and does not have elevated sensitivity for archaeological resources.

#### **4.5.1.2 *Historic Resources***

There are two structures on the project site, the barn fronting Tennant Avenue and a small water well/pump house structure. Based on the Cultural Resources Assessment prepared for the SEQ EIR, the barn on the project site, identified as P-43-001769, was determined in 2006 not to be a historic resource and was found ineligible for the California Register of Historic Resources.<sup>7</sup> The barn structure is shown in Photos 1-3.

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<sup>5</sup> Basin Research Associates, Inc. *Cultural Resources Supplement, Archaeological Resources Morgan Hill General Plan Santa Clara County, California*. 2000.

<sup>6</sup> City of Morgan Hill. *Archaeological Sensitivity Map*. April 2000.

<sup>7</sup> Michael Brandman Associates. *Cultural Resources Assessment, Citywide Agriculture Preservation Program and Southeast Quadrant Land Use Plan*. December 13, 2013. Page 17.

**4.5.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact Than "Approved Project"	Checklist Source(s)
Would the project:						
1. Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
2. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3,11
3. Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3,11
4. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

**4.5.2.1 Prior Impact Evaluation from the SEQ EIR**

Due to a lack of project-level detail for development in the SEQ Plan Area, the SEQ EIR did not make a definitive conclusion regarding the potential for impacts to archaeological resources from implementation of the Plan. The Cultural Resources Assessment for the SEQ EIR ascertained that the archaeological sensitivity in the Plan Area is low, which is consistent with the City’s Archaeological Sensitivity Map. The SEQ EIR did not identify any historic resources in the Plan Area that could be eligible for the California Register of Historic Resources or the National Register of Historic Places.

**4.5.2.2 Impacts to Subsurface Cultural Resources**

Construction of the sports fields would not require deep excavation (i.e. greater than two feet) across the entire project site. As described in *Section 4.8, Hazards and Hazardous Materials*, the top 12-18 inches of soil may be removed in the vicinity of the barn structure to address contaminants from past agricultural use. The proposed light standards would likely have deep foundations to ensure stability, and the foundation for a snack bar and bathroom facility may exceed two feet in depth as well. Based on the City’s Archaeological Sensitivity Map, the SEQ EIR, and the Cultural Resources Assessment prepared for it, the project area is not sensitive for subsurface resources. There is always a potential, however, for construction to encounter unknown archaeological resources or human remains.

**Standard Measures:** This project may adversely impact undocumented human remains or unintentionally discover significant historic or archaeological materials. In the unlikely event

cultural materials are found during site grading or excavation, the following standard measures would be implemented. If human remains are discovered, it is probable that they are the remains of Native Americans.

- If human remains are encountered they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. 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 should not be held by human hands. Surgical gloves should be worn if remains need to be handled.
  - Surgical mask should 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. 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. Ground-disturbing project activities may continue in other areas that are outside the discovery locale.
- 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 and initiated these protocols, or if on-site at the time of discovery, by the Monitoring Archaeologist (typically 25-50ft for single burial or archaeological find).
- The discovery locale shall be secured (e.g., 24 hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances.
- The Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols 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 Community Development Director (408) 779-7247
  - The Contractor’s Point(s) of Contact
  - The Coroner of the County of Santa Clara (if human remains found) (408) 793-1900
  - The Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082
  - The Amah Mutsun Tribal Band (916) 481-5785 (H) or (916) 743-5833 (C)
- The Coroner has two working days to examine the 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.
- Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Community Development 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.

Implementation of these measures would avoid potentially significant impacts to unidentified subsurface archaeological resources or undocumented human remains. **(Less Than Significant Impact [Same Impact as Approved Project])**

#### **4.5.2.3      *Impacts to Historic Resources***

Based on the Cultural Resources Assessment prepared for the SEQ EIR, the barn on the project site was found to be ineligible for the California Register of Historic Resources in 2006. The age of the structure is not known at this time and could not be conclusively inferred from historical aerial images of the project site.

The property is currently privately-owned and located outside of the City of Morgan Hill, and there is a potential for the barn to be removed by the property owner in order to remediate some of the known contaminants in the vicinity of the barn prior to the City's acquisition of the land (see **Section 4.8, *Hazards and Hazardous Materials*** for more information). If not removed for remediation, the barn would ultimately be demolished to accommodate the driveway entrance to the ball fields from Tennant Avenue. If the barn is still on the project site at the time the City is considering approval of the ball fields design and/or the commercial development on the remainder of the site, demolition as part of future construction would need to be evaluated to confirm whether the barn is an historic resource, i.e. with the passage of time the barn could attain additional historic significance it did not possess when evaluated in 2006.

Therefore, during project-level environmental review for a specific development proposal affecting the barn structure on the site, an historic resource report shall be prepared by a qualified historian to evaluate whether the on-site barn would qualify as an historic resource. This report shall be submitted to the Community Development Director for review and approval prior to issuance of a site development permit.

If the report determines that the barn does not qualify as an historic resource, then no further action would be needed. If the report determines that the barn is eligible as an historic resource, then recommendations for treatment or documentation of the structure shall be implemented prior to project implementation. If impacts to the barn are found to be significant and unavoidable, then an Environmental Impact Report shall be prepared to evaluate feasible mitigation, project alternatives, and to disclose impacts pursuant to the requirements of the California Environmental Quality Act.

The rural residences surrounding the project site would not be affected by the project. Though conversion of the land use from agriculture to sports fields would slightly diminish the agricultural character of the project vicinity, the site is already surrounded by a major freeway, a hotel, and a four-lane arterial roadway. The proposed project, therefore, that would not cause a substantial adverse effect on the significance of an off-site historic resource. **(Less Than Significant Impact [Same Impact as Approved Project])**

#### **4.5.3            Conclusion**

The proposed project would have a less than significant impact on historic resources. With the implementation of the City's standard measures to protect unidentified subsurface cultural resources, the project would not have a potentially significant impact on archaeology, paleontology, or human remains. **(Less Than Significant Impact [Same Impact As Approved Project])**

## 4.6 GEOLOGY AND SOILS

### 4.6.1 Existing Setting

#### 4.6.1.1 *Topography*

The project site is located on the floor of the Santa Clara Valley with elevations at the project site ranging from approximately 332 feet above mean sea level (amsl) at the southern corner to 344 feet amsl at the north end adjacent to Tennant Avenue. The Santa Clara Valley is situated between the Santa Cruz Mountains to the west and the Diablo Mountain Range to the east.

#### 4.6.1.2 *Geology and Soils*

The geologic landscape in Morgan Hill consists of bedrock and surface soils. Most of the underlying bedrock belongs to either the Franciscan Assemblage or the Santa Clara Formation, although smaller deposits of other rock units are found throughout the study area.

Based on the SEQ EIR and U.S. Department of Agriculture soil data, over 90% of the site is underlain by well drained Pleasanton loam soil.<sup>8</sup> Pleasanton loam has a moderate infiltration rate when thoroughly wet and a moderate rate of water transmission. A small portion of the site at the northeast corner contains well drained Arbuckle gravelly loam with a moderate infiltration rate. Approximately 1.5 acres of land at the southern end of the site contains moderately well drained San Ysidro loam, which has a slow infiltration rate and a high runoff potential. Unlike the other soils on the project site, San Ysidro loam has a relatively high shrink-swell potential, which can lead to land subsidence as a result of moisture changes.

As detailed in Chapter 3.6 of the SEQ EIR, the project site is not susceptible to landslides or slope failure.

#### 4.6.1.3 *Seismicity*

Although the project site is not located in a Fault Rupture Hazard Zone (as detailed in Exhibit 3.6-1 of the SEQ EIR), an earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the site. The degree of shaking is dependent on the magnitude of the event, the distance to its zone of rupture, and local geologic conditions.

#### Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loosely water-saturated soils from a solid state to a liquid-like state after ground shaking. There are many variables that contribute to liquefaction including the age of the soil, soil type, soil cohesion, soil density, and groundwater level.

<sup>8</sup> US Department of Agriculture, Natural Resources Conservation Service. *Custom Soil Resource Report*. February 17, 2015.

Based on the Phase I/II Environmental Site Assessment prepared for the project site (see Appendix C of this Addendum), groundwater beneath the site fluctuates seasonally and may be as high as 10 to 15 feet below ground surface (bgs) during the wet season and as low as 40 feet bgs during the dry season. The dominant regional groundwater flow direction is southerly to southeasterly. According to the SEQ EIR, the project area is not located within a liquefaction hazard zone.

Lateral Spreading

Lateral spreading occurs as a form of horizontal displacement of alluvial material toward an open free face, such as a creek channel. Since the project site is set back from the Madrone Channel by at least 20 feet, and the Madrone Channel is engineered to resist lateral spreading, the potential for lateral spreading during a seismic event is low.

**4.6.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact Than "Approved Project"	Checklist Source(s)
Would the project:						
1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:						
a. Rupture of a known earthquake fault, as described 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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
b. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
c. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3,12
d. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
2. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3,12

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact Than "Approved Project"	Checklist Source(s)
Would the project:						
3. Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3,12
4. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3,12
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

**4.6.2.1 Prior Impact Evaluation from the SEQ EIR**

The SEQ EIR found that individual projects would be required to comply with the seismic design criteria of the California Building Standards Code, and therefore impacts to development in the SEQ Plan Area from fault rupture, ground shaking, and seismic-related ground failure would be less than significant. Potential effects of erosion or sedimentation would be avoided with implementation of the City-required on-site and off-site stormwater retention facilities. Impacts from expansive soils would be avoided by adhering to the California Building Standards Code. The SEQ EIR did not anticipate impacts from septic or alternative wastewater disposal systems because the Plan includes the extension of municipal wastewater infrastructure.

**4.6.2.2 Soil-Related Impacts**

Soils on the project site range from a low to high expansion potential. Expansive soil conditions could damage future development and proposed improvements, which would represent a significant impact unless substantial damage is avoided by incorporating appropriate engineering into the grading and design of the proposed ball fields complex.

The project site is not located within a landslide hazard zone and would not likely be subject to landslide hazards. The project site is relatively flat and would not be subject to substantial soil erosion or the loss of topsoil during development activities.

**Standard Measures:** In accordance with the City of Morgan Hill standards, the following measures to reduce and/or avoid soil hazards and substantial erosion impacts shall be implemented prior to development on the project sites.

- To avoid or minimize potential damage from soil settlement or expansion, any structures built on the 26-acre project site, including field lighting poles, shall be built to meet the requirements of the latest California Building Code, as adopted or updated by the City. Prior to issuance of a building permit, the proposed site plans and designs shall be reviewed for 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 project shall implement standard grading best management practices, including but not limited to, street sweeping, fiber rolls, inlet protection, stockpile covering or watering, covering of trucks, and/or replanting of vegetation, to prevent substantial erosion and siltation during development of the sites.

Implementation of these standard measures would minimize soil hazards and potential soil erosion impacts. **(Less Than Significant Impact [Same Impact as Approved Project])**

#### Sanitary Sewer

The nearest sanitary sewer line is approximately 1,000 feet north of the site in Condit Road. The proposed project would either extend this line to provide municipal wastewater service for the site or construct an alternative wastewater disposal system beneath the site. Any septic or alternative wastewater disposal systems would need to be reviewed and approved by the County of Santa Clara for compliance with the County's Onsite Wastewater Treatment Systems Ordinance (NS-517.85) prior to construction of the system. The ordinance establishes standards for approval, installation, and operation of onsite wastewater treatment systems consistent with the appropriate California Regional Water Quality Control Board standards to prevent health hazards and nuisance conditions as well as to protect surface and groundwater quality.

Since it is not known at this time how the project will manage wastewater, future environmental review of the project prior to approval of a final design for the proposed ball fields will evaluate the potential impacts of the two options noted above. Compliance with the County Ordinance NS-517.85 would ensure that any impacts from alternative wastewater disposal systems are less than significant. **(Less Than Significant Impact [Same as Approved Project])**

#### **4.6.2.3      *Seismic Impacts***

The likelihood of fault rupture at the project site is low; however, the site is located in a seismically-active region and strong ground shaking will likely occur during the life of the project. The project site is relatively flat and would not be subject to landslides or fault rupture. As detailed in the SEQ EIR, soils on the project site are not prone to seismically-induced liquefaction. There is no potential

for the project to cause lateral spreading at the Madrone Channel because the channel is over 25 feet from the site, and has been engineered to resist lateral spreading.

Impacts from ground shaking during a seismic event (i.e. earthquake) can be minimized through the use of standard engineering and seismic safety design techniques in conformance with the California Building Code. Development on the project site would be designed to withstand soil hazards and to reduce the risk to life or property to the extent feasible and in compliance with the California Building Code. **(Less Than Significant Impact [Same as Approved Project])**

#### **4.6.3            Conclusion**

Implementation of the standard measures detailed in this chapter, as well as compliance with the County Onsite Wastewater Treatment Systems Ordinance (if needed) would avoid geology and soil impacts related to future development on the project site. **(Less Than Significant Impact [Same as Approved Project])**

## 4.7 GREENHOUSE GAS EMISSIONS

### 4.7.1 Setting

#### 4.7.1.1 *Background Information*

Global temperatures are affected by naturally-occurring and anthropogenic (originating in human activity) atmospheric gases, including water vapor (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). These gases as well as other less common gases that trap heat in the atmosphere are called greenhouse gases (GHG). The heat-trapping process works as follows: solar (ultraviolet) radiation enters the earth's atmosphere from space, and a portion of the radiation is absorbed at the surface. This radiation energizes the earth system, which then emits radiation back toward space as infrared radiation. Greenhouse gases, which mostly do not absorb solar radiation due to its short wavelength, are effective in absorbing infrared radiation because of its long wavelength. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This process is known as the greenhouse effect, and it is a natural process that maintains a habitable climate on the planet.

Emissions of GHGs from human activities such as electricity production, motor vehicle use, and agriculture, are increasing the concentration of GHGs in the atmosphere. The current atmospheric CO<sub>2</sub> concentration fluctuates around 400 parts per million (ppm); in 1960 the concentration was below 320 ppm.<sup>9</sup> Based on ice core data, atmospheric CO<sub>2</sub> concentrations have not exceeded 300 ppm in the last 650,000 years.<sup>10</sup> Substantial scientific evidence has been gathered in support of the conclusion that anthropogenic GHG emissions are causing a trend of unnatural warming of the earth's climate, known as global warming or global climate change.<sup>11</sup> According to the Intergovernmental Panel on Climate Change, an international body convened by the United Nations and the World Meteorological Organization, "it is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century."<sup>12</sup>

There are many state, regional, and local plans, policies, and regulations which address GHG emissions resulting from new development. A complete discussion of the regulations relating to GHG emissions can be found in the SEQ EIR.

<sup>9</sup> Scripps Institution of Oceanography at the University of California, San Diego. *The Keeling Curve: A Daily Record of Atmospheric Carbon Dioxide*. Last updated June 23, 2014. Accessed June 24, 2014. Available at: <http://keelingcurve.ucsd.edu/>

<sup>10</sup> Intergovernmental Panel on Climate Change. *IPCC Fourth Assessment Report: Climate Change 2007. TS.2.1.1 Changes in Atmospheric Carbon Dioxide, Methane and Nitrous Oxide*. 2007. Available at: [http://www.ipcc.ch/publications\\_and\\_data/ar4/wg1/en/tssts-2-1-1.html](http://www.ipcc.ch/publications_and_data/ar4/wg1/en/tssts-2-1-1.html)

<sup>11</sup> The term "global climate change" is often used interchangeably with the term "global warming," but "global climate change" is preferred because it implies that there are other consequences to the global climate in addition to rising temperatures.

<sup>12</sup> Intergovernmental Panel on Climate Change. *Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis*. 2013. Page 17. Available at: <http://www.ipcc.ch/index.htm>

**4.7.1.2 Existing Conditions**

Existing sources of greenhouse gas emissions from the project site are minimal and are primarily the result of fuel combustion for agricultural equipment and vehicles for people working on the property. Due to the irregularity of activity on the site, it would be speculative to estimate existing greenhouse gas emissions from the site. Furthermore the Traffic Technical Memorandum prepared for the project (see Appendix E) did not calculate vehicle trip reductions to account for existing trip generation, therefore existing GHG emissions are presumed to be zero.

**4.7.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact Than "Approved Project"	Checklist Source(s)
Would the project:						
1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

**4.7.2.1 Impact Evaluation in Prior EIR**

Based on the SEQ EIR, development in the SEQ Plan Area would not have a significant long-term GHG emissions impact because the Plan is consistent with the emissions reduction targets set forth in Assembly Bill (AB) 32. AB 32 calls for Statewide GHG emissions in the year 2020 to be at or below 1990 emissions levels. Per the SEQ EIR, the approved 1990 GHG emissions inventory is 427 MMT (million metric tons) CO<sub>2</sub>e<sup>13</sup> and the approved 2020 business as usual scenario is 545 MMT CO<sub>2</sub>e. The analysis stated that as long as the SEQ Plan met or exceeded the 21.7 percent reduction from the 2020 business as usual forecast, the Plan would be consistent with the AB 32 reduction targets.

Using the BAAQMD-recommended CalEEMod software to estimate GHG emissions based on the proposed land uses, the SEQ EIR concluded that development in the SEQ Plan Area would result in 20,409 MT CO<sub>2</sub>e per year, which is 24 percent below the business as usual scenario. According to the SEQ EIR, these reductions will be achieved through implementation of state emission reduction regulations as well as City General Plan policies that reduce water and energy consumption from future land uses.

<sup>13</sup> CO<sub>2</sub>e stands for 'equivalent carbon dioxide,' which is a measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

The SEQ EIR did not make any conclusions about construction-related GHG emissions.

#### **4.7.2.2 Construction Greenhouse Gas Emissions (Temporary Emissions)**

Construction phases include demolition, soil remediation, site grading, trenching, field and building construction, and paving. Overall construction of the project is estimated to take approximately nine months. The project site is located in a suburban area adjacent to U.S. 101, therefore GHG emissions generated from the transport of construction materials and waste would not be unusually high.

Neither the City of Morgan Hill nor the BAAQMD have quantified thresholds of significance for GHGs emitted during construction activities. Since the scope of climate change is so broad, emissions from construction for a single project are highly unlikely to constitute a significant contribution to the cumulative impact. There are measures, however, which can be implemented to reduce GHG emissions during construction.

As described in *Section 4.3, Air Quality*, the project would incorporate measures to reduce vehicle idling and particulate emissions. In addition, the City may include some of the following Best Management Practices which are recommended by BAAQMD for reducing construction GHG emissions:

- Use of alternative fueled (e.g. biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet;
- Use of local building materials of at least 10 percent
- Recycle or reuse at least 50 percent of construction waste or demolition materials.

The proposed project would have a less than significant impact related to construction GHG emissions. (**New Less Than Significant Impact**)

#### **4.7.2.3 Operational Greenhouse Gas Emissions and Consistency With Plans and Policies**

GHG emissions associated with operation of the project would include fossil fuel combustion for electricity and fuel burned for transportation to and from the site. Development on the commercial site may include restaurants, which would also emit GHGs from cooking with natural gas, and will be subject to its own separate project-level environmental review. Indirect emissions from project operation would result from water conveyance, wastewater treatment, and solid waste disposal.

### **Greenhouse Gas Emission Sources**

#### Mobile Sources

Vehicle traffic is the main source of GHG emissions that would be associated with the ball fields. As discussed in *Section 4.16, Transportation*, the project would not generate more vehicle trips than were analyzed in the SEQ EIR. Therefore the project would not cause an increase in vehicle-related emissions beyond what was disclosed in the SEQ EIR.

### Indirect Source of Emissions

Indirect source emissions for the proposed project would include generation of electricity provided for field and parking lot lighting, restroom and snack bar facilities, and water service. If the fields are built with grass instead of synthetic turf, then additional GHG emissions would result as an indirect effect of using more water on the project site than would be required for turf fields. The proposed project does not include any uses or features which would cause indirect GHG emissions beyond those previously-considered in the SEQ EIR.

Since the proposed project is consistent with the site development assumptions made for *Sports/Recreation/Leisure* land uses in the SEQ EIR, operational GHG impacts would be the same as those disclosed in the SEQ EIR (**Less Than Significant Impact [Same Impact As Approved Project]**)

#### **4.7.2.4**      *Consistency with Adopted Plans to Reduce GHG Emissions*

The proposed project will be required to conform to applicable policies and processes listed in Chapter 15.65 of the Municipal Code, which details the City's Sustainable Building Regulations. The project is consistent with the SEQ Plan and EIR, which were found to be consistent with the GHG emissions reduction requirements set by AB 32. Therefore, the proposed project would not conflict with any policies or regulations adopted for the purpose of reducing GHG emissions. (**Less Than Significant Impact [Same Impact As Approved Project]**)

#### **4.7.3**      Conclusion

Measures have been identified to minimize previously-unidentified construction GHG emissions impacts resulting from development on the project site. These emissions would not exceed any regulatory thresholds and would not be a substantial contribution to cumulatively significant GHG emissions. (**New Less Than Significant Impact**)

The proposed project is consistent with the land use assumptions made for the site in the SEQ EIR and would not cause new or more substantial operational GHG impacts. Therefore the project is consistent with adopted plans to reduce GHGs. (**Less Than Significant Impact [Same Impact As Approved Project]**)

## 4.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion based in part on a Phase I and Phase II Environmental Site Assessment (ESA) prepared for the site by *Weber, Hayes, & Associates* on March 3, 2014. The report is attached as Appendix C of this Initial Study.

### 4.8.1 Setting

#### 4.8.1.1 *Overview*

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples include pesticides, herbicides, petroleum products, heavy metals (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing. Determining if such substances are present on or near project sites is important because, by definition, exposure to hazardous materials above regulatory thresholds can result in adverse health effects on humans as well as harm to plant and wildlife ecology.

#### 4.8.1.2 *Existing and Historic Setting*

The 26-acre site is currently occupied by agricultural land and a small barn structure fronting Tennant Avenue. Aerial photographs dating back to the year 1939 show that the project site consisted of orchards from 1939 to 2009, when they were cleared from the property completely. Beginning in 2010, the orchard trees were cleared and the site was plowed for row crops. Currently there are no crops being grown on the project site, but it still has the capability to support agricultural activities.

Between 1939 and 1974, land surrounding the project site was primarily orchard land and rural residences. A notable difference between the 1968 aerial photo and the 1974 aerial of the project site is the addition of U.S. 101 along the western site boundary. The hotel across Tennant Avenue north of the project site was constructed by 1998. Aside from these two major changes, land surrounding the project site remains similar to its historic condition as rural residential and agricultural land.

#### 4.8.1.3 *On-Site Conditions*

The Phase I ESA prepared for the project site concluded that long-term historical agricultural land use is a likely indicator of elevated concentrations of pesticides and other agricultural chemicals in the soil. Additionally, small barn structures on agricultural land such as the one on the project site are frequently associated with storage of agricultural chemicals and equipment. There are three 500-gallon anhydrous ammonia fertilizer containers adjacent to the barn structure. The tanks were on wooden pallets and appear to be stored temporarily for seasonal farming purposes. Lastly, there is an active water supply well that is currently connected to the on-site irrigation system. Each of these conditions has the potential to be a hazard or to be associated with hazardous conditions on the project site, therefore Phase II Limited Soil Assessments were undertaken to address potential contaminants of concern.

## Phase II Limited Soil Assessment

On October 9<sup>th</sup>, 2013, nine four-point soil samples were collected from 36 locations across the property (see Figure 5 of Appendix C for sampling locations). The sampling program was designed to evaluate the property for common residual soil contaminants associated with agricultural uses. In addition, one sample from each of the nine quadrants was analyzed for arsenic and lead.

The organochlorine insecticide dieldrin was detected above the Environmental Screening Level (ESL) of 0.0023 mg/kg at each of the nine sampling quadrants, however all detected concentrations were below the California Human Health Screening Level (CHHSL) of 0.035 mg/kg. ESLs are a conservative threshold aimed at preventing contaminants from leaching into shallow groundwater, whereas the CHHSL is protective of human health via surface exposure pathways. Toxaphene, a highly chlorinated insecticide, was found in one sample above the ESL but below the CHHSL. The chlorinated rodenticide endrin was also detected above ESLs.

These low-level detections of dieldrin, endrin and toxaphene generally do not constitute a future risk to human health and safety at the site, but some of the detections exceeded groundwater quality protection screening levels (ESLs). Follow-up testing indicated that the low concentration detections of dieldrin throughout the site do not have the potential to leach to groundwater. A single detection of dieldrin near the small barn, however, exceeded both the groundwater protection based screening levels (ESLs) and the human health and safety exposure screening levels (CHHSLs) for ball field type land use (i.e. commercial-industrial).

Arsenic was detected throughout the site in concentrations ranging from 4.2 to 5.7 mg/kg, which exceed both the ESL and CHHSL for residential and industrial land use. Arsenic concentrations in soil ranging from 5.0 to 20 mg/kg are typical (or “background”) conditions for much of the Bay Area. The arsenic concentrations detected on the project site therefore represent background concentrations and are not considered to present a significant hazard. Lead detections ranged from 8.2 to 13.0 mg/kg, which is well below both the residential ESL (80 mg/kg) and CHHSL (150 mg/kg) for lead.

On February 5<sup>th</sup>, 2014, three shallow soil samples were collected from areas around the shed and analyzed for organochlorine pesticides, petroleum hydrocarbons, and heavy metals. Elevated concentrations of petroleum hydrocarbons (motor oil), lead, and/or dieldrin were detected in all three of these shallow soil samples.

### Asbestos-Containing Materials/Lead-Based Paint

Asbestos can be found in many types of building applications such as insulation, floor tiles, and roofing material. The manufacturing and use of asbestos in building products was curtailed in the United States in the late 1970s. Another hazardous material that was likely in use at the time the existing barn structure was constructed is lead-based paint. The EPA defines lead-based paint as paint or other surface coatings that contain lead equal to or in excess of one milligram per square centimeter, or 0.5 percent by weight. The small barn structure along Tennant Avenue is the only structure on the project site and it is not insulated or painted, therefore asbestos-containing materials and lead-based paint are not likely to be present on the site.

#### **4.8.1.4 Off-Site Conditions and Sources of Contamination**

A review of regulatory databases and available documents found no records of hazardous materials use, waste management, accidental releases, or related environmental concerns at the project site. Only one condition was found in the vicinity of the site: the Olin Corporation perchlorate plume. This groundwater plume originates approximately 3,300 feet west of the project site. While no water quality analytical data was available at the time of the analysis, downgradient monitoring well data indicate that there is a low likelihood of perchlorate concentrations exceeding six micrograms per liter ( $\mu\text{g/L}$ ) on the project site. If the water well on the project site is used for future development on the site, water quality data should be collected and evaluated from the on-site well.

#### **4.8.1.5 Other Hazards**

##### **Airport Safety Hazards**

The project site is not located within the South County Airport Influence Area (AIA) or any areas surrounding the South County Airport that are affected by noise, height, and safety considerations.<sup>14</sup> Since the site is not within the AIA of an airport, it is not subject to Santa Clara County Airport Land Use Commission (ALUC) evaluation. The project site is not within two miles of a public airport and is not located within the vicinity of a private airstrip.

##### **Proximity of Construction to Schools**

The nearest school to the project site is Barrett Elementary School, over 2,000 feet northwest of the site across U.S. 101. Therefore, construction at the project site would not be within one-quarter mile of an existing nearby school. It is possible, however, that the high school evaluated as part of the SEQ Plan could be constructed before the proposed project. If that occurred, the project site would be 600 feet west of the high school and within one-quarter mile of a school.

##### **Wildfires**

The project site is bordered by rural residences, agricultural land, local roads, and U.S. 101. The site is not located in a State of California Very High Fire Hazard Severity Zone at the wildland and urban interface.<sup>15</sup>

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<sup>14</sup> Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, South County Airport*. May 2008. Available at: <[http://www.countyairports.org/docs/CLUP\\_E16/CLUP\\_Draft\\_E16\\_052108.pdf](http://www.countyairports.org/docs/CLUP_E16/CLUP_Draft_E16_052108.pdf)>. Accessed February 27, 2013.

<sup>15</sup> California Department of Forestry and Fire Protection. Fire Hazard Severity Zones Maps. Accessed February 23, 2015. Available at: [http://www.fire.ca.gov/fire\\_prevention/fhsz\\_maps\\_santaclara.php](http://www.fire.ca.gov/fire_prevention/fhsz_maps_santaclara.php)

**4.8.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact Than "Approved Project"	Checklist Source(s)
<b>Would the project:</b>						
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,13
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,13
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
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, will it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,13
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, will the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,14
6. For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
7. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact Than "Approved Project"	Checklist Source(s)
Would the project:						
8. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13,15

**4.8.2.1 Prior Impact Evaluation in SEQ EIR**

The SEQ EIR found that the conversion of agricultural and rural properties to urban use may expose agricultural chemicals and hazardous building materials. This potential impact was determined to be less than significant due to project-level environmental review and compliance with federal, state, and local health and safety regulations. The SEQ EIR also concluded that potentially significant hazardous material impacts could result from contamination on sites in the SEQ Plan Area listed pursuant to Government Code Section 65962.5. The SEQ EIR analysis requires a Phase I Environmental Site Assessment prepared by a qualified individual to ensure that potentially significant impacts from these sites would be reduced to a less than significant level. All other hazards and hazardous material issues were found to be less than significant for development in the SEQ Plan Area.

**4.8.2.2 On-Site Hazardous Materials Impacts**

**Agricultural Pesticides**

As described in *Section 4.8.1.3* above, concentrations of agricultural pesticides on the project site with one exception near the barn do not exceed the CHHSLs and therefore do not pose a risk to human health. Additional testing found that, with the exception of soil in the vicinity of the barn (discussed below), concentrations of pesticides on the project site also are not high enough to leach into groundwater. Therefore residual agricultural pesticides on the majority of the project site are not a hazard to future users of the site, to any construction workers exposed during construction, or to groundwater.

**Barn Structure**

There is no paint on the small barn structure with potential for lead or building materials with the potential to contain asbestos, therefore demolition of the barn structure does not have the potential to expose construction workers to hazardous building materials.

The City of Morgan Hill will require the current property owner to perform the remedial activities to remove the contaminants identified in the Phase I/II and obtain appropriate documentation from the

Santa Clara County Department of Environmental Health (SCCDEH) prior to close of escrow. To meet this requirement, the property owner has enrolled in the Voluntary Cleanup Program with the SCCDEH. Remediation would entail removal of the top 12-18 inches of soil in the vicinity of the small barn structure, which may necessitate demolition of the barn structure. Completion of remediation would be documented by a case closure letter from the SCCDEH. Therefore, since the contamination around the barn would be remediated prior to the City's acquisition of the property, future construction on the project site for either the commercial property or for the ball fields would not create potentially significant impacts associated with the accidental release of hazardous materials. **(Less Than Significant Impact [Same Impact as Approved Project])**

#### **4.8.2.3      *Off-Site Hazardous Materials Impacts***

The Phase I/II ESA prepared for the project found no potential for off-site contamination to affect the project site. There is a known perchlorate plume originating from the former Olin Corporation building at 425 Tennant Avenue, approximately 0.6 miles west of the project site. The multi-mile plume is being actively remediated and is heavily regulated due in part to the reliance of the City on groundwater for its freshwater supply. Though groundwater in the area is known to flow in a southerly to southeasterly direction, toward the project site, the mapped area of the plume does not overlap with the project site.

There are three monitoring wells for this plume located at the end of Fisher Avenue adjacent to the south end of the project site. At one of these monitoring wells, low-level detections of perchlorate were found in the middle-deep aquifer zone and the intermediate-lower aquifer at 5.3 µg/L and 1.5 µg/L, respectively. According to the Phase I/II ESA, it is highly unlikely that perchlorate concentrations in the existing irrigation water supply well (located adjacent to the barn structure over 1,600 feet north of the monitoring wells) would have concentrations of perchlorate above the regulatory water quality goal of 6.0 µg/L. Based on these findings, off-site hazardous material contamination is not a potential hazard on the project site. **(Less Than Significant Impact [Same Impact as Approved Project])**

#### **4.8.2.4      *Other Hazards***

The project site is not located within two miles of a public airport and there are no private airstrips in the vicinity. The project site is not located within a Very High Fire Hazard Severity Zone and is not located within a quarter mile of an existing school. The site is located within one-quarter mile of the high school proposed as part of the SEQ Plan, however. Since the proposed project would not emit or handle any hazardous waste or materials, no hazards to the school would result from the proposed project.

Development on the project site would take access via existing roads and a new driveway from Murphy Avenue, and would not interfere with the City's emergency response or evacuation plans. As part of the standard project review process, the proposed site plan would be reviewed for consistency with the City's Fire Code and the provisions related to emergency access prior to project approval. **(No Impact [Same Impact As Approved Project])**

An existing groundwater well located behind the small barn structure is currently connected to an on-site irrigation system. If the proposed ball fields or commercial development do not intend to use the well as a source of water, the well should be properly destroyed under permit within one year of inactivity, per State Department of Water Resources guidelines. If the well is maintained for water use, it is possible that low levels of perchlorate could be found in the water. The Phase I/II ESA recommends that if this is the case, that the well will be used for future land uses on the site, additional water quality data should be collected to ensure that the water is safe for use. Since it is unknown at this time whether the well will be used or destroyed, potentially impacted water quality is not considered a potentially significant impact for this land acquisition. Future project-level environmental review will need to evaluate this well if it is to be used as a source of water. If the well is not to be used to support the ball fields, or put to another productive use, it would be properly abandoned under a permit from the Santa Clara Valley Water District.

#### **4.8.3            Conclusion**

The proposed project would not result in new or more significant hazards and hazardous materials effects than those previously-described in the SEQ EIR. **(Less Than Significant Impact [Same as Approved Project])**

## 4.9 HYDROLOGY AND WATER QUALITY

### 4.9.1 Setting

The project site consists of agricultural land and a small barn structure fronting Tennant Avenue. Elevation on the site ranges from 332-344 feet above mean sea level (amsl) and the topography of the project area slopes gradually to the south. The project site is in the Llagas Creek watershed which drains to Monterey Bay.

#### 4.9.1.1 *Drainage*

The City of Morgan Hill is divided into several hydrologically distinct drainage areas. Each drainage area has a system of conveyance facilities, pumps, and detention basins to collect and dispose the runoff. Stormwater runoff from the project site drains first to the Madrone Channel, which then connects to Llagas Creek, and is ultimately discharged into the Monterey Bay.

#### 4.9.1.2 *Flooding*

##### **Flood Hazard (100-year Flood)**

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) designates the Madrone Channel as Flood Zone AE, which is the designation for areas subject to inundation by the one percent annual chance flood event (i.e. a 100-year flood).<sup>16</sup> The project site is outside of both the 100-year flood zone and the 500-year flood zone (0.2% annual chance of flood event).

##### **Dam Failure**

The SCVWD operates a comprehensive dam safety program that includes Anderson and Chesbro dams. Elements of the safety program include dam maintenance, periodic studies, annual inspections with the Division of Safety of Dams (DSOD), review and evaluation of monitoring data year-round, a program to evaluate the conditions of the dam following earthquakes and an Emergency Action Plan coordinated with local emergency management agencies, and capital improvements when major repairs are needed.<sup>17</sup>

In 2011, the SCVWD completed a seismic stability evaluation of Anderson Dam. The evaluation found that the dam is subject to significant damage if a large earthquake were to occur close to the dam. A storage restriction of 25.5 feet below the spillway has been put in place to protect public safety. The dam's two regulatory agencies, DSOD and the Federal Energy Regulatory Commission approved the restriction. The restriction allows the dam to fill to 68 percent of its full storage

<sup>16</sup> Federal Emergency Management Agency (FEMA). *Flood Insurance Rate Map. Santa Clara County, California. Map Number 06085C0626H*. May 18, 2009. Available at: <http://msc.fema.gov/portal>

<sup>17</sup> Santa Clara Valley Water District. *Dam Safety*. 2014. Accessed March 3, 2015. <http://www.valleywater.org/EkContent.aspx?id=8144&terms=chesbro+dam>

capacity, which will prevent the uncontrolled release of water after a major earthquake.<sup>18</sup> The SCVWD initiated a capital project to complete the planning, design and construction of a seismic retrofit by the end of 2018. The operating restriction will remain in place until the project is completed.

### **Seiches, Tsunamis, and Mudflows**

A seiche is defined as a wave generated by rapid displacement of water within a reservoir or lake, due to an earthquake that triggers land movement within the water body or landsliding into or beneath the water body. The project site is not located near a waterbody that is considered susceptible to a seismically-induced seiche, given the physical geography of the site and the lack of surrounding water bodies.

A tsunami is a very large tidal wave caused by an underwater earthquake or volcanic eruption. Tsunamis affecting the Bay Area could result from off-shore earthquakes. The project site is not located within a potential tsunami inundation area.<sup>19</sup>

A mudflow is a large rapid (up to approximately 50 miles per hour) movement of mud formed by loose earth and water. Hillsides and slopes of unconsolidated material could be at risk to mudflows if these areas become saturated.<sup>20</sup> The project area is relatively flat and there are no hillsides adjacent to the site. Therefore, the project site is not likely to be vulnerable to mudflow.

### **City of Morgan Hill Flood Control**

The City's Flood Damage Prevention Ordinance (Municipal Code Chapter 18.42.030) is intended to minimize public and private losses due to flood conditions in specific areas of the City. The ordinance restricts or prohibits uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities. The project site is not located within a mapped flood zone and does not meet the definition of a 'special flood hazard area' as set forth in the City's Municipal Code, therefore development on the project site would not be subject to the Flood Damage Prevention Ordinance.

#### **4.9.1.3 Groundwater**

Based on the Phase I/II ESA prepared for the project site (see Appendix C of this Addendum), groundwater beneath the site fluctuates seasonally and may be as high as 10 to 15 feet bgs during the wet season and as low as 40 feet bgs during the dry season. The dominant regional groundwater flow direction is southerly to southeasterly. The City currently relies on local groundwater as its sole water supply source. The City receives its water from two groundwater sources: the Coyote Valley subarea of the Santa Clara Subbasin and Llagas Subbasin, part of the Gilroy-Hollister Basin. Both

<sup>18</sup> California Department of Conservation. *Santa Clara County Tsunami Inundation USGS 24K Quads*. Accessed February 19, 2015. Available at:

[http://www.consrv.ca.gov/cgs/geologic\\_hazards/Tsunami/Inundation\\_Maps/SantaClara/Pages/SantaClara.aspx](http://www.consrv.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SantaClara/Pages/SantaClara.aspx)

<sup>19</sup> Association of Bay Area Governments. *Tsunami Inundation Map for Coastal Evacuation*. Accessed February 19, 2015. Available at: <http://quake.abag.ca.gov/tsunamis/>

<sup>20</sup> U.S. Geological Survey. *Landslide Hazards*. USGS Fact Sheet FS-071-00. May 2000.

subbasins are managed and administered by the SCVWD. The project site is situated over the Llagas groundwater subbasin which drains to the south toward Llagas Creek and eventually Monterey Bay.<sup>21</sup>

**4.9.1.4 Water Quality**

The water quality of ponds, creeks, streams, and other surface water-bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as “nonpoint” source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Deposition of eroded material in water features can increase turbidity, thereby endangering aquatic life and reducing wildlife habitat.

Agricultural fields are frequently sources of nonpoint source pollution due to the use of fertilizers and pesticides. Both irrigation and precipitation can lead to runoff from the field and into local waterways, where the added nutrients or other chemicals can have detrimental effects to the aquatic environment.

**4.9.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact Than “Approved Project”	Checklist Source(s)
Would the project:						
1. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3

<sup>21</sup> Santa Clara Valley Water District. 2012 Groundwater Management Plan. July 2012. Figure ES-2.

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact Than "Approved Project"	Checklist Source(s)
Would the project:						
4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on-or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3
5. Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3
6. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
7. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,16
8. Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3
9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
10. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

**4.9.2.1 Prior Impact Evaluation in SEQ EIR**

The SEQ EIR concluded that impacts to water quality and groundwater resources from implementation of the SEQ Plan would be less than significant provided that projects met the City’s stormwater management requirements. Minimization measures for water quality impacts, including implementation of water pollution prevention measures in compliance with local, regional, and state permit requirements, were identified. These measures are discussed in detail below. In addition, the SEQ EIR identified potentially significant impacts from drainage and flooding, but included mitigation measures to reduce those impacts to less than significant levels.

#### 4.9.2.2 *Drainage*

The project site is approximately 26 acres in size and consists almost entirely of pervious surfaces. It is unknown at this time whether the proposed fields will be synthetic turf or grass. Synthetic turf fields would cause most of the site to become impervious, whereas grass fields would accommodate local infiltration of water. Thus the two potential development scenarios would have very different implications for drainage. While stormwater treatment in compliance with the City's stormwater management requirements would be needed for both grass and turf fields, the size of stormwater facilities and the volume of water draining from the site to those facilities would be much greater for synthetic turf fields.

Per the SEQ EIR, there is currently no storm drainage system in the SEQ Plan Area south of Tennant Avenue, which includes the project site. The City requires new development projects to, at a minimum, retain all water from the 85<sup>th</sup> percentile of rainfall events (approximately two to five year storm events) on site. Any on-site systems (retention basins) would be required to be designed to detain a volume of water up to a 25-year storm event while releasing water at a rate reflective of the 10-year predevelopment flow. This design limits stormwater flows off-site to less than 10-year predevelopment flows. There is no existing public stormwater system on the site, therefore the project could substantially increase the stormwater runoff from the site. Increased runoff has the potential to carry pollutants into local waterways and also cause local flooding.

**Impact HYD-1:** The current project design does not accommodate the potential for increased stormwater runoff from the project site. Increased runoff can increase pollution and sedimentation of local waterways as well as cause localized flooding. **(Significant Impact)**

**Mitigation Measures:** Since the City has yet to decide whether the project would include synthetic turf fields or grass, it is premature to design a stormwater treatment system for the project. Therefore, the following measure will be implemented prior to approval of a final ball fields design to ensure that potential drainage impacts are mitigated to less than significant levels.

**MM HYD-1.1:** The project proponent (the City) shall prepare a Stormwater Management Plan to manage stormwater runoff from the project site. Options to manage stormwater runoff include surface bioretention ponds, underground rain tanks, and off-site bioretention. The project could also extend and connect to the City's Municipal stormwater drainage infrastructure, which will require subsequent environmental review. The Plan shall be submitted to the Director of Public Works to ensure compliance with the City of Morgan Hill stormwater treatment requirements. Any secondary impacts resulting from implementation of this measure shall be evaluated in a subsequent environmental review completed prior to consideration of a Site Development Permit for the project site.

**MM HYD-1.2:** In accordance with Morgan Hill Municipal Code Chapter 17.32, Improvements and Improvement Agreements, the final collection system shall be designed to be capable of handling runoff without local flooding.

On-site retention facilities shall be designed to a 25-year storm capacity. Off-site detention and retention facilities may also be proposed, and are subject to the approval of the Director of Public Works.

**MM HYD-1.3:** As required by the State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, construction activity resulting in a land disturbance of one (1) 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) 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 (WDID) number to the construction site will be issued after the 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.

Implementation of these measures once the field type is known (i.e. natural grass or synthetic turf) will ensure that drainage from the future development of the site does not result in local flooding or drainage impacts. **(New Less Than Significant Impact With Mitigation)**

#### **4.9.2.3      *Flooding***

The project site is not located within a mapped flood zone and does not meet the definition of a ‘special flood hazard area’ as set forth in the City’s Municipal Code. In addition, the project would not include any housing. Therefore the proposed project would not expose any people or structures to flood hazards and would not result in any obstructions in an existing floodplain. **(No Impact [Less Impact Than Approved Project])**

#### **Dam Failure**

The City of Morgan Hill is located in the dam failure inundation area of Anderson Dam. While the project site could be subject to inundation should the Anderson Dam fail catastrophically, the dam is inspected twice a year by the SCVWD in the presence of representatives from the California DSOD and the Federal Energy Regulatory Commission. Furthermore, the Anderson Reservoir is managed to prevent significant damage during a maximum credible earthquake. While the potential inundation resulting from catastrophic dam failure could damage property and proposed structures within the City as a whole and pose a severe hazard to public safety, the probability of such failure is extremely remote and reservoir levels have been lowered to maintain an additional level of safety;

therefore dam inundation failure is not considered a significant hazard.<sup>22</sup> **(Less Than Significant Impact [Same as Approved Project])**

#### 4.9.2.4 Water Quality

##### Construction Impacts

Construction and grading activities temporarily increase the amount of debris on the site, which could increase pollutant loads of eroded material in stormwater runoff. Given the proximity of the Madrone Channel, which drains to the Monterey Bay watershed, construction on the project site could increase pollutant loads in stormwater runoff to local waterways.

**Standard Measures:** In accordance with the City of Morgan Hill Standard Conditions of Approval and the NPDES Construction General Permit, the following measures would be implemented to reduce potential construction-related water quality impacts.

Implementation of the following Pre-Construction Measures would be required at the time of future construction on the project site, and would avoid potentially significant construction-related water quality impacts:

- 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 as necessary.
- 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 sites will be swept daily (with water sweepers).
- Vegetation in disturbed areas will be replanted as quickly as possible.

Per **MM HYD-1.3**, the project will be required to comply with the Nonpoint Source Pollution Program by preparing a SWPPP that includes implementation of best management practices prior to commencement of grading and construction activities.<sup>23</sup> Once grading begins the SWPPP will be maintained on-site and updated as needed while construction progresses. **(Less Than Significant Impact [Same As Approved Project])**

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<sup>22</sup> Santa Clara Valley Water District. *Dam Safety*. 2014. Accessed March 3, 2015. Available at: <http://www.valleywater.org/EkContent.aspx?id=8144&terms=chesbro+dam>

<sup>23</sup> State Water Resources Control Board, Division of Water Quality. *Construction General Permit Fact Sheet*. Last Updated January 2013. Accessed March 3, 2015. Available at: [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml)

## Post-Construction Phase Impacts

The proposed development would result in an increase in impervious surfaces and could increase stormwater runoff in the project area. The project site is almost entirely pervious and, as detailed above, it is not known at this time whether the proposed fields would be constructed with impervious synthetic turf or with pervious grass. Implementation of **MM HYD-1.1** through **-1.3** would ensure that the project does not result in significant post-construction stormwater impacts. **(New Less Than Significant Impact With Mitigation)**

### 4.9.2.5 Groundwater

The 2010 Urban Water Management Plan prepared by the SCVWD indicates that the operational groundwater storage capacity for the Llagas groundwater sub-basin is approximately 150,000 acre-feet.<sup>24</sup> The SEQ EIR found that adequate long-term groundwater supplies would be available to serve future development that occurs within the SEQ Area, and therefore development in the SEQ Area would not cause groundwater overdraft.

Groundwater beneath the site fluctuates seasonally and may be as high as 10 to 15 feet bgs during the wet season and as low as 40 feet bgs during the dry season. Future construction on the project site would not entail any excavation close to known groundwater depths, as such the project would not interfere with groundwater flow or expose any aquifers. Also, in the event the existing well is not used to support the ball fields complex, it would be abandoned under a permit from the SCVWD to ensure it would not serve as a conduit for contaminants to reach the aquifer.

Since the majority of the project site contains pervious surfaces, precipitation on the site currently serves as an incremental contributor to groundwater recharge. With the eventual construction of surface parking, commercial development on the northern portion of the site, and the fields, the proposed project would increase impervious surfaces on the site. At this time it is not known whether the fields will be constructed with grass or with synthetic turf. If the City opts to construct grass fields, the fields would be considered pervious surfaces that allow precipitation to recharge groundwater. On the other hand, synthetic turf fields usually contain a liner beneath them which prevents water from reaching the soil below, and would ultimately result in a site that is almost entirely impervious.

The SEQ EIR found that the use of on- or off-site bioretention in compliance with City stormwater policies would support ongoing groundwater recharge. The City has not yet determined which method of stormwater treatment will be employed on the site, in part because it depends on which types of fields will be constructed. Future project-level environmental review will need to evaluate whether the type of fields and the stormwater treatment plan selected (as required by **MM HYD-1.1** through **-1.3**) will substantially interfere with groundwater recharge. The SEQ EIR did not identify the project site as integral to groundwater recharge and the adjacent Madrone Channel serves as a groundwater recharge facility. Given these in addition to the contribution of project stormwater facilities to groundwater recharge, the proposed project would not result in a significant impact to groundwater recharge. **(Less Than Significant Impact [Same as Approved Project])**

<sup>24</sup> City of Morgan Hill. *2010 Urban Water Management Plan*. July 2011.

### 4.9.3 Conclusion

Implementation of these measures once the field type is known (i.e. natural grass or synthetic turf) will ensure that drainage from the future development of the site does not result in local flooding or drainage impacts. **(New Less Than Significant Impact With Mitigation)**

With the implementation of standard measures detailed in this chapter and project-level environmental review of potential groundwater recharge impacts, the proposed project would have a less than significant impact on water quality and groundwater recharge. **(Less Than Significant Impact [Same as Approved Project])**

**4.10 LAND USE**

**4.10.1 Setting**

The 26-acre project site is flat and consists primarily of agricultural land with a small barn structure and active water well/pump house fronting Tennant Avenue. Surrounding land uses are primarily agricultural, with single-family rural residences on row crop and orchard properties to the south across Fisher Avenue as well as adjacent to the eastern site boundary. There is a hotel north of the site across Tennant Avenue, and beyond that there are a mix of land uses including the Morgan Hill Aquatics Center, the Outdoor Sports Center, and agricultural land with single-family residences. The western edge of the site is bounded by the SCVWD’s Madrone Channel and U.S. 101.

The SEQ Plan changed the General Plan designation for the project site to *Sports/Recreation/Leisure*, which land use designation was created as part of the SEQ Plan. This designation is intended to allow a wide range of private commercial, retail, and public/quasi-public sports-recreation-leisure themed uses, at a scale that creates a high-quality, attractive, health-oriented, fun destination for regional and local users in a manner that supports the city’s economic development, city identity and greenbelt goals. The site is currently zoned *A-20Ac-sr (Exclusive Agriculture with Scenic Roads Combining District)* by the County of Santa Clara.

The SEQ Plan identifies the ultimate zoning for the site as *Sports/Recreation/Leisure (Subdistrict B)*, which would not take effect until the City annexes the site. This zoning designation allows the types of uses detailed in the *Sports/Recreation/Leisure* General Plan designation. Subdistrict B applies for sites located immediately adjacent to U.S. 101 and allows for commercially-oriented uses such as gas stations, restaurants, motels/hotels, and grandstands/stadiums. The SEQ Plan also called for two drive-thru uses (gas stations or restaurants) to be conditionally permitted within Subdistrict B.

**4.10.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Checklist Source(s)
Would the project:						
1. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
3. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3

**4.10.2.1 Prior Impact Evaluation in SEQ EIR**

The SEQ EIR concluded that the SEQ Plan, which included expansion of the City’s Urban Growth Boundary (UGB), Urban Service Area (USA), and City Limits, would have less than significant land use compatibility impacts. With the requirement that specific projects apply for coverage under the Santa Clara Valley Habitat Plan (VHP), no conflicts with the VHP were anticipated.

**4.10.2.2 Land Use Impacts from the Project**

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; or 2) conditions on or near the project site may have impacts on persons or development introduced onto the site by the project. Both of these circumstances are aspects of land use compatibility. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project’s design or scope. Depending on the nature of the impact and its severity, land use compatibility conflicts can range from minor irritations and nuisance to potentially significant effects on human health and safety.

**Division of a Community**

The proposed project would not divide the site or construct new facilities which divide an existing community. Though the driveway from Murphy Avenue would cross a parcel adjacent of the site, it would not divide a community. Therefore the proposed project would not divide an established community. **(No Impact [Same Impact As Approved Project])**

**Land Use Compatibility and Consistency**

The SEQ Plan called for the entire project site to be included within the City’s UGB, USA, and City Limits. The project site is currently located within the City's UGB, but is outside of the USA and City Limits. As part of the proposed project, the City would acquire the entire 26 acre parcel and begin the process of incorporating it into the City Limits and USA. This process will be undertaken through the Santa Clara County Local Agency Formation Commission (LAFCO), which is a state-mandated local agency that oversees the boundaries of cities and special districts. If the incorporation application is ultimately unsuccessful, the City will explore opportunities to develop the project while it remains outside of the City Limits.

Ultimately, the purpose of the proposed property acquisition is to construct six ball fields on the project site and sell 3.4 acres on the north end of the property back to the current owner for future commercial development consistent with the *Sports/Recreation/Leisure* general plan designation and planned zoning designation (Subdistrict B). This project is consistent with the General Plan designation for the site as well as the planned zoning designation, as it would create a recreational facility that would serve both regional and local users and would offer a high-quality, attractive and health-oriented destination. The commercial element of the future development plan is also consistent because the designations are intended to allow some commercially-oriented uses near U.S. 101. The project would not be consistent with the current County zoning for the site, however the annexation and rezoning of the site to *Sports/Recreation/Leisure (Subdistrict B)* is an integral element of the ball field development project and consistency with the current County zoning is not relevant.

Since the SEQ EIR found that the expansion of the City's UGB, City Limits, and USA, as well as the designation of land for *Sports/Recreation/Leisure* uses would result in less than significant land use impacts, and since the proposed project is consistent with the SEQ Plan, the proposed project is not anticipated to result in any new or more significant impacts to surrounding land uses than the SEQ Plan. The proposed ball fields would provide parking on-site for users (see **Section 4.16, Transportation** for more information on parking), and would not include any uses that might prevent the surrounding land uses from continuing their operation as they do today. As discussed in the noise, air quality, and aesthetics sections of this report, the residences on nearby properties would not be affected by significant air quality, noise, or visual effects from the proposed ball fields. Therefore, the proposed land acquisition, with the ultimate purpose of City ball field and private commercial development on the site, would be compatible with the surrounding land uses. **(Less Than Significant Impact [Same Impact As Approved Project])**

#### **4.10.2.3      *Impacts to the Proposed Project***

The project site is adjacent to U.S. 101, which means that users of the proposed fields would be exposed to elevated concentrations of air pollutants and noise levels as a result of the heavy vehicle use occurring nearby. As described in **Section 4.3, Air Quality** air pollution exposure would be less than significant. With the incorporation of the measures identified for potentially significant noise impacts (see **Section 4.12, Noise**), impacts to the proposed project resulting from the land use on the site would not be significant.

#### **4.10.2.4      *Consistency With an Adopted Habitat Plan***

As described in **Section 4.4.2.4** of this report, the proposed ball fields development does not meet any of the definitions for Covered Activities under the VHP and does not have incidental take authorization under the VHP. Mitigation Measure 6a from the SEQ EIR requires future development to apply for coverage under the VHP and pay applicable VHP fees prior to issuance of grading permits. The project will apply for coverage under the VHP and pay land cover and nitrogen deposition fees to the Santa Clara Valley Habitat Agency as called for by the VHP. This would reduce potential nitrogen deposition impacts to a less than significant level (see full discussion in **Section 4.4, Biological Resources**). Therefore the project would not conflict with the VHP. **(New Less Than Significant Impact)**

#### 4.10.3 Conclusion

Though the project cannot receive incidental take authorization under the VHP, the project would pay nitrogen deposition fees to the Santa Clara Valley Habitat Agency as called for by the VHP, which would reduce potential nitrogen deposition impacts to a less than significant level (see full discussion in *Section 4.4, Biological Resources*). Therefore the project would not conflict with the VHP. **(New Less Than Significant Impact)**

The proposed project would not divide an established community and would be consistent with the land use designations established for the site in the SEQ Plan. Development consistent with the SEQ Plan would not result in any new or more significant land use impacts than previously-identified for the project site. **(Less Than Significant Impact [Same Impact as Approved Project])**

**4.11 MINERAL RESOURCES**

**4.11.1 Setting**

The State of California has protected mineral resource zones by implementing the Surface Mining and Reclamation Act of 1975.<sup>25</sup> The goals of the Act include classifying mineral resources in California and providing local governments with the information needed to protect these resources. Local governments are responsible for designating lands that contain regionally significant mineral resources in local general plans in order to protect these resources in areas of intensive competing land uses. There are no known mineral resources on the project site. The project site is located in Mineral Resource Zone 1, which is for areas where adequate information indicates that no significant mineral deposits are present or there is little likelihood for their presence.<sup>26</sup>

**4.11.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Checklist Source(s)
Would the project:						
1. Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,17
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

**4.11.2.1 *Prior Evaluation in the SEQ EIR and Impacts to Mineral Resources***

The SEQ EIR did not evaluate potential impacts to mineral resources, which implies that mineral resources are not present in the SEQ Plan Area such that they could be impacted by land use development. Based on a review of mineral classification maps prepared by the California Department of conservation, the project site does not contain any mineral resources. Therefore the project is not expected to result in the loss of availability of known mineral resources of value to the City of Morgan Hill and the residents of the California. **(No Impact [Same Impact as Approved project])**

<sup>25</sup> California Department of Conservation, Office of Mine and Reclamation. *Surface Mining and Reclamation Act and Associated Regulations*. January 2007. Available at: <http://www.conservation.ca.gov/omr/smara/Documents/010107Note26.pdf>. Accessed January 14, 2014.

<sup>26</sup> California Department of Conservation, and Kohler-Antablin, S. *Generalized Mineral Land Classification Map of the Monterey Bay Production-Consumption Regions North Half*. 1999. Available at: <http://www.quake.ca.gov/gmaps/WH/smaramaps.htm>

**4.11.3        Conclusion**

The project would not result in a significant impact from the loss of availability of a known mineral resource. **(No Impact [Same Impact as Approved project])**

## 4.12 NOISE

The following discussion is based upon a noise assessment prepared for the proposed project by *Illingworth & Rodkin, Inc.* in February 2015. This analysis is included as Appendix D of this Initial Study/Addendum.

### 4.12.1 Setting

A brief summary of environmental noise and vibration is provided below. For additional information on the properties of environmental noise and the methods used to evaluate it, please see the noise assessment included as Appendix D of this Initial Study/Addendum as well as Chapter 3-10 of the SEQ EIR. The regulatory setting and applicable requirements for environmental noise and vibration have not changed since the adoption of the SEQ EIR.

#### 4.12.1.1 *Noise and Vibration Background*

##### **Noise**

Noise is defined as unwanted sound. Noise can be disturbing or annoying because of its pitch or loudness. Pitch refers to relative frequency of the vibrations by which sound is produced. Higher pitched signals sound louder to people than sounds with a lower pitch. A decibel (dB) is a unit of measurement which indicates the relative amplitude of a sound. A 10 on the decibel scale marks the lowest sound level that a healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis such that each 10 decibel increase is perceived as a doubling of loudness. The California A-weighted sound level, or dBA, is a sound measurement scale that gives greater weight to sounds to which the human ear is most sensitive.

Sensitivity to noise increases during the evening and at night because excessive noise interferes with the ability to sleep. Twenty-four hour descriptors have been developed that emphasize quiet-time noise events. The Day/Night Average Sound Level,  $L_{dn}$ , is a measure of the cumulative noise exposure in a community. It includes a 10 dB addition to noise levels from 10:00 PM to 7:00 AM to account for human sensitivity to night noise.

##### **Vibration**

Ground vibration consists of rapidly fluctuating motions or waves, which are also measured in decibels.<sup>27</sup> The abbreviation “VdB” is used for vibration decibels to reduce confusion with sound decibels. Construction activities can cause vibration that varies in intensity depending on several factors. Pile driving and vibratory compaction equipment typically generate the highest construction-related groundborne vibration levels. The two primary concerns with construction-induced vibration are the potential to damage a structure, and the potential to annoy or disturb people and interfere with enjoyment of life.

<sup>27</sup> Decibels of ground vibration refer to peak vertical velocities (PPV) of the floors of affected structures. In contrast, sound decibels refer to the time-averaged magnitudes of fluctuations in air pressure levels.

#### 4.12.1.2 Existing Noise and Vibration Environment

##### Noise

The primary source of noise in the project area is vehicle traffic on U.S. 101 along the western site boundary. Vehicles on Tennant Avenue also account for some of the existing noise in the project area, though to a lesser extent than vehicles on U.S. 101. The project site is not located within two miles of a public airport and there are no private airstrips in the vicinity.

A noise measurement taken for the SEQ EIR at the hotel north of the project site (approximately 140 feet north of Tennant Avenue) calculated average noise levels at that location to be 64 dBA  $L_{dn}$ , with instantaneous noise levels reaching 83.4 dBA  $L_{max}$ .

Noise monitoring was completed in February 2015 to quantify existing noise conditions at sensitive land uses adjacent to the project site. To estimate the day-night average noise level ( $L_{dn}$ ), this data was compared with long-term noise data gathered by *Illingworth & Rodkin, Inc.* for U.S. 101 in March 2012. Table 4.12-1 below summarizes the results, and Photo 7 shows the locations from which noise measurements were taken.

<b>ID</b>	<b>Noise Measurement Location</b>	<b><math>L_{eq}</math></b>	<b><math>L_{dn}^1</math></b>	<b><math>L_{max}</math></b>
ST-1	Northeast of Project Site, ~100 feet from the center of Tennant Avenue	59	63	69
ST-2	Along Fisher Avenue, ~1,100 feet from the center of Highway 101	59	63	63
ST-3	In front of 1175 Fisher Avenue, east of project site	58	62	64

<sup>1</sup> Day-night average noise levels were calculated using the short-term measurements taken in February 2015 and long-term noise data collected for Highway 101 in March 2012.  
 ST = Short-term  
 Source: Illingworth & Rodkin, Inc. *Southeast Quad Ball Fields – Noise Assessment*. February 27, 2015.



**Photo 7 Noise Measurement Locations**

**Vibration**

There are no known sources of vibration in the vicinity of the project site. Though they generate noise, personal automobiles and commercial trucks are not known to generate vibration at levels with the potential to affect structures or the environment outside of the limits of the roadway.

**4.12.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project result in:						
1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3.18
2. Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3.18

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project result in:						
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3.18
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3.18
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, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3,14
6. For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3

**4.12.2.1 Prior Impact Evaluation in the SEQ EIR**

The SEQ EIR concluded that significant and unavoidable roadway noise impacts would occur on Tennant Avenue west of Condit Road and east of Murphy Avenue, as well as on Murphy Avenue south of Tennant Avenue. Mitigation Measure NOI-1a to require a noise impact analysis of new development was identified in the SEQ EIR. Additional mitigation such as reducing speed limits, restricting truck traffic, providing traffic calming measures, and installing sound walls were identified to reduce noise levels to less than significant levels. Since some of the measures may conflict with other City goals and policies, the feasibility of the measures was uncertain and the roadway noise impacts were found significant and unavoidable. Along with temporary construction noise impacts, temporary construction and permanent operational vibration impacts from implementation of the SEQ Plan were less than significant.

#### 4.12.2.2 *Noise and Vibration Impacts from the Project*

##### **Operational Noise**

After acquiring the property, the City intends to construct six ball fields, batting cages, a concession stand, restrooms, bleachers, a driveway from Murphy Avenue, and surface parking on 22.6 acres of the site. The remaining 3.4 acres of the site would be sold back to the property owner for commercial development consistent with the *Sports/Recreation/Leisure* land use designation.

Noise associated with ball fields typically results from baseballs/softballs being hit, crowds cheering, shouting from players and spectators, and vehicle noise in the parking lot. A public address (PA) system may be installed at the fields to announce the players who are at bat. PA systems are typically mounted on a scorer's booth behind home plate and are designed to cover the spectator bleacher area located on both base lines adjacent to the scorer's booth behind home plate. The fields would be lighted and the anticipated schedule of use would be from 8:00 AM to 10:00 PM.

*Illingworth & Rodkin, Inc.* has made measurements of noise generated by baseball games at several locations throughout the Bay Area. Worst case noise levels are approximately 57 dBA  $L_{eq}$  at a distance of 100 feet from the center of the infield. Maximum noise levels reach approximately 65 dBA  $L_{max}$  at the same distance. Noise levels from sporting events typically decline at a rate of six dB per doubling of distance between the noise source and receptor.

There is a single-family residence approximately 250 feet east of the site along Fisher Avenue, and approximately 650 feet southeast of the proposed baseball fields dugouts. Another residence, though it is currently vacant, is located at the corner of Tennant Avenue and Murphy Avenue approximately 1,000 feet north of the proposed fields. Average noise levels from the proposed ball fields would range from 43-45 dBA  $L_{eq}$  at the nearest sensitive receptors. Maximum instantaneous noise levels at these locations would be approximately 51-53 dBA  $L_{max}$ . These noise levels would not measurably increase ambient or instantaneous noise levels at these residences because they are well below existing ambient noise levels (see Table 4.12-1, above). The noise levels generated by the project would also be below the regulatory threshold, thus meeting the residential Zoning Code noise limits established by the City.

##### Parking Lot Activities

Parking areas would be located along the northern, eastern, and southern property lines of the project site. Noise associated with the use of the parking lots includes vehicle circulation, loud engines, door slams, and human voices. Noise levels resulting from parking activities at the nearest residences located along Fisher Avenue would range from 34 to 44 dBA  $L_{eq}$  and maximum noise levels would range from about 39 to 49 dBA  $L_{max}$ . Noise levels associated with normal parking lot activities would typically be within the range of ambient traffic noise levels and would be below the residential Zoning Code limits established by the City.

## Traffic Noise

Per the City of Morgan Hill General Plan, a substantial increase would occur 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. The noise environment at the nearest residences exceeds 60 dBA  $L_{dn}$ ; therefore, a substantial noise increase would be identified where the project would result in a permanent noise level increase of 3 dBA  $L_{dn}$  or more. Using data from the project traffic analysis (Appendix E), the project noise assessment found that traffic noise levels along roadways serving the project site would increase by approximately one dBA  $L_{dn}$  as a result of the project. Noise from the driveway connecting the project site with Murphy Avenue would not be expected to exceed this one dBA  $L_{dn}$  ambient noise level increase.

Operational noise impacts to nearby sensitive receptors resulting from the project alone would be less than significant. The SEQ EIR determined, however, that roadway noise from development of the SEQ Plan Area would ultimately be significant and unavoidable. The proposed project would contribute to these cumulative impacts.

**Impact NOI-1:** Vehicle traffic generated by the proposed ball fields would contribute to significant and unavoidable ambient noise increases resulting from implementation of the SEQ Plan. **(Significant Impact)**

**Mitigation Measures:** The following mitigation was identified as MM NOI-1b in the SEQ EIR to reduce impacts from increased roadway noise in the SEQ Plan Area:

**MM NOI-1.1:** The proposed project shall implement the following measure that was identified in the SEQ EIR:

Prior to consideration of approval of any urban development within the SEQ Area, the City of Morgan Hill shall evaluate (1) reducing the speed limits, (2) implementing truck restrictions, (3) providing traffic calming measures such as center medians or narrowing the lane widths, or (4) installing sound walls or landscaped berms at the roadway segments of

- (A) Tennant Avenue west of Condit Road;
- (B) Tennant Avenue east of Murphy Avenue; and
- (C) Murphy Avenue south of Tennant Avenue.

Since the project contribute vehicle traffic to Tennant Avenue west of Condit Road, evaluation of noise reduction or attenuation measures will be needed prior to consideration of the ball fields development proposal. Implementation of this measure would mitigate the project's contribution to significant and unavoidable roadway noise impacts identified in the SEQ EIR. Due to the potential infeasibility of the aforementioned measures, the project would contribute to significant and unavoidable ambient noise impacts resulting from development of the SEQ Plan Area. **(Significant and Unavoidable Impact [Same Impact as Approved Project])**

## Construction Noise

Construction activities can generate high noise levels, especially during demolition, excavation, and foundation construction when heavy equipment operates on-site. Hourly average noise levels generated by demolition and construction typically range from 77-89 dBA  $L_{eq}$  at a distance of 50 feet from the center of a busy construction site, and drop off at a rate of approximately six dBA per doubling of distance between the source and receptor.

Typically, significant noise impacts do not result when standard construction noise control measures are enforced at the project site and when the duration of the noise-generating construction period is limited to one construction season (typically one year) or less. The exact duration of project demolition and construction activities is not known at this time. Based on the distance of the residences from the project site (the nearest residence is ~850 feet from the center of the project site), and given that construction would not occur across the entire site for the duration of the construction process, construction is not anticipated to result in potentially significant temporary noise impacts at nearby residences.

**Standard Measures:** The following standard measures will be implemented to reduce potential construction-related noise impacts to nearby sensitive receptors:

- Construction activities shall be limited to the hours between 7:00 a.m. and 8:00 p.m., Monday through Friday, and between the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction activities should occur on Sundays or federal holidays (Consistent with Section 8.28.040 of the Morgan Hill Municipal Code).
- Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise generating equipment (e.g. rock crushers, compressors) as far as possible from adjacent residential receptors.
- Acoustically shield stationary equipment located near residential receptors with temporary noise barriers or recycled demolition materials.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- The contractor shall prepare a detailed construction plan identifying the 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.

Implementation of these measures would reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance. **(Less Than Significant Impact [Same Impact as Approved Project])**

## Construction Vibration

The SEQ EIR found that projects developed within the SEQ Plan Area were unlikely to require pile-driving for construction, and that bulldozers and graders would be the greatest sources of construction vibration from construction in the SEQ Plan Area. Vibration levels at a single-family home located as near as 50 feet from an anticipated development were calculated not to exceed the 0.25 inch-per-second peak-particle velocity significant threshold, and vibration impacts were found to be less than significant.

Construction of the proposed ball fields would be consistent with the construction envisioned for the site in the SEQ EIR. Pile driving would not be needed for construction of the ball fields. Since the nearest residence to the project site is 250 feet east of the southeast site boundary, graders, paving equipment, and excavators (for foundations of light standards) used for project construction would not cause vibration levels greater than those identified in the SEQ EIR, and vibration impacts from the project would be less than significant. **(Less Than Significant Impact [Same Impact as Approved Project])**

### 4.12.2.3 *Noise and Vibration Impacts To the Project*

#### Noise

##### Exterior Noise

Ball fields are not considered noise- or vibration-sensitive uses; although users of the site may include people typically classified as sensitive receptors (e.g. children), people are anticipated to use the ball fields temporarily and would not be regularly exposed to environmental noise in the same way that residences are.

The City of Morgan Hill Acceptable Noise Levels included in the General Plan (shown as Exhibit 3.10-4 in the SEQ EIR) identify ambient noise levels of 55-75 dBA  $L_{dn}$  as “conditionally acceptable” for Outdoor Spectator Sports land uses, and 70-85 dBA  $L_{dn}$  as “clearly unacceptable.” These Acceptable Noise Levels are based on the California State Office of Planning and Research’s General Plan Guidelines from the year 1990.

Based on the noise evaluation completed for the SEQ EIR, existing noise levels on the project site range from approximately 60-65 dBA  $L_{dn}$  on the eastern portion of the site and greater than 75 dBA  $L_{dn}$  on the western portion of the site (see Exhibit 3.10-3 of the SEQ EIR). The proposed project would be conditionally acceptable under City of Morgan Hill General Plan policy, however certain portions of the site closest to U.S. 101 may be exposed to clearly unacceptable noise levels. This potential noise impact to future users of the site from U.S. 101 was not identified in the SEQ EIR.

**Impact NOI-2:** Noise levels on the project site range from 60-75+ dBA  $L_{dn}$  and exceed the City’s conditionally acceptable exterior noise levels for outdoor spectator sports uses. **(Significant Impact)**

**Mitigation Measures:** Implementation of the following measure would be consistent with the City's outdoor noise policies and would ensure that future users of the site are not exposed to elevated exterior noise levels.

**MM NOI-2.1:** Prior to approval of a Site Development Permit for the final project site, a design-level acoustical study shall be undertaken to determine what, if any, noise attenuation measures are needed to ensure that exterior noise levels on the project site meet the City's Acceptable Noise Levels criteria. Noise reduction measures could include redesign of the project to use intervening structures or use parking areas as buffers from U.S. 101, or constructing sound walls on the west side of the project site. The acoustical study shall be reviewed and approved by the Community Development Director and the measures incorporated into the project design, as appropriate, prior to approval of a Site Development Permit for the project site.

Feasible mitigation measures exist to ensure that future development on the site is consistent with the City's General Plan exterior noise policies. Implementation of **MM NOI-2.1** would reduce potentially significant outdoor noise exposure to less than significant levels. **(New Less Than Significant Impact With Mitigation)**

#### Interior Noise

There are no interior uses included in the conceptual design of the ball fields. Future commercial development on the north side of the project site would be exposed to elevated noise levels, potentially in excess of the City's interior noise standards, however, that development will be subject to its own project-level environmental review. **(Less Than Significant Impact [Same Impact as Approved Project])**

#### **4.12.3**      Conclusion

The proposed project would contribute to the significant and unavoidable roadway noise impacts that were disclosed in the SEQ EIR. Implementation of **MM NOI-1.1** prior to consideration of approval of any urban development on the project site would reduce the environmental impacts of increased noise levels resulting from project-related traffic. **(Significant Unavoidable Impact [Same Impact as Approved Project])**

Implementation of **MM NOI-2.1** would reduce potentially significant outdoor noise exposure to less than significant levels. **(New Less Than Significant Impact with Mitigation)**

Implementation of standard construction noise reduction measures would minimize construction-related noise impacts. Construction noise and vibration impacts from the proposed project would be less than significant. **(Less Than Significant Impact [Same Impact as Approved Project])**

**4.13 POPULATION AND HOUSING**

**4.13.1 Setting**

In 2010, the population of the City of Morgan Hill was 37,882. By 2030, the population is projected to grow to 45,800.<sup>28,29</sup> Residential development within the City of Morgan Hill is controlled in part by the City’s Residential Development Control System (RDCS), which establishes a population ceiling for the City of 48,000 as of January 1, 2020.

**4.13.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Checklist Source(s)
Would the project:						
1. Induce substantial 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1-3
3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

**4.13.2.1 *Prior Impact Evaluation in the SEQ EIR***

According to the analysis of the SEQ EIR, development under the SEQ Plan would not induce substantial population growth or displace substantial numbers of existing residences and people.

**4.13.2.2 *Population and Housing Impacts***

The proposed project would result in the City gaining ownership of a 26-acre site, with the ultimate purpose of constructing six ball fields and returning 3.4 acres of the site to the property owner for future commercial development. There is currently no housing on the site and construction on the site would not displace any housing or people.

<sup>28</sup> U.S. Census Bureau, 2010 Census of Population. State & County QuickFacts: Morgan Hill (City). Last Modified January 2013. Available at: <<http://quickfacts.census.gov/qfd/index.html>>. Accessed March 26, 2013.

<sup>29</sup> Association of Bay Area Governments (ABAG), *Projections and Priorities 2009: Building Momentum, San Francisco Bay Area Population, Household, and Job Forecasts*. August, 2009.

The SEQ EIR found that development consistent with the Plan would not induce substantial population growth in the City. The proposed ball fields would not be a direct source of employment, however the anticipated commercial uses on the northern portion of the site would support full-time employees. With the City's RDCS system in place to meter residential growth, any increase in population resulting from future commercial development on the site would not be substantial.

Utilities necessary to serve the site would be constructed consistent with the utility plans set forth in the SEQ Plan. Extension of utilities to the project site would not be growth-inducing because development of the land uses surrounding the site is also governed by the SEQ Plan, which designates much of the land near the project site as *Sports/Recreation/Leisure* uses. These uses do not allow housing to be developed on those sites. **(Less Than Significant Impact [Same Impact as Approved Project])**

#### **4.13.3            Conclusion**

The proposed project would not result in a substantial increase in population of the City of Morgan Hill above projected population levels or displace any housing or people. **(Less Than Significant Impact [Same Impact as Approved Project])**

## **4.14 PUBLIC SERVICES**

### **4.14.1 Setting**

#### **4.14.1.1 *Fire Service and Emergency Medical Services***

The City of Morgan Hill Fire Department (MHFD) 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, 2) Dunne Hill Fire Station, located at 2100 East Dunne Avenue, and 3) 15670 Monterey Street. The nearest station is located at 15670 Monterey Street, approximately 1.5 miles west of the project site. In general, the response time meets the current standard of eight minutes 95 percent of the time; although it is expected that most responses will be approximately five minutes 90 of the time.<sup>30</sup>

#### **4.14.1.2 *Police Service***

Police service is provided to the site by the City of Morgan Hill Police Department. The Morgan Hill Police facility is located at 16200 Vineyard Boulevard, approximately one mile west of the project site. The Police Department's goal is to respond to Priority One calls within five minutes and Priority Two calls within 10 minutes. 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.

#### **4.14.1.3 *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.

#### **4.14.1.4 *Parks***

The City owns 70 acres of developed parkland (including the Civic Center, assessment district parks and city owned trails) and 59 acres of recreation facilities. Included within this inventory, 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 parkland, there is also a significant amount of recreational land and open space in the City that is privately owned and maintained. Under the City's General Plan Policy 18c, fifty percent of the private homeowners association (HOA) recreational acreage is counted toward meeting the General Plan goal of five acres per thousand population. Additionally, the General Plan allows for 10 percent of open space to be counted towards meeting this goal. In combination, these various types of public and private parks and recreational facilities in the City of Morgan Hill total about 200 acres to serve an estimated population of 37,882. This exceeds the City's goal of five acres of parkland per 1,000 residents.

<sup>30</sup> City of Morgan Hill, City Council Staff Report. *Fire and Emergency Medical Services (EMS) CalFire Proposal Update*. Meeting Date April 4, 2012.

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. Morgan Hill residents also utilize County and State parks, which include Silveira Park at the southern end of the City, the Coyote Creek park chain to the north, and Henry Coe State Park to the east.

**4.14.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:						
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,3

**4.14.2.1 Prior Impact Evaluation in the SEQ EIR**

The SEQ EIR found that, due to the proximity of existing stations to the SEQ Plan Area, expansion of the City’s USA, UGB, and City limits as well as development consistent with the Plan would not require additional fire or police services. Less than significant impacts to schools, libraries, parks, and other public facilities were identified.

**4.14.2.2 Impacts to Fire and Police Service**

The proposed project would not include any future development of residential uses, and sports fields are not anticipated to generate substantial demand for police, fire, or emergency services. The commercial uses at the north end of the site would be incremental contributors to overall demand for

police and fire service in the City, however, it will be subject to its own project-level environmental review at the time it is proposed. Any future development on the site would be constructed in conformance with current building and fire codes, including features that will reduce potential fire hazards. Review of the project design by CalFire and the Morgan Hill Police Department will result in the incorporation of appropriate safety features to reduce fire hazards and criminal activity. Therefore, the proposed project would not require construction or expansion of fire or police facilities. **(Less Than Significant Impact [Same Impact as Approved Project])**

#### **4.14.2.3      *Schools and Libraries***

The proposed project does not include any residences and as such, would not generate any additional demand for school or library facilities. **(No Impact [Less Impact Than Approved Project])**

#### **4.14.2.4      *Parks***

The project would ultimately allow for the construction of six ball fields on 22.6 acres and commercial development on 3.4 acres of the site. Construction of this ball fields complex would help the City maintain its goal of providing five acres of park land for every 1,000 residents, and would not directly increase demand for park land. **(No Impact [Less Impact Than Approved Project])**

#### **4.14.3      Conclusion**

With future review of final site plans by the police and fire departments, the project impacts to public services would be less than significant. **(Less Than Significant Impact [Same Impact as Approved Project])**

**4.15 RECREATION**

**4.15.1 Setting**

The City owns 70 acres of developed parkland (including the Civic Center, assessment district parks and city owned trails) and 59 acres of recreation facilities. Included within this inventory, 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 parkland, there is also a significant amount of recreational land and open space in the City that is privately owned and maintained. Under the City’s General Plan Policy 18c, fifty percent of the private homeowners association (HOA) recreational acreage is counted toward meeting the General Plan goal of 5.0 acres per thousand population. Additionally, the General Plan allows for 10 percent of open space to be counted towards meeting this goal. In combination, these various types of public and private parks and recreational facilities in the City of Morgan Hill total about 200 acres to serve an estimated population of 37,882. This exceeds the City’s goal of five acres of parkland per 1,000 residents.

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 City’s General Plan has a parks and recreation goal to provide useful, accessible and high-quality parks, recreation, and trail facilities programs. To achieve this goal, the City has adopted a parkland dedication/park land in-lieu fee ordinance (Municipal Code Chapter 17.28) that requires parkland dedication or in-lieu fees for residential developments.

**4.15.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Checklist Source(s)
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 will occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,3

**4.15.2.1**      *Prior Impact Evaluation in SEQ EIR*

As stated in the SEQ EIR, the boundary adjustments and land use designation changes included in the SEQ Plan would not increase demand for parks and recreational facilities. Any potential impacts from development in the plan area would be avoided through dedication of recreational land or payment of in-lieu fees. Impacts to recreational resources were found to be less than significant.

**4.15.2.2**      *Impacts to Park and Recreational Facilities*

The proposed land acquisition would support the future development of recreational facilities in the City, which would help the City maintain its goal of five acres of recreational land per 1,000 residents. **(No Impact [Less Impact Than Approved Project])**

**4.15.3**      **Conclusion**

The proposed project would not impact any parks or recreational resources and would ultimately result in additional public recreation areas in the City. **(No Impact [Less Impact Than Approved Project])**

## 4.16 TRANSPORTATION

The discussion in this section is based on a traffic analysis technical memorandum prepared by *Hatch Mott MacDonald* on May 2, 2014. The traffic analysis considers four project design and access alternatives; Alternative #3 is the applicable development scenario. A copy of this report is included as Appendix E of this Initial Study.

### 4.16.1 Setting

#### 4.16.1.1 *Access*

U.S. 101 is a north-south freeway that serves as the primary roadway connection between Morgan Hill and other areas of Santa Clara County to the north and south. The project site is adjacent to the Tennant Avenue interchange with U.S. 101. Local access to the project site is provided by Tennant Avenue, a four-lane local route along the north side of the project site, and Fisher Avenue, a small two-lane road that dead ends at the southwest corner of the project site.

#### 4.16.1.2 *Traffic Study*

##### Level of Service

An analysis of AM and PM peak hour traffic conditions was completed for the following intersections:

1. Southbound US 101 Ramps / Tennant Avenue
2. Northbound US 101 Ramps / Tennant Avenue
3. Condit Road / Tennant Avenue
4. Murphy Avenue / Tennant Avenue

The analysis found that in the existing condition, all four study intersections operate at or better than the City of Morgan Hill Level of Service (LOS) standards. The LOS standard for intersections #1-3 is LOS E, while the standard for Murphy Avenue / Tennant Avenue is LOS D.

##### Queuing

A vehicle queuing analysis was also completed at the study intersections in order to determine if any exclusive left turn lanes would overflow or if vehicle queues would extend far enough back to affect the operations of other intersections. Under existing conditions all left-turn pockets provide ample storage and no vehicle queues extend far enough back to affect traffic operations at adjacent intersections.

#### 4.16.1.3 *Existing Pedestrian and Bicycle Facilities*

Pedestrian facilities comprise sidewalks, crosswalks, and pedestrian signals. Sidewalks are provided on a portion of Tennant Avenue along the project boundary but they do not extend eastward beyond the small barn structure. There are no crosswalks connecting Condit Road with the sidewalks along

the south side of Tennant Avenue. There are no sidewalks or crosswalks on or along Fisher Avenue. There are Class II and Class III bicycle lanes (i.e. painted lanes on the roadway) on Tennant Avenue west of Condit Road and extending over U.S. 101 west of the project site.

The nearest public transit option to the project site is the VTA Bus Route 16, which follows Main Avenue on the east side of U.S. 101. Route 16 serves various locations in the City of Morgan Hill including the Civic Center, Live Oak High School, and Sobrato High School. The route operates on weekdays, with three trips in each direction during the morning and four trips in each direction in the afternoon and evening. The nearest stop for Route 16 is approximately two miles north of the project site on East Main Avenue.

**4.16.2 Environmental Checklist and Discussion of Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,19
2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3,19
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3
5. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,3
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3,19

**4.16.2.1 Prior Impact Evaluation in the SEQ EIR**

The SEQ EIR concluded that implementation of the SEQ Plan would cause significant LOS impacts to Tennant Avenue between Condit Road and Murphy Avenue, degrading the LOS from C to F. In addition, the SEQ EIR found that construction of the high school envisioned in the SEQ Plan would result in significant LOS impacts to the intersection of Tennant Avenue and Murphy Avenue. The high school project includes construction of a signal at Tennant Avenue/Murphy Avenue, as well as a new left-turn pocket from eastbound Tennant Avenue onto Murphy Avenue. These improvements will mitigate the LOS impacts of the high school, but the overall impacts to Tennant Avenue from implementation of the SEQ Plan were found to be significant and unavoidable with no feasible mitigation available.

The SEQ EIR also found that the LOS of Tennant Avenue over U.S. 101 would be degraded to LOS F in the PM peak-hour in the year 2030 cumulative condition. Though payment of traffic fees from individual developments was identified as mitigation for this impact, there was no specific programming in place to ensure that improvements would be made to the Tennant Avenue overcrossing, and the impacts were deemed significant and unavoidable.

Impacts to morning peak-hour traffic on northbound U.S. 101 between Tennant Avenue and Dunne Avenue were also found significant and unavoidable

**4.16.2.2 Roadway Impacts**

**Trip Generation**

Vehicle trip generation for the proposed project was based on a project consisting of six ball fields, 23,750 square feet of retail, 7,500 square feet of high-turnover sit-down restaurant, and 7,500 square feet of fast food restaurant uses. Though not currently on file with the City, a mix of future

commercial uses was assumed in the traffic analysis in combination with the ball fields for site planning and access purposes. The commercial development will be subject to its own separate project-level environmental review, including traffic analysis as applicable, at the time an application is filed with the City. Table 4.16-1 below shows the trip generation estimates, which are taken from Appendix E of this Initial Study.

<b>Proposed Land Use</b>	<b>Size</b>	<b>Weekday Daily Trips</b>	<b>Weekday PM Peak</b>	<b>Saturday Daily Trips</b>	<b>Saturday Midday Peak</b>
Baseball Fields	6 fields	480	120	1,440	240
Retail	23,750 sf	1,053	64	998	114
Restaurant (High-turnover Sit-down)	7,500 sf	954	74	1,188	106
Restaurant (Fast Food)	7,500 sf	5,370	196	5,415	443
<b>Subtotal</b>	-	<b>7,857</b>	<b>454</b>	<b>9,041</b>	<b>903</b>
Pedestrian/Bicycle Trip Reduction (10%) <sup>1</sup>	-	-786	-45	-904	-90
Internal Capture (50%) <sup>2</sup>	-	-3,689	-167	-3,801	-332
<b>Total Net Project Trip Generation</b>	-	<b>3,382</b>	<b>242</b>	<b>4,336</b>	<b>481</b>

<sup>1</sup> Pedestrian/Bicycle Trip Reduction accounts for the estimated portion of the project site traffic being made on foot or on a bicycle.

<sup>2</sup> Internal Capture reflects the estimated portion of retail/restaurant project site traffic that would be served by patrons of the baseball fields.

See source noted below for complete trip generation table. Trip generation rates for non-field uses come from Institute of Transportation Engineers. *Trip Generation Manual, 9<sup>th</sup> Edition*. 2012. Trip generation rates for the ball fields come from: Kaku Associates. *Traffic Study for the Sepulveda Basin Sports Complex*. February 2006.

Source: HatchMott MacDonald. *Technical Memorandum, Morgan Hill Baseball Fields, Morgan Hill, California*. May 2, 2014.

The proposed ball fields project would increase trip generation to and from the project site by approximately 108 vehicles during the weekday PM peak hour and 216 vehicles during the Saturday peak hour (12:00 pm).<sup>31</sup> The project's peak hour vehicle trip estimates for both weekdays and Saturdays are within the 751 PM peak hour trips estimated for baseball/softball fields, high-turnover sit-down restaurants, and drive through fast food uses in the Transportation Impact Analysis completed for the SEQ EIR (see Table D1 of Appendix H of the SEQ EIR). Therefore the trip generation analysis for the project site is consistent with the vehicle trips assumed for the site in the SEQ EIR.

<sup>31</sup> These trip generation estimates are taken from the Baseball Fields line in Table 4.16-1 and include the 10% pedestrian/bicycle trip reduction.

### **Level of Service**

Impacts to roadway and intersection LOS resulting from the combined ball fields and anticipated commercial development on the project site were evaluated in the SEQ EIR and in a project-specific analysis prepared based on the conceptual site plan (Appendix E). The relevant findings of the SEQ EIR are summarized in *Section 4.16.2.1* above and the results of the LOS analysis completed for the project are summarized in Table 4.16-2, below.

**Table 4.16-2 Level of Service Impacts of the Project (Including Anticipated Future Commercial Uses)**

Study Intersection	Existing Conditions				Existing Plus Project Conditions				Cumulative Conditions <sup>1</sup>			
	Weekday PM Peak Hour		Saturday Noon Peak Hour		Weekday PM Peak Hour		Saturday Noon Peak Hour		Weekday PM Peak Hour		Saturday Noon Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
Tennant Ave/Southbound U.S. 101 Ramps	15.8	B	13.1	B	20.0	B-	15.2	B	<b>205.7</b>	<b>F</b>	<b>235.2</b>	<b>F</b>
Tennant Ave/Northbound U.S. 101 Ramps	18.2	B-	16.4	B	16.4	B	6.9	A	29.5	C	51.8	D-
Tennant Ave/Condit Road (Side-Street)	2.3 11.2	A B	3.2 11.5	A B	2.2 13.6	A B	3.2 21.4	A C	<b>667.8</b> <b>&gt;1100</b>	<b>F</b> <b>F</b>	<b>808.9</b> <b>&gt;1100</b>	<b>F</b> <b>F</b>
Tennant Ave/Murphy Ave	11.4	B	9.8	A	12.9	B	13.9	B	<b>927.1</b>	<b>F</b>	<b>935.8</b>	<b>F</b>

<sup>1</sup> Cumulative plus Project conditions represent Year 2030 conditions with build-out of both the city General Plan and the Southeast Quadrant uses.

**Bold** indicates significant impacts.

Analysis performed using year 2000 Highway Capacity Manual and the Santa Clara Valley Transportation Authority (VTA) guidelines.

Source: Hatch Mott MacDonald. *Technical Memorandum, Morgan Hill Baseball Fields, Morgan Hill, California*. May 2, 2014. See Appendix E of this Initial Study/Addendum for the full report.

As shown in the Existing Plus Project columns of Table 4.16-2, the proposed ball fields project in combination with anticipated future commercial uses on the remainder of the site would not cause any significant LOS impacts to roadway intersections. Three of the study intersections would be significantly impaired in the Cumulative condition, a condition which assumes complete build-out of both the SEQ Area and the City's 2030 General Plan. These findings are consistent with the analysis completed for the SEQ EIR (see Table 3.13-15 of the SEQ EIR).

**Impact TRANS-1:** The proposed project (including anticipated future commercial uses) would contribute to significant cumulative vehicle delay impacts at the following intersections:

- Tennant Avenue/Southbound U.S. 101 Ramps
- Tennant Avenue/Condit Road
- Tennant Avenue/Murphy Avenue

**(Significant Impact)**

**Mitigation Measures:** The project proponent will implement the following measure from the SEQ EIR to reduce cumulative traffic congestion impacts:

**MM TRANS-1.1:** Prior to issuance of building permits for future land use development proposals within the SEQ Area, the project applicant shall pay all transportation-related traffic impact fees to the City of Morgan Hill.

In addition to this measure, implementation of an Air Quality and Transportation Demand Management (AQ-TDM) Plan, as required by **MM AQ-1.1**, would reduce the project's impacts to local and regional transportation systems.

At the time the SEQ EIR was certified, the improvements necessary to reduce the significant traffic effects from development in the SEQ Area had not been programmed into the City's Traffic Impact Fee Program. Though a signal will ultimately be constructed for the Tennant Avenue/Murphy Avenue intersection, the signal alone would not sufficiently mitigate the significant LOS impacts expected to occur at that intersection. Additional improvements, including a signal at Tennant Avenue/Condit Road and an additional southbound right-turn lane at the Tennant Avenue/Southbound Highway 101 ramps, were identified. However according to the traffic technical memorandum for the proposed project, a traffic signal at Tennant Avenue/Condit Road would cause increased vehicle delays along Tennant Avenue in the long-term. Given the close intersection spacing along Tennant Avenue, this additional intersection delay could increase vehicle queuing and harm vehicle progression between the traffic signals.

Since the City is currently updating the fee program, there is no guarantee that traffic impact fees would be used for the necessary improvements. In addition, the southbound U.S. 101 ramps are not in the City's jurisdiction and the City's fee program is not structured to fund improvements to regional facilities. Therefore, although the proposed project would pay fees for improvements that are likely to be included in the next update of the City's Traffic Impact Fee Program, cumulative impacts to the above-described intersections would be significant and unavoidable. **(Significant and Unavoidable Impact [Same Impact as Approved Project])**

## Vehicle Queueing

A queuing analysis was completed for the study intersections in order to determine if any exclusive turn lanes would overflow into adjacent lanes or if vehicles would extend far enough back to affect the operations of other intersections. Under current conditions, all of the streets studied provide adequate storage for vehicle queues and no queues extend far enough back to affect traffic operations at other intersections.

Under Existing Plus Project conditions, the vehicle queues in all turn lanes are far less than the provided storage lengths and no queues would extend far enough back to affect other intersections. Since the proposed driveway at Tennant Avenue would be an entrance only (i.e. no vehicles would be allowed to turn onto Tennant Avenue from the project site), there would be no vehicle queues on the project site at the Tennant Avenue driveway.

In the Cumulative condition, project-related traffic (including the assumed commercial development on the northern portion of the site) would contribute to vehicle queues at all of the study intersections during both the weekday PM and Saturday peak hours. The improvements identified in the SEQ EIR (described above) would minimize the extent to which these queues would impact the operations of upstream intersections. The proposed project will implement **MM TRANS-1.1** to make a fair-share contribution toward the necessary circulation infrastructure improvements, but since the improvements are not officially part of the City's Traffic Impact Fee Program, there is no guarantee that the project contribution would be spent on the necessary improvements. Poor traffic operations arising from long vehicle queues are not in themselves environmental impacts. Vehicle queues would not cause any new environmental impacts as the increase in vehicle delay would not cause any new significant and unavoidable air quality or noise impacts (see *Section 4.3, Air Quality* or *Section 4.12, Noise* for more detail on air quality and noise impacts).

### 4.16.2.3 *Parking Supply*

The ball fields complex as designed would include approximately 542 parking stalls in paved surface parking lots along the north, east, and south site boundaries, including the site of the future commercial development at the north end of the property. Ultimately, 99 of the parking stalls at the north end of the site would serve commercial development, and an additional 91 would be shared between the commercial development and the ball fields. These areas are indicated in red and blue in the Conceptual Site Plan (Figure 3.2-1). Excluding the shared parking and the parking ultimately intended for the retail portions of the site, the project provides 352 parking stalls solely for the ball fields users, or just over 58 stalls per field. At least 16 of those 352 stalls would be ADA-compliant.

The recommended parking requirements for tournament play ball fields range from 35 - 75 stalls per field, or 210 - 450 stalls for six ball fields. Since the project provides 58 stalls of dedicated parking per field, the proposed parking is within the range of recommended parking for tournament play ball fields. With additional shared parking available, parking provided by the project would be adequate for the tournament use envisioned for the site.

#### 4.16.2.4 *Transit, Bicycle, and Pedestrian Impacts*

##### **Transit**

There are no public transit options available in the vicinity of the project site, therefore users of the site would not be expected to use transit to access the site. The proposed project would not have any impacts on the capacity of existing transit systems.

##### **Bicycles**

There are existing bicycle lanes on Tennant Avenue west of Condit Road. The project includes a new driveway on Tennant Avenue, which could increase hazards to cyclists from vehicles entering the project site. Vehicles entering the site can see bicyclists prior to making this turning movement, however, and yield to bicycles before entering the site. Because this driveway will be entrance-only, hazards to bicyclists are not expected to be significant.

The current site design does not include bicycle parking, but the final design will incorporate bicycle racks and/or lockers according to City requirements. This would be evaluated as part of final project-level environmental review.

##### **Pedestrians**

Currently, there is very little pedestrian activity associated with the project site. There are no sidewalks on Tennant Avenue east of the barn structure, and there are no land uses on the site that attract pedestrians. The proposed project would construct ball fields and ultimately accommodate high turnover restaurants and retail uses, all of which would increase pedestrian activity and potentially cause traffic delays and safety hazards if not designed properly. The key area of concern is the intersection with Condit Road, where pedestrians using other sports facilities or staying at the hotels along Condit Road would cross the four-lane Tennant Avenue to go to and from the project site. An estimated 20 pedestrians (weekday PM peak hour) and 50 pedestrians (Saturday midday peak hour) are anticipated to cross Tennant Avenue at Condit Road in a one-hour period while traveling to and from the project site.

To accommodate pedestrians and avoid conflicts with traffic on Tennant Avenue, the project design would ultimately include a below grade pedestrian crossing that connects Condit Road with the project site. While the exact location has yet to be determined, the undercrossing would likely connect the west side of Condit Road so that the southern end would be located on the project site. Wayfinding signs and distinct pathways would also be included in the final site design to direct pedestrians to the undercrossing.

With the inclusion of a pedestrian undercrossing and the prohibition of vehicle exits onto Tennant Avenue, the proposed project would not cause any hazards or conflict with any plans related to bicycles, pedestrians, or transit. **(Less Than Significant Impact [Same Impact as Approved Project])**

**4.16.3            Conclusion**

The proposed project would contribute to significant cumulative traffic congestion and vehicle queuing impacts on local roadways. Payment of traffic impact fees and implementation of an AQ-TDM plan would reduce these impacts, but would not guarantee complete mitigation of the cumulative traffic impacts of development in the SEQ Plan Area. **(Significant and Unavoidable Impact [Same Impact as Approved Project])**

Elements of the project design avoid significant impacts to bicyclists, pedestrians, and transit users. **(Less than Significant Impact [Same Impact as Approved Project])**

## 4.17 UTILITIES AND SERVICE SYSTEMS

### 4.17.1 Setting

#### 4.17.1.1 *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 14 groundwater wells, ten potable water storage tanks, 10 booster stations, and over 160 miles of pressured pipes ranging from two to 14 inches in diameter. The City's water distribution system meets the needs of existing customers. The City has planned and constructed water projects in conjunction with new street construction in anticipation of future growth and water needs.

Based on Exhibit 3.14-1 of the SEQ EIR, there is a 12-inch diameter potable water line in the Tennant Avenue highway overcrossing that extends from the overcrossing northward along Condit Road. Water currently used on the project site for irrigation is pumped from the groundwater well on the north end of the site. Existing water demand in the SEQ Area was estimated to be 581 acre-feet per year, based on an agricultural land water use factor of 0.45 acre-feet per acre per year. Although the site is not currently under cultivation, it has been within the past few years and could continue to be without the project. Therefore, the approximately 26-acre project site could use 11.7 acre-feet of potable water per year, or approximately 3.8 million gallons.

#### 4.17.1.2 *Sewer System and Wastewater Treatment*

The City of Morgan Hill sewer collection system consists of approximately 135 miles of 6-inch through 30-inch diameter sewers, and includes 15 sewage lift stations and associated force mains. The "backbone" of the system consists of the trunk sewers, generally 12-inches in diameter and larger, that convey the collected wastewater flows through an outfall that continues south to the Wastewater Treatment Facility (WWTF) in Gilroy operated by the South County Regional Wastewater Authority. The WWTF is jointly owned by the cities of Gilroy and Morgan Hill. The City's existing sewer collection system meets the needs of existing customers. The City has planned and constructed sewer facilities in conjunction with new street construction in anticipation of future growth and sewage needs.

The WWTF 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 Regional Water Quality Control Board to treat up to 8.5 mgd.<sup>32</sup> Both the cities of Gilroy and Morgan Hill have growth control systems in place which limit unexpected increases in sewage generation. The ADWF for combined flows from Morgan Hill and Gilroy were approximately 6.8 mgd in 2010. Based on combined population projections for both cities, the current capacity of 8.5 mgd will be reached in approximately 2020.<sup>33</sup>

<sup>32</sup> California Regional Water Quality Control Board. *Waste Discharge Requirements, South County Regional Wastewater Authority Wastewater Treatment and Reclamation Facility, Santa Clara County (NPDES Permit No. CA0049964) – Order No. R3-2010-0009*. Adopted March 2010. Accessed February 3, 2014. Available at: [http://www.waterboards.ca.gov/rwqcb3/board\\_decisions/adopted\\_orders/](http://www.waterboards.ca.gov/rwqcb3/board_decisions/adopted_orders/)

<sup>33</sup> MWH Global and Akel Engineering Group. *Technical Memorandum – SCRWA Wastewater Flow Projections (2012)*. November 20, 2013. Available at:

According to the SEQ EIR, in 2008 the City of Morgan Hill recorded an ADWF of 3.9 mgd, greater than its approximate allocation of treatment capacity of 3.6 mgd.

The South County Regional Wastewater Authority is designing a 3.25 mgd expansion project for the WWTF, with construction expected to be complete by the end of 2015.<sup>34</sup> The increase will bring the total plant capacity to 11.75 mgd, with 4.92 mgd assigned to Morgan Hill. The City has projected the wastewater treatment plant expansion will provide sufficient capacity to accommodate City growth through 2030, with an estimated future population of 54,000.

There is no existing wastewater infrastructure in the vicinity of the project site and the project site does not generate any wastewater. The nearest sewer line is an eight-inch line that extends southward on Condit Road from Barrett Avenue to its terminus at the Morgan Hill Aquatics Center, approximately 1,000 feet north of the project site.

**4.17.1.3 Solid Waste**

Recology South Valley provides solid waste and recycling services to the businesses and residents of the cities of Morgan Hill and Gilroy. Recology South Valley has contracted through 2017 with the Salinas Valley Solid Waste Authority to dispose of municipal solid waste at Johnson Canyon Sanitary Landfill. Johnson Canyon Sanitary Landfill is anticipated to reach capacity in 2040.<sup>35</sup> The site in its current state does not generate solid waste.

**4.17.1.4 Storm Drainage**

Precipitation on the project site infiltrates the local soils or, when the field is saturated, pools until it infiltrates or evaporates at the southwest corner of the site. Any excess stormwater on the site would drain to the adjacent Madrone Channel, which ultimately flows to the Monterey Bay.

**4.17.2 Utilities and Service Systems Impacts**

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

[http://www.cityofgilroy.org/CityOfGilroy\\_Files/city\\_hall/meetings/52fd58ad\\_12-4-13%20SCRWA%20packet.pdf](http://www.cityofgilroy.org/CityOfGilroy_Files/city_hall/meetings/52fd58ad_12-4-13%20SCRWA%20packet.pdf)

<sup>34</sup> Ruggeri-Jensen-Azar & Associates. *Preliminary Engineers Report for Wet Utilities, Southeast Quadrant; Morgan Hill, CA.* February 12, 2013. Page 4-2. Available at: <http://www.morganhill.ca.gov/965/Southeast-Quadrant>

<sup>35</sup> CalRecycle. *Facility/Site Summary Details: Johnson Canyon Sanitary Landfill.* 2008. Accessed March 4, 2015. Available at: <http://www.calrecycle.ca.gov/SWFacilities/Directory/27-AA-0005/Detail/>

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
3. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
5. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
7. Comply with federal, state and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3

**4.17.2.1 Prior Impact Evaluation in the SEQ EIR**

The SEQ EIR, as revised per the Final EIR, concluded that the proposed plan would increase water demand in the SEQ Plan Area by 625 acre-feet per year over the existing condition. Existing and planned potable water supply and infrastructure were found to be adequate for development within the SEQ Area provided that project-level environmental review for future projects evaluate the impacts of expanded and extended pipes. Similarly, there is adequate wastewater treatment capacity for the SEQ Plan Area despite the projected increase in wastewater generation of 0.46 million gallons

per day (mgd). The new infrastructure identified in the SEQ EIR would be built and the environmental impacts evaluated during the review for future projects.

#### **4.17.2.2 Water Supply and Service Impacts From the Proposed Project**

##### **Water Supply**

The project would construct six ball fields, restrooms, and other associated structures on 22.6 acres of the site, with the remaining 3.4 acres returned to the property owner for commercial development. The SEQ EIR estimates that *Sports/Recreation/Leisure* land uses will consume approximately 2.24 acre-feet of potable water per acre per year. Though this is highly dependent upon whether the fields are constructed with synthetic turf or with grass, the project is consistent with the *Sports/Recreation/Leisure* land use designation and with the SEQ EIR. Therefore, assuming natural grass, future water use on the project site is estimated to be 58.24 acre-feet per year, an increase of approximately 46.54 acre-feet per year over the current condition. This increase in water demand is consistent with the analysis in the SEQ EIR and the currently proposed project would not cause any greater impacts to water supply than those previously-identified for the project site. **(Less Than Significant Impact [Same Impact as Approved Project])**

##### **Water Service**

Potable water service to the site would be obtained by connecting to the water line in Tennant Avenue. Construction of a lateral connection would occur within an existing, paved road and would not be expected to result in any significant environmental impacts. **(Less Than Significant Impact [Same Impact As Approved Project])**

#### **4.17.2.3 Wastewater Impacts From the Proposed Project**

The proposed ball fields would include restrooms at a location to be determined during final design. To provide service to these restrooms, the project proponent (the City) anticipates extending and connecting the City's municipal sanitary sewer system, which would incrementally increase demands on the WWTF. The SEQ EIR estimated that implementation of the SEQ Plan would increase wastewater generation by 0.46 mgd, based in part upon a wastewater generation factor for *Sports/Recreation/Leisure* land uses of 1,500 gallons per acre per day (gpad). Using this factor, the proposed ball fields would generate approximately 34,000 gallons of wastewater per day, which would incrementally increase demand on the WWTF if the project ultimately connects to the municipal sanitary sewer system.

Since the WWTF currently has treatment capacity available and is also undergoing an expansion to accommodate growth through the year 2030, the incremental increase in wastewater generation that could result from the project would not cause a wastewater treatment provider to exceed the wastewater treatment requirements of the Central Coast Regional Water Quality Control Board or to construct expanded treatment facilities. **(Less Than Significant Impact [Same Impact As Approved Project])**

## Sanitary Sewer Service

The nearest sanitary sewer pipe is approximately 1,000 feet north of the site in Condit Road. Extension of a 10-inch sanitary sewer pipe down Murphy Avenue from Barrett Avenue to the north is envisioned as part of the conceptual sewer collection system for the SEQ Plan Area. Also planned is an eight-inch line in Tennant Avenue that would connect to an eight-inch line at a manhole in Murphy Avenue. Due to the elevation gradient of the SEQ Plan Area, a force main and pump station would be needed to effectively connect this planned infrastructure to the existing pipes in Barrett Avenue north of the site.

It is anticipated that the ball fields would be served by the City's municipal sanitary sewer collection system, which would need to be extended to this area in order for a connection to be built between the project site and the system. Since the additional sewer lines would be constructed within existing paved roadways, the environmental impacts of that disturbance are expected to be minimal. Trenching, excavation, and construction for new sewer lines in roadways would be temporary and therefore would not result in significant air quality, noise, or traffic impacts.

Since the timing of project construction as well as the City's schedule for extension of the sewer infrastructure into the SEQ Area are unknown, and since key details about the design, location, and scale of the extended sanitary sewer system remain to be determined, it is not currently possible to evaluate at a project-level the potential environmental impacts of such an extension. These elements of the proposed sanitary sewer service connection would need to be evaluated at the time the City is planning to undertake the extension, and if that happens to be occurring in connection with the final ball fields design process, the environmental review for the sewer extension would also occur during the final ball fields project-level review prior to approval of a Site Development Permit for the project. **(Less Than Significant Impact [Same Impact as Approved Project])**

### 4.17.2.4 *Solid Waste Impacts From the Proposed Project*

The City of Morgan Hill has contracted with Recology South Valley to provide solid waste disposal and recycling service within the City. Recology South Valley will dispose of solid waste from the City at Johnson Canyon Sanitary Landfill which has a projected permitted capacity of approximately 13,800,000 cubic yards and is expected to remain open through 2040.<sup>36</sup> The SEQ EIR did not estimate solid waste generation from the SEQ Plan Area, but identified 63.6 million cubic yards of landfill capacity available at four landfills: Johnson Canyon, Kirby Canyon, Guadalupe Sanitary, and Newby Island. The former is in Gonzales, California, while the other three are located in the City of San José.

Since the existing site generates little to no solid waste, it is likely that the proposed project would result in increased waste generation from the project site. New sources of solid waste would include the concession stand, restrooms, and users of the site in general. Based on approximate waste disposal rates from the California Emissions Estimator Model (CalEEMod), a computer model used for estimating greenhouse gas and air pollution emissions, "City parks" generate roughly 0.09 tons of

<sup>36</sup> CalRecycle. *Facility/Site Summary Details: Johnson Canyon Sanitary Landfill*. 2008. Available at: <http://www.calrecycle.ca.gov/SWFacilities/Directory/27-AA-0005/Detail/> Accessed May 17, 2013.

solid waste per acre per year.<sup>37</sup> For the proposed ball fields, this would amount to approximately two tons of solid waste per year. By comparison, a single-family house in California is estimated to generate 0.36 tons of solid waste per resident per year, or 1.44 tons per year for a family of four.<sup>38</sup> Thus the six proposed ball fields combined would generate just 40 percent more solid waste than one single-family home. While weight of the waste does not correspond directly to cubic yardage, the metric used to determine capacity of a landfill, it is reasonable to conclude that between the four landfills identified in the SEQ EIR, there will be enough capacity for two tons of additional waste each year.

Commercial uses on the north end of the site would also generate solid waste. The scope of the commercial development is not known at this time and solid waste generation would need to be estimated as part of separate project-level environmental review. The proposed project would result in increased waste disposal from the project site, however, the proposed development would be served by landfills with adequate capacity and would offer waste diversion services (e.g. recycling) consistent with the 50 percent minimum waste diversion requirement set by the state. **(Less Than Significant Impact [Same Impact as Approved Project])**

#### **4.17.2.5 Storm Drainage Impacts**

The project site is approximately 26 acres in size and consists almost entirely of pervious surfaces (i.e. soils). It is unknown at this time whether the proposed ball fields will be synthetic turf or grass. Synthetic turf fields would cause nearly all of the site to become impervious, whereas grass fields would accommodate local infiltration of water. Thus the two potential development scenarios would have very different implications for drainage. While stormwater treatment in compliance with the City's stormwater management requirements would be needed for both grass and turf fields, the size of stormwater facilities and the volume of water draining from the site to those facilities would be much greater for turf fields.

Per the SEQ EIR, there is currently no storm drainage system in the SEQ Plan Area south of Tennant Avenue, which includes the project site. The City requires new development projects to, at a minimum, retain all water from the 85<sup>th</sup> percentile of rainfall events (approximately two to five year storm events) on site. Any on-site systems (retention basins) would be required to be designed to detain a volume of water up to a 25-year storm event while releasing water at a rate reflective of the 10-year predevelopment flow. This design limits stormwater flows off-site to less than 10-year predevelopment flows.

Implementation of **MM HYD-1.1** through **-1.3** once the field type is known is required prior to approval of a site development permit. These measures will require construction of new stormwater facilities, which may have the potential to cause environmental effects. As part of the final project environmental review, the environmental effects of these facilities will be evaluated and mitigation incorporated, as needed, for any potentially significant impacts resulting from construction of the stormwater facilities. **(New Less Than Significant Impact With Mitigation)**

<sup>37</sup> California Air Pollution Control Officers Association (CAPCOA). *California Emissions Estimator Model User's Guide*. July 2013. Appendix D, Table 10.1. Available at: <http://www.caleemod.com/>

<sup>38</sup> Ibid.

**4.17.3            Conclusion**

With the implementation of **MM HYD-1.1** through **-1.3** (detailed in *Section 4.9, Hydrology and Water Quality*) the project will not result in a significant impact related to stormwater treatment. **(New Less Than Significant Impact With Mitigation)**

The impacts of the proposed project on water and solid waste utilities would not be greater than previously evaluated for the site in the SEQ EIR. Future environmental review of the project will need to evaluate the potential impacts of the final wastewater treatment design. **(Less Than Significant Impact [Same Impact as Approved Project])**

### Checklist Sources

1. CEQA Guidelines - Environmental Thresholds (Professional judgment and expertise and review of project plans).
2. City of Morgan Hill. *Morgan Hill General Plan*. Last Revised February 2010.
3. City of Morgan Hill. *Final Environmental Impact Report, Citywide Agriculture Preservation Program and Southeast Quadrant Land Use Plan, City of Morgan Hill, Santa Clara County, California*. May 16, 2014.
4. City of Morgan Hill. *Code of Ordinances*. Last Revised November 2012.
5. California Department of Transportation. *California Scenic Highway Program. Scenic Highway Routes*. Last Updated April 2012.
6. California Department of Conservation. *Santa Clara County Important Farmland 2012*. August 2014.
7. County of Santa Clara, Planning Office. *Williamson Act and Open Space Easement Programs, ArcGIS Interactive Map*. Last Updated November 4, 2014.
8. Bay Area Air Quality Management District (BAAQMD). *Bay Area 2010 Clean Air Plan*. September 2010.  
--. 2011. *California Environmental Quality Act Air Quality Guidelines*. Updated May.
9. Illingworth & Rodkin, Inc. *Community Health Risk Assessment*. February 2015.
10. Santa Clara Valley Habitat Agency. *Santa Clara Valley Habitat Plan*. August 2012.  
--. Habitat Agency Geobrowser. February 2015.
11. City of Morgan Hill. *Archaeological Sensitivity Map*. April 2000.
12. United States Department of Agriculture, Natural Resources Conservation Service. *Custom Soil Resource Report*. February 17, 2015.
13. Weber, Hayes & Associates. *Phase I/II Environmental Site Assessment for an Agricultural Property. Tennant Avenue Parcels, Morgan Hill, California*. March 3, 2014.
14. Santa Clara County. Airport Land Use Commission. *Comprehensive Land Use Plan, South County Airport*. Adopted November 2008.
15. California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed February 23, 2015.
16. Federal Emergency Management Agency (FEMA). *Flood Insurance Rate Map. Santa Clara County, California. Map Number 06085C0626H*. May 2009.
17. California Department of Conservation. Office of Mine and Reclamation. *Surface Mining and Reclamation Act and Associated Regulations*. January 2007.
18. Illingworth & Rodkin, Inc. *Noise Assessment*. February 2015.
19. Hatch Mott MacDonald. *Technical Memorandum, Morgan Hill Baseball Fields, Morgan Hill, California*. May 2, 2014.

## SECTION 5.0 REFERENCES

---

- Association of Bay Area Governments. *Projections and Priorities 2009: Building Momentum, San Francisco Bay Area Population, Household, and Job Forecasts*. August, 2009.
- . *Tsunami Inundation Map for Coastal Evacuation*. Accessed February 19, 2015. Available at: <http://quake.abag.ca.gov/tsunamis/>
- Basin Research Associates, Inc. *Cultural Resources Supplement, Archaeological Resources Morgan Hill General Plan Santa Clara County, California*. 2000.
- Bay Area Air Quality Management District. *Santa Clara County PM2.5 Concentrations and Cancer Risks Generated from Surface Streets*. December 2011. Available at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>
- California Air Pollution Control Officers Association (CAPCOA). *California Emissions Estimator Model User's Guide*. July 2013. Appendix D, Table 10.1. Available at: <http://www.caleemod.com/>
- California Department of Conservation. *Santa Clara County Important Farmland 2012*. August 2014. Accessed February 11, 2015. Available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/scl12.pdf>
- . *Santa Clara County Tsunami Inundation USGS 24K Quads*. Accessed February 19, 2015. Available at: [http://www.consrv.ca.gov/cgs/geologic\\_hazards/Tsunami/Inundation\\_Maps/SantaClara/Pages/SantaClara.aspx](http://www.consrv.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SantaClara/Pages/SantaClara.aspx)
- California Department of Conservation, and Kohler-Antablin, S. *Generalized Mineral Land Classification Map of the Monterey Bay Production-Consumption Regions North Half*. 1999. Available at: <http://www.quake.ca.gov/gmaps/WH/smaramaps.htm>
- California Department of Conservation, Office of Mine and Reclamation. *Surface Mining and Reclamation Act and Associated Regulations*. January 2007. Accessed March 3, 2015. Available at: <http://www.conservation.ca.gov/omr/smara/Documents/010107Note26.pdf>
- California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed February 23, 2015. Available at: [http://www.fire.ca.gov/fire\\_prevention/fhsz\\_maps\\_santaclara.php](http://www.fire.ca.gov/fire_prevention/fhsz_maps_santaclara.php)
- California Department of Resources Recycling and Recovery. *Facility/Site Summary Details: Johnson Canyon Sanitary Landfill*. 2008. Accessed March 3, 2015. Available at: <http://www.calrecycle.ca.gov/SWFacilities/Directory/27-AA-0005/Detail/>
- California Department of Transportation. *California Scenic Highway Mapping System*. N.d. Accessed February 11, 2015. Available at: [http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm)

Central Coast Regional Water Quality Control Board. *Waste Discharge Requirements, South County Regional Wastewater Authority Wastewater Treatment and Reclamation Facility, Santa Clara County (NPDES Permit No. CA0049964) – Order No. R3-2010-0009*. Adopted March 2010. Accessed February 3, 2014. Available at: [http://www.waterboards.ca.gov/rwqcb3/board\\_decisions/adopted\\_orders/](http://www.waterboards.ca.gov/rwqcb3/board_decisions/adopted_orders/)

City of Gilroy. South County Regional Wastewater Authority. *Agenda*. November 2011. MWH Global and Akel Engineering Group. *South County Regional Wastewater Authority. Cities of Gilroy and Morgan Hill. Wastewater Flow Projections*. August 2011.

City of Morgan Hill. *Archaeological Sensitivity Map*. April 2000.

--. *Final Environmental Impact Report, Citywide Agriculture Preservation Program and Southeast Quadrant Land Use Plan, City of Morgan Hill, Santa Clara County, California*. May 16, 2014. Available at: <http://www.morganhill.ca.gov/965/Southeast-Quadrant>

--. *Morgan Hill General Plan*. 2010. Available at: <http://www.morganhill.ca.gov/index.aspx?nid=75>

--. *2010 Urban Water Management Plan*. July 2011.

City of Morgan Hill, City Council Staff Report. *Fire and Emergency Medical Services (EMS) CalFire Proposal Update*. Meeting Date April 4, 2012.

County of Santa Clara, Planning Office. *Williamson Act and Open Space Easement Programs, ArcGIS Interactive Map*. Last Updated November 4, 2014. Accessed February 11, 2015. Available at: <http://www.sccgov.org/sites/planning/PlansPrograms/Williamson/Pages/WA.aspx>

Federal Emergency Management Agency (FEMA). *Flood Insurance Rate Map. Santa Clara County, California. Map Number 06085C0626H*. May 18, 2009. Available at: <http://msc.fema.gov/portal>

Hatch Mott MacDonald. *Technical Memorandum, Morgan Hill Baseball Fields, Morgan Hill, California*. May 2, 2014.

Illingworth & Rodkin, Inc. *Southeast Quad Ball Fields – Noise Assessment*. February 27, 2015.

--. *Community Health Risk Assessment*. February 24, 2015.

Intergovernmental Panel on Climate Change. *IPCC Fourth Assessment Report: Climate Change 2007. TS.2.1.1 Changes in Atmospheric Carbon Dioxide, Methane and Nitrous Oxide*. 2007. Available at: [http://www.ipcc.ch/publications\\_and\\_data/ar4/wg1/en/tssts-2-1-1.html](http://www.ipcc.ch/publications_and_data/ar4/wg1/en/tssts-2-1-1.html)

--. *Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis*. 2013. Page 17. Available at: <http://www.ipcc.ch/index.htm>

Michael Brandman Associates. *Cultural Resources Assessment, Citywide Agriculture Preservation Program and Southeast Quadrant Land Use Plan*. December 13, 2013.

- Ruggeri-Jensen-Azar & Associates. *Preliminary Engineers Report for Wet Utilities, Southeast Quadrant; Morgan Hill, CA*. February 12, 2013. Available at: <http://www.morganhill.ca.gov/965/Southeast-Quadrant>
- Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, South County Airport*. May 2008. Accessed March 3, 2015. Available at: [http://www.countyairports.org/docs/CLUP\\_E16/CLUP\\_Draft\\_E16\\_052108.pdf](http://www.countyairports.org/docs/CLUP_E16/CLUP_Draft_E16_052108.pdf)
- Santa Clara Valley Habitat Agency. *Santa Clara Valley Habitat Plan*. August 2012.
- Santa Clara Valley Water District. *Dam Safety*. 2014. Accessed March 3, 2015. Available at: <http://www.valleywater.org/EkContent.aspx?id=8144&terms=chesbro+dam>
- . *Reservoirs*. Accessed March 3, 2015. Available at: <http://www.valleywater.org/Services/Reservoirs.aspx>
- . *2012 Groundwater Management Plan*. July 2012.
- Scripps Institution of Oceanography at the University of California, San Diego. *The Keeling Curve: A Daily Record of Atmospheric Carbon Dioxide*. Last updated June 23, 2014. Accessed June 24, 2014. Available at: <http://keelingcurve.ucsd.edu/>
- State Water Resources Control Board, Division of Water Quality. *Construction General Permit Fact Sheet*. Last Updated January 2013. Accessed March 3, 2015. Available at: [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml)
- United States Census Bureau, 2010 Census of Population. State & County QuickFacts: Morgan Hill (City). Last Modified January 2013. Accessed March 3, 2015. Available at: <http://quickfacts.census.gov/qfd/index.html>
- United States Department of Agriculture, Natural Resources Conservation Service. *Custom Soil Resource Report*. February 17, 2015.
- United States Geological Survey. *Landslide Hazards*. USGS Fact Sheet FS-071-00. May 2000.
- Weber, Hayes & Associates. *Phase I/II Environmental Site Assessment for an Agricultural Property. Tennant Avenue Parcels, Morgan Hill, California*. March 3, 2014.

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